Via Email and FedEx

November 6, 2020

Aurelia Skipwith, Director
United States Fish and Wildlife Service
1849 C Street NW, Room 3358
Washington, D.C. 20240
aurelia_skipwith@fws.gov

David Bernhardt, Secretary
U.S. Department of the Interior
1849 C Street NW
Washington, D.C. 20240
exsec@ios.doi.gov

United States Fish and Wildlife Service
1849 C Street NW, Room 3358
Washington, D.C. 20240

RE: Notice of Intent to Sue for Violations of the Endangered Species Act

WildEarth Guardians, Western Watersheds Project, Cascadia Wildlands, Klamath-Siskiyou Wildlands Center, Environmental Protection Information Center (EPIC), The Lands Council, Wildlands Network, and Klamath Forest Alliance – represented by the Western Environmental Law Center – provide this notice of intent to sue the addressees of this letter (collectively referred to throughout as the “Service”) for violations of the Endangered Species Act (“ESA”) and its implementing regulations with regard to the Service’s November 3, 2020 final rule Removing the Gray Wolf (Canis lupus) from the List of Endangered and Threatened Wildlife. 85 Fed. Reg. 69,778 (Nov. 3, 2020). This notice of intent to sue letter is provided as required by the ESA. 16 U.S.C. § 1540(g)(2).

Gray wolves were among the first species granted federal protections, first under the legislative predecessors to the ESA — the Endangered Species Preservation Act of 1966 and the Endangered Species Conservation Act of 1969 — and subsequently under the ESA of 1973, as amended. 85 Fed. Reg. at 69,779. The entities listed in 1978 included: (1) an endangered population at the taxonomic species level (C. lupus) throughout the contiguous United States and Mexico (except Minnesota); and (2) a threatened population in Minnesota. Id.
Hundreds of thousands of wolves likely ranged across the western United States and Mexico. 85 Fed. Reg. at 69,788. However, the gray wolf’s range and numbers declined significantly throughout the 19th and 20th centuries as the result of human-caused mortality from poisoning, trapping, and shooting, and from government-funded programs of eradication. Id. By 1974, the species had been eliminated from most of its historical range, and occurred only in small populations in Minnesota and on Isle Royale, Michigan. Id. There were only approximately 1,235 wolves in Minnesota remaining at the time of the 1978 listing rule publication. Id. Although gray wolves are making a remarkable comeback in select areas of the United States — e.g., a population of roughly 4,200 individuals currently roam the region surrounding the Great Lakes1 — they have yet to return to much of their historic habitats across vast portions of the American West, including in the Pacific Northwest, the Central/Southern Rockies, and the Southwestern United States (including Nevada and most of California).

The gray wolf is still recovering across much of the contiguous United States as it attempts to reestablish itself across its historical range, and as such, a determination that the wolf has recovered is premature. As explained in greater detail below, the final rule violates section 4 of the ESA and its implementing regulations. 16 U.S.C. § 1533. The final delisting rule continues the Service’s decades-long attempt to fit a square peg in a round hole. Instead of taking the rational and science-based approach of fixing the confusing 1970’s-era listing decisions for the gray wolf, the Service once again is attempting to impose a one-size-fits-all delisting decision across the contiguous United States.

The above-named conservation organizations and their members have significant, concrete interests in the survival and recovery of the gray wolf throughout its range, and intend to initiate litigation after sixty days have elapsed unless the violations of law described below are cured. Many of the topics contained in this notice letter are covered in greater depth in these conservation organizations’ July 15, 2019 comments on the proposed gray wolf delisting rule, and the attachments to those comments.

I. The Service erroneously concluded the gray wolf does not meet the statutory definition of a “species.”

The final delisting rule for gray wolves concludes “[t]he gray wolf entities that are currently on the List do not meet the Act’s definition of a ‘species.’” 85 Fed. Reg. at 69,783. The Service’s reasoning is that neither currently listed entity “encompasses an entire species, or a subspecies, of gray wolf” and that they also do not qualify as a Distinct Population Segment (“DPS”). Id. at 69,783-84. The Service also cites 50 C.F.R. § 424.11(e)(3) to support the need to delist gray wolves because they purportedly do not meet the definition of a “species” under the ESA. This conclusion is erroneous, arbitrary and capricious, is not based on the best available scientific and commercial data (hereinafter “best available science”), conflicts with the ESA, and conflicts with the Service’s 1996 DPS policy.

1 85 Fed. Reg. at 69,788. Note that we do not agree that recovery has indeed been achieved in the Great Lakes region based on this population estimate alone.
The ESA does not define the term “distinct population segment,” and therefore, in 1996, the Service issued a “Policy Regarding the Recognition of Distinct Vertebrate Population Segments Under the Endangered Species Act.” 61 Fed. Reg. 4,722 (Feb. 7, 1996) (hereinafter “DPS Policy”). The DPS Policy interprets the term “distinct population segment” as requiring consideration of (1) the discreteness of the population segment in relation to the remainder (sometimes referred to as remnant) of the species to which it belongs; (2) the significance of the population segment to the species to which it belongs; and (3) the population segment’s conservation status in relation to the Act’s standards for listing. 61 Fed. Reg. at 4,725.

To determine discreteness, the DPS policy states a population segment may be considered discrete if it meets one of two conditions:

1. It is markedly separated from other populations of the same taxon as a consequence of physical, physiological, ecological, or behavioral factors. Quantitative measures of genetic or morphological discontinuity may provide evidence of this separation.
2. It 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. The Service explains “[t]he standard established for discreteness is simply an attempt to allow an entity given DPS status under the Act to be adequately defined and described.” Id. at 4,724. The Service has been clear that complete discreteness is not required, as “the standard adopted does not require absolute separation of a DPS from other members of its species, because this can rarely be demonstrated in nature for any population of organisms.” Id. This standard is intended to create a low bar, as it “allow[s] entities recognized under the Act to be identified without requiring an unreasonably rigid test for distinctness.” Id. In particular, the DPS policy specifically contemplated that a DPS would have “some limited interchange among population segments considered to be discrete….” Id.

Here, the Service concludes the two listed entities (the Minnesota entity and lower-48 entity) “are not markedly separated from other populations of the same taxon.” 85 Fed. Reg. at 69,783. Related to the Minnesota entity, the Service concluded it is “not discrete from the endangered listed entity where they abut in the Great Lakes area because gray wolves in Minnesota are not discrete from gray wolves in Wisconsin and Michigan.” Id. The Service also concluded “gray wolves in the West Coast States that are part of the endangered listed entity are not discrete from the recovered [Northern Rocky Mountain (NRM)] population.” Id. at 69,783-84. Because the Service determined there was a lack of discreteness, it did not continue to evaluate the significance of these populations. Id.

But these conclusions are legally flawed, not supported by the best available science and are in conflict with the ESA, the DPS policy, and the Service’s own peer reviewers. They are,
therefore, arbitrary and capricious, and otherwise not in compliance with the ESA. This attempt is exactly the result federal courts have cautioned against. See Humane Soc’y of the U.S. v. Zinke, 865 F.3d 585, 603 (D.C. Cir. 2017) (“The Service cannot circumvent the [ESA’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. Such a statutory dodge is the essence of arbitrary-and-capricious and ill-reasoned agency action.”); see also Nat’l Wildlife Fed’n v. Norton, 386 F. Supp. 2d 553, 565 (D. Vt. 2005) (“The [Service] cannot downlist an area that it previously determined warrants an endangered listing because it ‘lumps together’ a core population with a low to non-existent population outside of the core area.”). Indeed, here, the Service attempts to assert lack of discreteness to a Congressionally-created DPS—and one that never had a legally sufficient scientific basis—without adequately considering the discreteness of wolves in places such as the West Coast states and the Southern (or “Central,” as described in the final rule) Rockies (including Colorado and Utah).

Further, the Service is attempting to dodge its obligation to conduct a “comprehensive review” that addresses the entire listed entity—here the lower-48 entity—as opposed to smaller portions of that entity. See Humane Soc’y, 865 F.3d at 601-03 (“The statute requires a comprehensive review of the entire listed species and its continuing status.”); see also Crow Indian Tribe v. United States, 343 F. Supp. 3d 999 (D. Mont. 2018), affirmed in part by 965 F. 3d 662 (9th Cir. 2020) (remanding partial delisting decision for further examination of the delisting’s effect on the remnant population). Although the Service may desperately wish to do so to avoid confronting science it does not like, the Service cannot delist a species with blinders on. Humane Soc’y, 865 F.3d at 602-03 (“Yes, the Service’s disregard of the remnant’s status would turn that sparing segment process into a backdoor route to the de facto delisting of already-listed species, in open defiance of the [ESA’s] specifically enumerated requirements for delisting.”).

In the final rule, the Service acknowledges it did not conduct a DPS analysis for Pacific Northwest gray wolves. 85 Fed. Reg. at 69,854. Instead, the Service relies on a 2013 analysis it conducted. Id. At 69,854-55 (referencing 78 Fed. Reg. 35,664, 35,711-713 (June 13, 2013)). In doing so, the Service ignores information gleaned over the past seven years, and ignores its own peer reviewers. Indeed, the Service admits several peer reviewers questioned the conclusions the Service made in the proposed rule regarding discreteness of the listed entity. 85 Fed. Reg. at 69,854.

The Service previously concluded that wolves in the Northern Rocky Mountains DPS would be isolated from other suitable habitat to the west and south of the DPS. 73 Fed. Reg. 10514, 10518 (Feb. 27, 2008). It also previously acknowledged that wolves occurring in the Cascade Mountain Range would not be part of the Northern Rocky Mountains DPS. See 73 Fed. Reg. 10514, 10518 (Fed. 27, 2008) (“if wolves dispersed into the North Cascades, they would remain protected by the Act as endangered because it is outside of the NRM DPS”); see also 74 Fed. Reg. 15123, 15127 (April 2, 2009) (same). The Service also has previously recognized that some of the first known recolonizing wolves in the North Cascades came from British Columbia, Canada—and not from the Northern Rocky Mountains DPS—based on genetic testing. Id.
Dr. Carlos Carroll noted in his official peer review comments that the Service erred in concluding West Coast gray wolves were not discrete from Northern Rocky Mountain DPS wolves. See Carroll Peer Review Comments at 12-18. Dr. Carroll noted that regional salmonid populations listed under the ESA frequently have a portion of its members that stray to other regional salmonid populations. Carroll Peer Review Comments at 16. Indeed, Dr. Carroll uses this as an example of how the DPS policy does not require 100% isolation between populations, and that occasional dispersing wolves or packs between populations does not eliminate discreteness. Id. Dr. Carroll also explained that genetics contributed to a finding of discreteness, noting “the coastal rainforest ecotype which is the source of a portion of the individuals comprising the Pacific Northwest wolf populations, has been shown to possess ‘markedly different genetic or phenotypic traits’ (Hendricks et al. 2018).” Id. at 17.

Importantly, Dr. Carroll’s peer review comments explain that even though genetics does support a finding of discreteness, a species inhabiting a unique ecological setting—such as the wolves occurring in western Washington and Oregon, and California—“does not require that a recolonizing population already be ‘genetically adapted to a unique ecological setting.’” Id. As such, Dr. Carroll recommended “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.” Id. Dr. Carroll concluded with a recommendation that the Service look to Waples et al. (2018) for “an example of a rigorous application of the discreteness and significance tests to evaluate whether a wolf taxon constitutes a valid DPS.” Id. at 18. Ultimately, Dr. Carroll concluded that wolves occurring in western Washington and Oregon, and California, were discrete from other taxon and should be considered a DPS:

Applying the same process to Pacific Northwest wolf population, I would conclude that marked separation can be established as a consequence of up to four factors: physical (separation by larger inland populations by areas of unsuitable habitat), ecological (occupation of coastal rainforest ecosystems), genetic (discontinuity in neutral molecular genetic data as established by Hendricks et al. (2018)), and due to international governmental boundaries which separate US populations from coastal rainforest wolves in Canada. Once discreteness has been established it is only necessary to meet a single significance element to be considered a DPS (Waples et al. 2018). However, Pacific Northwest wolves merit significance both due to their persistence in a unique ecological setting, which is used as a proxy for adaptive genetic differences, and due to the fact that loss of the population would result in a significant gap in the range of the taxon.

Id. at 18.

Dr. Carroll also analyzed other areas of the lower-48 DPS for discreteness:
Applying the discreteness and significance evaluation process of Waples et al. (2018) to the Colorado/Utah region and the northeastern US, I would conclude that marked separation can be established as a consequence of several factors: physical (separation from other populations by areas of unsuitable habitat), ecological (occupation of unique ecosystems as delineated by ecoregional boundaries and related data (Waples et al. 2018)), and in the case of the northeastern US, due to international governmental boundaries which separate the northeast US from eastern wolves in Canada. 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.

*Id.* at 20.

Another peer reviewer, Dr. Daniel MacNulty, explained it was illogical for the Service to conclude west coast wolves were not discrete from Northern Rocky Mountains DPS wolves and Minnesota wolves if Northern Rocky Mountain wolves are discrete from Minnesota wolves. MacNulty Peer Review Comments at 4. Dr. MacNulty concluded:

> I found no scientific information in the Proposed Rule or Draft Biological Report supportive of the Service’s interpretation that western listed wolves are not discrete from wolves in Minnesota, Wisconsin, and Michigan. Rather, the Proposed Rule and the Draft Biological Report supply scientific information that supports the opposite interpretation: that western listed wolves are discrete from wolves in Minnesota, Wisconsin, and Michigan.

*Id.* at 5. Dr. Adrian Treves similarly expressed skepticism regarding the Service’s analysis of discreteness, and the inconsistent treatment contained therein. *See* Treves Peer Review Comments at 5-7.

Here, wolves occurring outside the geographic boundaries of the Northern Rocky Mountains DPS in Washington, Oregon, California, Colorado, and elsewhere meet the discreteness test in that they are markedly separated from other populations of the same taxon as a consequence of physical, physiological, ecological, or behavioral factors, including genetic differences. These entities are also significant to the rest of the taxon as they represent a recovering species recolonizing its lost historical habitat, and need ESA protections to continue on the path to eventual recovery. Ultimately, the Service is attempting to expand the geographic boundaries of the Congressionally-created Northern Rocky Mountains DPS in an effort to avoid its ESA obligations to recover gray wolves throughout their historical and current ranges.

Finally, the recently enacted ESA regulation requiring the Secretary to delist a species if after a status review the Secretary determines “[t]he listed entity does not meet the statutory definition of a species” violates the ESA’s purposes and policies, 16 U.S.C. § 1531, and
serves only to strip imperiled species, such as the gray wolf, of needed ESA protections. As such, 50 C.F.R. § 414.11(e)(3) is arbitrary, capricious, and contrary to the ESA.

II. The Service’s analysis of different “gray wolf entities” is legally flawed.

In the final gray wolf delisting rule, the Service asserts its attempt to combine the two listed entities—the threatened Minnesota entity and the endangered lower-48 entity—into a single gray wolf entity for the purposes of delisting was proper. 85 Fed. Reg. 69,784-86. This approach, however, defies the logic and demands of prior court rulings analyzing the Service’s prior gray wolf delisting attempts, and the clear language of the ESA. In an attempt to provide itself with a backup plan in case that approach is deemed illegal, the Service attempts to also evaluate two other configurations of “gray wolf entities” in a not so subtle attempt to survive judicial review. See id. The attempts are ultimately unpersuasive, violate the ESA, and are arbitrary and capricious. Ultimately, an evaluation of the correct listed entities reveal that gray wolves are still endangered throughout all and/or a significant portion of their range.

The attempt to lump the Minnesota and contiguous United States populations of gray wolves into a single entity is a near-exact replica of prior failed delisting attempts from the Service. For example, in 2005, a federal district court in Oregon faulted the Service for promulgating its 2003 wolf downlisting rule that clearly violated the plain statutory mandates of the ESA. Defenders of Wildlife v. Secretary, U. S. Dep’t of the Interior, 354 F. Supp. 2d 1156 (D. Or. 2005) (hereinafter “Oregon Wolves”). The 2003 rule lumped wolves into one of three separate DPSs — an Eastern, Western, or Southwestern DPS — and lessened protections for wolves wherever found within the Eastern and Western DPSs, even in areas with low or non-existent population levels. The court held this rule violated the law, holding that the Service: (1) arbitrarily and capriciously failed to properly analyze whether the gray wolf was endangered or threatened in a “significant portion of its range” by failing to consider 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;” Oregon Wolves, 354 F. Supp. 2d at 1167–68 (“By 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 [significant portion of its range] superfluous.’” (quoting Defenders, 258 F.3d at 1142)); (2) arbitrarily and capriciously applied its DPS Policy to “expand the boundaries” of its proposed DPSs, which effectively decreased protections for the species outside of core recovery areas despite there being no changes to existing threats to justify less protection; Id. at 1171 (classifying the Service’s wolf DPS as appearing “to be a tactic for downlisting areas the FWS has already determined warrants listing, despite the unabated threats and low to nonexistent populations outside of the core areas.”); and (3) arbitrarily and capriciously failed to properly consider the attempt to downlist the species in vast portions of its geographic range without applying the ESA’s section 4 listing factors, Id. at 1172 (“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.”). In short, the court held that “by downlisting the species based solely on the
viability of a small population within that segment, the Service was effectively ignoring the species’ status in its full range, as the [ESA] requires.” *Humane Soc’y*, 865 F.3d at 592.

The District of Vermont also faulted the Service for these same shortcomings in its 2003 delisting rule. *National Wildlife Federation v. Norton*, 386 F. Supp. 2d 553 (D. Vt. 2005) (hereinafter “Vermont Wolves”). The *Vermont Wolves* court explicitly stated: the Service “cannot downlist an area that it previously determined warrants an endangered listing because it ‘lumps together’ a core population with a low to non-existent population outside of the core area.” *Vermont Wolves*, 386 F. Supp. 2d at 565. The Service “bypass[es] the application of the ESA in the non-core area” when it arbitrarily “expands the boundaries” of the wolf population to achieve its desired outcome to lessen federal protections for the species. *Id*. A final rule “that makes all other portions of the wolf’s historical or current range outside of the core gray wolf populations insignificant and unworthy of stringent protection” is “contrary to the plain meaning of the ESA phrase ‘significant portion of its range,’ and therefore, is an arbitrary and capricious application of the ESA.” *Id*. at 566.

Rather than appealing these prior rulings, the Service promulgated subsequent rules in 2007, and again in 2009, which also failed to comply with the law. *See Humane Soc’y of the United States v. Kempthorne*, 579 F. Supp. 2d 7 (D.D.C. 2008) (vacating 2007 rule); *Humane Soc’y of the United States v. Salazar*, No. 09-1092, Docket Entry No. 27 (D.D.C. July 2009) (settling case challenging 2009 rule for inadequate public notice and comment). In 2011, the Service tried again, this time seeking to remove ESA protections from just the wolves in the Western Great Lakes. This rule also failed to abide by the clear mandate of the ESA and, in 2017, the U.S. Court of Appeals for the D.C. Circuit upheld a district court ruling on the matter, again overturning the Service’s proposal because the Service failed to consider two significant aspects — the impacts of partial delisting on the remnant population and the impacts of historical range loss on the already-listed species. *Humane Soc’y of the United States v. Zinke*, 865 F.3d 585 (D.C. Cir. 2017).

Yet, despite these many failings, here, *once again*, the Service is attempting to sidestep the mandates of the ESA — this time by arbitrarily lumping all wolves in the contiguous United States and Mexico (including the Minnesota “threatened” population, but excluding the Mexican wolf and red wolf subspecies populations, as well as the already delisted Northern Rocky Mountain population) into a singular “gray wolf entity.” The effect of this combination is deeply troubling, for its creation is based solely on the fact that one metapopulation — gray wolves in the three states of Minnesota, Wisconsin, and Michigan’s Upper Peninsula — may be faring well, thanks to the beneficial protections ensured by the ESA’s federal management regime. *See Proposed Rule*, 84 Fed. Reg. at 9,683 (“The metapopulation in the Great Lakes area contains sufficient resiliency, redundancy, and representation to sustain populations within the gray wolf entity over time. Therefore, we conclude that the relatively few wolves that occur outside the Great Lakes area within the gray wolf entity, including those in the west coast States and lone dispersers in other States, are not necessary for the recovered status of the gray wolf entity.”); *see also* Final Rule, 85 Fed. Reg. at 69,883 (“The wolves in Wisconsin and Michigan contain sufficient resiliency, redundancy, and representation to sustain populations with the 44-State entity over time.
Therefore, we conclude that the relatively few wolves that occur within the 44-State entity outside of Wisconsin and Michigan, including those in the West Coast states and central Rocky Mountains, as well as lone dispersers in other States, are not necessary for the recovered status of the 44-State entity.”).\(^2\)

Having failed to use the DPS tool to reach its desired outcome in the past (see legal history referenced above), the Service is now flipping its former reasoning entirely on its head and altogether abdicating its responsibility for recovering this species in the nearly 85 percent of former habitat and range where gray wolves once freely roamed but are now absent. Instead of actually considering and incorporating the courts’ prior concerns into its gray wolf recovery program as required by law, the Service is attempting, wholesale, to wipe its hands clean of any responsibility for seeing the recovery of the gray wolf through to the finish line. Even if the Service is correct that it has achieved success and restored the gray wolf to the Great Lakes region, the Service cannot use that purported success alone to justify the stance that its job is complete and that it has no responsibility to restore the species throughout the ample, critically important, and biologically suitable habitats afforded by the Pacific Northwest, Central/Southern Rocky Mountains, and Southwestern regions of the United States. This is especially true in parts of the country such as Washington, Oregon, California, and Colorado where gray wolves are just beginning to recolonize their historical range and habitat, thanks in part to the protections of the Endangered Species Act. Pulling the plug on recovery in these states jeopardizes the potential success and time-frames for these recovery actions. The ESA demands more.\(^3\)

The Service’s arbitrary creation of a combined “gray wolf entity” by merely lumping together the Minnesota metapopulation with the “remnant” population outside of the Great Lakes region does not cure the severe legal faults of prior delisting attempts. Once again, the Service is creating a fictional entity not based in biology or any other science and attempting to remove ESA protections in one fell swoop. While the Service tries to paper over its methodology with word-smithing, the effect is the same: The Service is once more trying to do what the courts have already said it cannot legally do under the mandates of the ESA by stripping a species of necessary protections before recovery has been achieved such that the Act’s protections are no longer needed. See *Nat’l Wildlife Fed’n v. Norton*, 386 F. Supp. 2d 553, 565 (D. Vt. 2005) (“The [Service] cannot downlist an area that it previously determined

---

\(^2\) To be clear, however, the signatories of this notice of intent to sue letter are not asserting or implying that wolves in the Great Lakes states are recovered by any measure. Rather, our focus is on ESA-listed wolves in west coast states, as well as in western states that once contained wolf populations and retain adequate habitat and prey-base to support wolf populations today.

\(^3\) See *e.g.*, *Defenders of Wildlife v. Norton*, 23 F. Supp.2d 9, 19 (D.D.C. 2002) (“The Service’s focus on only one region of the Lynx’s population – the Northern Rockies/Cascades – to the exclusion of the remaining three-quarters of the Lynx’s historical regions, is antithetical to the ESA’s broad purpose to protect endangered and threatened species.”); *Nat’l Wildlife Fed’n v. Norton*, 386 F. Supp. 2d 553, 566 (D. Vt. 2005) (“The Final Rule makes all other portions of the wolf’s historical or current range outside of the core gray wolf populations insignificant and unworthy of stringent protection. The Secretary’s conclusion is contrary to the plain meaning of the ESA phrase ‘significant portion of its range,’ and therefore, is an arbitrary and capricious application of the ESA.”).
warrants an endangered listing because it ‘lumps together’ a core population with a low to non-existent population outside of the core area.”). This final rule, like its prior iterations, is the essence of arbitrary and capricious decision making disallowed by the APA.

The Service simply cannot legally delist a non-listable entity in the first place, and as such, cannot legally create an entirely fictional, combined Minnesota and 44-State (Lower 48-State entity minus the NRM DPS) “gray wolf entity” and simultaneously delist both populations as it has done. The Service is merely repeating the same inherent mistake of the past, rendering the rule arbitrary and capricious and a plain violation of the law. The only legally relevant analysis is that of the listed entities: the Minnesota threatened population of gray wolves and the lower-48 endangered population of gray wolves. The Service cannot subvert these listings by falsely claiming that having wolves in the Midwest alone is sufficient to render the species recovered throughout all or a significant portion of the species range when no viable, biologically recovered populations exist outside of this region. 85 Fed. Reg. at 69,883.

III. Gray wolves are endangered throughout a significant portion of their range.

The Service’s determination that the “44-State entity” is not endangered throughout all or a significant portion of its range is not based on the best available science, conflicts with the ESA, conflicts with the correct definition of “significant portion of its range”, and is arbitrary and capricious. Indeed, the final rule is fatally flawed by its rejection of the importance and significance of endangered wolves found in Washington, Oregon, California, Colorado, and elsewhere. The Service is clear that it considers those wolves expendable and unnecessary: “[W]e conclude that the relatively few wolves that occur within the 44-State entity outside of Wisconsin and Michigan, including those in the West Coast States and central Rocky Mountains as well as lone dispersers in other States, are not necessary for the recovered status of the 44-State entity.” 85 Fed. Reg. at 69,883.

Under the ESA, the Service must consider a species’ status across a “significant portion of its range” in making listing determinations. 16 U.S.C. § 1532(6); Defenders of Wildlife v. Norton, 258 F.3d 1136 (9th Cir. 2001). Thus, there are two situations under which a species, subspecies, or DPS may qualify for listing: a species may be listed throughout all of its range, or a “significant portion of its range.” 16 U.S.C. § 1532(6); Defenders of Wildlife v. Norton, 258 F.3d 1136 (9th Cir. 2001).

The ESA does not define “significant portion of its range,” but the Ninth Circuit has explained that one way a species may qualify for listing throughout a “significant portion of its range” is if there are “major geographical areas in which it is no longer viable but once was.” Defenders of Wildlife v. Norton, 258 F.3d at 1145–46. “Those areas need not coincide with national or state political boundaries, although they can.” Id. This requires the Service to: (1) quantify the species’ historic range in order to establish a temporal baseline; and (2) then determine whether the lost or no longer viable area, measured against the baseline, amounts to a significant portion. If a species is “expected to survive” in an area that is much smaller than its historic range, the Service must explain its conclusion that the lost area is not a
“significant portion of its range.” Id. at 1145. An “adequate explanation” why territory, which was part of a species’ historic range but is no longer occupied or considered viable, is not a “significant portion” of the species’ range is required. If the lost area qualifies as a “significant portion,” then the Service must complete a threats assessment to determine if the species qualifies for listing throughout a “significant portion of its range.” 16 U.S.C. §§ 132(6), (2).

Importantly, the phrase does not mean that threats in the “significant portion” must render the entire species at risk of extinction. Defenders of Wildlife v. Norton, 258 F.3d at 1141. On the contrary, legislative history demonstrates that the phrase was intended to allow for protection in one area even if a species is abundant or overabundant in another area. Id. at 1144. Nor is there any bright-line percentage of habitat that must be affected in order for an area to be “significant.” Id. at 1143. For a species with a small historical range, even a very small percentage of habitat may be “significant.” Id.

Notably, the Service cannot rely on its 2014 Policy interpreting the phrase “significant portion of its range,” 79 Fed. Reg. 37,578, which has since been vacated in-part in the federal district courts. Specifically, in Ctr. for Biological Diversity v. Jewell, the Court found that the “significant portion of its range” language “cannot permissibly be interpreted ‘to mean that a species is eligible for protection under the ESA’ only 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.” Ctr. for Biological Diversity v. Jewell, 248 F. Supp. 3d at 956 (quoting Defenders of Wildlife, 258 F. 3d at 1142 (emphasis in original)). Such an interpretation would render the ESA’s reference to “significant portion of its range” superfluous. Id.

Curiously, in the proposed rule the Service acknowledged that a part of its SPR Policy had been vacated across the country in Desert Survivors v. U.S. Dep’t of the Interior, however, that language was removed from the final rule, and apparently, the Service has decided to ignore its import in conducting its SPR analysis for gray wolves. Indeed, the Service ignored this dynamic in its response to comments on the issue. See 85 Fed. Reg. at 69,853. This, on its face, violates the ESA and renders the gray wolf delisting rule arbitrary and capricious.

Nor can the Service interpret the phrase in a way that wholly excludes analysis of the species’ historical range. Tucson Herpetological Soc. v. Salazar, 566 F.3d 870, 876 (9th Cir. 2009). Rather, the task of defining the phrase includes quantification of the species’ historic range and an evaluation of whether the lost habitat amounts to a “significant portion” of that range. Id.

4 Ctr. for Biological Diversity v. Jewell, 248 F. Supp. 3d 946 (D. Ariz. 2017) (finding the Service’s interpretation of “significant portion of its range” in the 2014 Policy “impermissibly clashes with the rule against surplusage and frustrates the purposes of the ESA” and is therefore arbitrary and capricious under the APA) amended in part by 2017 WL 8788052 (limiting the court’s vacatur of the 2014 Policy to the District of Arizona); Desert Survivors v. U.S. Dep’t of the Interior, 336 F. Supp. 3d 1131 (N.D. Cal. 2018) (clarifying the court’s ruling on the merits in 321 F. Supp. 3d 1011 that the 2014 Policy interpreting the phrase “significant portion of its range” is vacated and set aside in regards to the Policy’s definition of “significant”).
The Service may not look only to the health of the species’ population in certain areas while turning a blind eye to threats in areas where the population is either extirpated or home to only a few individuals. “It is insufficient, under *Defenders of Wildlife*, to point to one area or class of areas where [a species’] population persists to support a finding that threats to the species elsewhere are not significant . . . .” *Id.* at 877. The ESA requires more. *Id.*

Here, the Service’s “significant portion of its range” analysis is legally deficient, and its determinations regarding the 44-State entity’s threats across all and a significant portion of its range violates the ESA.

The Service’s interpretation of the term “significant” in its “significant portion of its range” analysis is flawed. The final delisting rule defines “significant” by asking whether “any portions are biologically meaningful in terms of resiliency, redundancy, or representation of gray wolves in the 44-State entity.” 85 Fed. Reg. at 69,885. The rule rests on the assumption that there is — purportedly — sufficient resiliency, redundancy, and representation to sustain populations within the gray wolf entity over time provided by the Great Lakes area metapopulation, and that other wolves are merely part of the Congressionally-created Northern Rocky Mountains DPS, and therefore expendable. *Id.* With regards to its analysis of the fictional combined entity, the Service continues to assert “that the relatively few wolves that occur outside the Great Lakes area within the gray wolf entity, including those in the West Coast States and Central/Southern Rocky Mountains as well as lone dispersers in other States, are not necessary for the recovered status of the combined listed entity.” *Id.* at 69,886.

This reasoning is inherently flawed because it wholly ignores the possibility of ever restoring gray wolves to the thousands of square miles of suitable habitat with sufficient prey base outside of the Great Lakes region altogether, and the inherent value of recovering wolf populations in the West Coast States and Central/Southern Rocky Mountains. The Service cannot reasonably find that suitable habitat in the Pacific Northwest, Central Rocky Mountains, and Southwestern United States is not “significant” in terms of “resiliency, redundancy, or representation” to the recovery of gray wolves in these regions. In fact, the opposite is true and the habitat afforded by these regions *is* necessarily significant to the recovery of the species in these areas. The gray wolf was once viable in these major geographic areas and now no longer is, and the Service has failed to make the requisite findings to discount these regions’ significance to the recovery of gray wolves there. The Service cannot ignore these regions in favor of solely relying on the fate of the species as a whole, as such an approach would render the phrase “significant portion of its range” superfluous. *Ctr. for Biological Diversity v. Jewell*, 248 F. Supp. 3d 946 (D. Ariz. 2017).

For example, the Service’s interpretation of the term “significant” as applied to the Pacific Northwest and Central Rocky Mountains regions is plainly wrong. The Service relies on the fact that the small number of wolves in Oregon, Washington, Northern California, and (just recently) Colorado are not biologically significant to the gray wolf entity because they occur only in small numbers and consist of only a few breeding pairs. Additionally, the Service continues to erroneously assert that endangered gray wolves in West Coast States and
Central Rockies are merely a part of a Congressionally-delisted Northern Rocky Mountains DPS, and that therefore they do not contribute to the representation of the gray wolf and cannot constitute a significant portion of the gray wolf’s range. 85 Fed. Reg. at 69,892. As discussed elsewhere in this notice letter, currently endangered wolves in Washington, Oregon, California, Colorado, and elsewhere are still recovering and need the continued protections of the ESA in order to truly recover throughout their range.

Another legal violation related to the SPR analysis is that the Service has defined range much too narrowly, and has excluded the importance of individual dispersers. Just because a wolf is an individual does not mean that it is not important to the species, given that it is likely a dispersing wolf that may establish a new pack in a new territory and further expand the current range of the species. Additionally, just because a wolf appears to be a solitary animal does not mean that it is not actually part of a pack, given that as the Service admits, there is uncertainty about specific wolf range and populations. The 2014 SPR policy also supports the need to consider individual wolves. There, the Service explicitly noted that “range” includes “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.” 79 Fed. Reg. 37,578, 37,609 (July 1, 2014). Because dispersal by individuals is obviously a part of the life cycle of gray wolves, the corridors in which they disperse and the areas where they eventually settle should also be included in the range of the species. By failing to include these individuals in the range of the gray wolf, the Service’s SPR analysis and designation of the gray wolf’s current range violates the SPR policy, the ESA, the best available science, and is therefore arbitrary and capricious.

Indeed, several peer reviewers commented on this dynamic. Dr. MacNulty noted “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. MacNulty Peer Review Comments at 8. Dr. Carroll explained, “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.” Carroll Peer Review Comments at 20.

As the Oregon Wolves court already has told the Service: “By 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 [significant portion of its range] superfluous.” Oregon Wolves, 354 F. Supp. at 1168 (quoting Defenders of Wildlife, 258 F. 3d at 1142). Indeed, as discussed elsewhere in this notice letter, wolves occurring outside of the Northern Rockies DPS (which we mean to include wolves listed as endangered in Oregon, Washington, California, and Colorado immediately prior to this final delisting rule) and outside of the Great Lakes metapopulation are significant, and continue to merit ESA protections.
The Service’s “significant portion of its range” analysis fails to adequately consider that a species may qualify for listing 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 at 1145–46. And further, it is arbitrarily based on the survival of the species as a whole, rendering the “significant portion of its range” phrase in the ESA redundant in violation of the law. *Id.* at 1142.

IV. The Service’s analysis of the (de)listing factors is inadequate, not based on the best available science, and does not support gray wolf delisting.

Under Section 4(a)(1) of the ESA, 16 U.S.C. § 1533(a)(1), and the Service’s implementing regulations, the Service is required to determine whether a species is threatened or endangered because of any of the following factors: (A) the present or threatened destruction, modification, or curtailment of the species’ range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; and (E) other manmade factors affecting the species’ continued existence.5 These factors are listed in the disjunctive, such that any one or combination of them can be sufficient for a finding that a species qualifies as threatened or endangered under the ESA.

In deciding to delist the Minnesota and 44-State gray wolf entities, the Service has determined that threats to the gray wolf throughout the Lower 48 have been reduced such that the entity no longer meets the definition of threatened or endangered under the ESA. 85 Fed. Reg. 69,889. In making this determination, the Service failed to utilize the best available science and failed to carefully consider and adequately apply Section 4(a)(1)’s threat factors in accordance with the ESA and the Service’s implementing regulations and policy.

**Southern Rockies & Southwest Section 4 Analysis**

The final rule fails to cure the serious defects associated with the proposed rule’s complete omission of any analysis of the Section 4(a)(1) listing factors as applied to wolves in the Central/Southern Rockies, including Colorado and Utah, and the Southwest, including northern New Mexico and Arizona, as well as Nevada and southern California. This renders the final rule arbitrary and capricious, not only under Section 4(a)(1) of the ESA, but also under the APA because the Service fails to consider an important aspect of the problem: the recovery of gray wolves in the Central/Southern Rocky Mountains and Southwestern United States, where wolves are currently functionally extinct.6 The rule effectively strips any wolves

---

5 *Tucson Herpetological Soc'y v. Salazar*, 566 F.3d 870, 873 (9th Cir. 2009) (citing 16 U.S.C. § 1533(a)(1); 50 C.F.R. § 424.11(c)).

6 *Motor Vehicle Mfrs. Ass'n of U.S. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (An agency must be reversed when the agency has “relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.”).
that currently do occur, see 85 Fed. Reg. 69,788 (documenting recent observation of six wolves travelling in a group in far northwestern Colorado, as of January 2020),\(^7\) and those that may eventually recover in these regions, of vital ESA protections without analyzing the Section 4(a)(1) listing factors as applied to this region to justify the removal.\(^8\)

But, the Service may only delist a species after analyzing whether the Section 4(a)(1) factors justify removal of a species from the list.\(^9\) Indeed, the Service must conduct this analysis in order to delist.\(^10\)

Yet here, while the Service cursorily conducts this analysis for wolves in the Great Lakes region and West Coast States (not that we agree that the analysis was proper, complete, nor correct — see below), the Service fails to adequately analyze these factors as applied to wolves in the Central/Southern Rockies and Southwestern United States. The final rule attempts to overcome this defect by including new information regarding habitat suitability and prey availability, 85 Fed. Reg. 69,817–18, and state management plans, Id. at 69,837–38, for wolves in the “Central” Rockies, including Colorado and Utah. But, the Service’s cursory acknowledgement of this region fails to do justice to the requirements of the Act. Instead, the agency merely concludes that while a group of six wolves traveling together in a group was documented in far northwestern Colorado (within very close proximity to Utah) in January 2020, as dispersers, they are not necessary to recovery of the 44-State entity, and therefore, do not matter. 85 Fed. Reg. 69,883. This is insufficient. By limiting its Section 4(a)(1) analysis as such, the Service “entirely failed to consider an important aspect of the problem” in violation of the ESA and APA.

**The Pacific Northwest Section 4 Analysis Is Grievously Flawed**

The Service’s threats assessment as applied to wolves in the west coast states of Oregon, Washington, and Northern California is severely lacking.

\(^{(A)}\) The present or threatened destruction, modification, or curtailment of the species range


\(^8\) Oregon Wolves, 354 F. Supp. 2d at 1172 ("The Final Rule is arbitrary and capricious because [the Service] downlisted major geographic areas without assessing the threats to the wolf by applying the statutorily mandated listing factors. [The Service's] interpretation of its regulations cannot preclude a statutory mandate.").


\(^10\) Id.
The Service’s assessment of “[t]he present or threatened destruction, modification, or curtailment of the species range” as applied to the west coast gray wolf population fails on a number of fronts. As in the proposed rule, the final rule’s analysis of “suitable habitat” based primarily on road density and human population density is not based in the best available science.\(^\text{11}\) The Service fails to properly consider many other vital habitat components (such as forest cover and the availability of federally or state protected lands) and fails to properly assess the threats facing wolf habitat on a broader scale. In fact, the rule simply ignores the vast areas of suitable habitat currently unoccupied by wolves in the west coast states. And the rule disregards important connectivity corridors and habitats necessary to foster movement into and allow the recolonization of habitats across the west coast states by dispersing wolves from the Northern Rocky Mountain populations in Idaho, Wyoming, and Montana. Instead, the final rule merely falls back on the agency’s belief that wolves outside of Wisconsin and Michigan simply are not necessary for recovery of the 44-State entity, plain and simple. 85 Fed. Reg. 69,885. The final rule also—as discussed elsewhere in this letter—fails to consider individual dispersing wolves (which are, after all, how wolf recovery occurs) as contributing to the current range of the species, which skews the agency’s analysis, reflects the failure to consider the best available science, and renders the final delisting rule arbitrary and capricious, and otherwise not in accordance with the ESA. Finally, the agency does not consider that its decision to lump wolves occurring in western Oregon and Washington, and California, in with the NRM DPS wolves necessarily curtails the current range of the listed endangered entity.

(B) Overutilization for commercial, recreational, scientific, or educational purposes

The Service failed to adequately consider listing factor (B) as applied to the west coast wolves as well. First, the rule’s human-caused mortality discussion is entirely lacking as applied to wolf populations in Oregon, Washington, and Northern California. The rule does not adequately discuss lethal management by state and federal land and wildlife managers, nor does it adequately discuss the impact of excessive levels of recreational hunting in the Northern Rocky Mountain states, which severely threatens wolf populations in the west coast by inhibiting dispersal and recolonization capabilities. Instead, the rule discounts the impacts of human-caused mortality by broadly concluding that the life-history characteristics of wolf populations provide “natural resiliency” to high levels of human-caused mortality. 85 Fed. Reg. 69,794; see also id. at 69,811. This ignores the basic fact that high levels of human-caused mortality are what drove the wolf extinct across most of the United States in the first place. The rule also does not adequately discuss and consider the impacts of recreational hunting seasons on tribal lands, such as the unlimited, year-round wolf hunting season on Confederated Tribes of the Colville Reservation lands, which also allows certain hunting and trapping activities outside of tribal lands. Further, the rule fails to consider the immense loss of wolves at the behest of livestock producers and fails to address the threats faced by the

---

\(^{11}\) See e.g. Atkins North America, Inc., Summary Report of Independent Peer Reviews for the U.S. Fish and Wildlife Service Gray Wolf Delisting Review at 122, 179, 184 (May 2019) (critiquing the Service’s analysis and corresponding definition of suitable habitat)[hereinafter “Peer Review”].
species due to the lack of non-lethal coexistence practices in key wolf habitats in the Pacific Northwest.

Additionally, the Service’s human-caused mortality discussion notes that illegal take “has not prevented recovery of the species, the maintenance of viable wolf populations, or the continued recolonization of vacant, suitable habitat.” 85 Fed. Reg. at 69,795. This, however, fails to account for the fact that the current endangered listing status of gray wolves likely prevents illegal take given strict and harsh penalties for illegal take under the ESA. The final rule lacks an analysis of the potential for increased gray wolf take if ESA-take prohibitions are removed.

(C) Disease and predation

The rule is utterly dismissive of the potential for disease to threaten wolf populations in the west coast states. 85 Fed. Reg. 69,818–19. In fact, there is no specific discussion of the potential impacts of disease in the Pacific Northwest’s uniquely different climate from that of the Great Lakes region. The Service only addressed the potential for disease to threaten wolf populations in the context of the Great Lakes region alone, and thereby failed to adequately assess this listing factor as applied to the West Coast wolf populations. Indeed, this factor can be significant to wolf populations, as was recently seen in the Yellowstone National Park wolf population in 2019. Additionally, the Service fails to properly acknowledge and deal with the fact that diseases are known to be causative factors for wolf population crashes, particularly in small and isolated populations, like those of the West Coast states.

(D) Inadequacy of existing regulatory mechanisms

The Service’s analysis of regulatory mechanisms in the west coast states is entirely inadequate. The Service fails to adequately consider the state wolf management plans in Oregon, Washington, and California in detail, fails to consider recent changes to these plans, and fails to consider the non-binding nature of the Washington plan. 85 Fed. Reg. 69,835–37. Indeed, the Washington wolf management is, as described by the Washington Department of Fish and Wildlife Director, merely an advisory document that can be changed with a letter to the file.

The Service fails to consider that the lack of state-level listing protections for the species in Oregon will necessarily inhibit the recovery of the species in the state absent vital federal-level protections. The Service completely ignores that the delisting of wolves in Oregon at the state-level was based on politics alone, and not on a science-based finding of the species’ biological recovery in the State. 85 Fed. Reg. 69,835. Indeed, the Oregon Department of Fish and Wildlife never met its statutory duty to peer review the science behind its erroneous determinations.

Both Oregon and Washington provide very instructive case studies for the Service, and it should have analyzed how both of these states have managed wolves, including a quantitative analysis of the number of wolves killed and entire packs eliminated in those states that considers both raw numbers and an analysis of geographic and temporal distribution. This analysis should also include impacts on dispersal, and an analysis of the corridors that dispersing wolves are taking and any barriers they face to their dispersal. Because both Oregon and Washington have been managing wolves in parts of their respective states that do not have federal protections in place, it provides an opportunity for the Service to conduct an analysis of what the states are doing and how their management plans have been working (or not). And, notably, the Service fails to discuss the very real threat of potential hunting in the west coast states upon delisting as well. For example, we’ve just seen the State of Wyoming allow wolf hunting to such an extent that the Wyoming wolf population was reduced below the target population the state insisted it would maintain within the state.

The Service’s cursory review of the existing regulatory mechanisms in place for wolves in Oregon, Washington, and California is insufficient to justify delisting at this time.

Regarding wolf management on federal public lands, the final rule concedes that U.S. Forest Service forest plans (also referred to as Land and Resource Management Plans or Land Management Plans) in West Coast states “do not contain standards and guidelines specific to wolf management.” 85 Fed. Reg. at 69,842. This concession is evidence of the lack of adequate regulatory mechanisms as it relates to wolf management in a majority of available wolf range (including current wolf range) in the West Coast states. The Service also explains that the Regional Forester for Region 6 (the Pacific Northwest) of the Forest Service will add the gray wolf as a sensitive species in their region. Curiously, the Service cites to a Bureau of Land Management document to support this statement, however the References Cited document related to the final gray wolf delisting rule does not contain any such document. Importantly, this has not happened yet, and cannot be used as evidence of adequate regulatory mechanisms that may justify delisting gray wolves now. Importantly, although wolves are delisted on some national forests in Region 6, gray wolves are not currently a sensitive species on those forests. Additionally, the U.S. Fish and Wildlife Service ignores that the sensitive species designation is an outdated designation. In 2012, the U.S. Department of Agriculture promulgated a new forest planning rule that eliminated the sensitive species designation and replaced it with a Species of Conservation Concern designation. See 36 C.F.R. § 219.9(b)-(c). The final delisting rule includes no discussion about how Region 6 (or other U.S. Forest Service regions) will characterize the gray wolf on the Species of Conservation Concern list, and what that actually means in practice.

13 The Service cites BLM 2019 as support, but there is no such document in the References Cited for Final Rule to Remove the Gray Wolf (Canis Lupus) from the List of Endangered and Threatened Wildlife. One of the authors of this notice letter emailed the listed U.S. Fish and Wildlife Service contact related to the final delisting rule, Bridget Fahey, on November 3, 2020, about this citation, however as of the date of sending this letter, had not received a reply to clarify the citation.
(E) Other manmade factors affecting the species’ continued existence

The rule fails to consider the threats to the species by other manmade factors, such as the impacts of climate change. The rule cursorily dismisses climate change impacts based on the fact that gray wolves are “highly adaptable.” But such a dismissive analysis fails to consider the threats the species may well face based on the necessary changes in its range that will occur and the lack of adequate protections in places where wolves may need to move in order to deal with a changing climate. Such a dismissive analysis also fails to consider the impacts on gray wolf prey, such as deer and elk populations. Dr. Carroll explained in his peer review comments that climate change “can accentuate the rate of change in a species’ range” and that the rule ignores climate change-related “issues regarding conservation of ecotypic variation and adaptive potential within the species.” Carroll Peer Review Comments at 9. Dr. Carroll further explained that because “wolf populations are known to be associated with specific ecosystems...shifts in ecosystems caused by climate change may be expected to alter distribution and viability of certain wolf ecotypes.” Id.

Additionally, the final rule fails to consider the potential for states to fail to employ science-based management practices absent federal oversight. For instance, once the five-year monitoring period expires, states may transition to more lethally aggressive and hate-based management practices for wolves, such as has occurred in Idaho since delisting (e.g., the institution of bounties to hunters for wolves killed). Not to mention the fact that the post-delisting monitoring program as described in the final rule only entails monitoring in the Great Lakes States. 85 Fed. Reg. at 69,894. These are valid concerns that are not adequately addressed in the Section 4(a)(1)(E) analysis.

Cumulative impact of the threats

Despite any one of the above factors being enough to warrant continued protections for gray wolves in the West Coast States in particular, the presence of all of these factors in combination necessarily points toward the need for maintaining ESA protections. Cumulatively, these threats will inhibit the recovery potential for gray wolves across the West Coast States and beyond.

In short, the Service’s Section 4(a)(1) listing factor analysis as applied to the West Coast States is grievously flawed and renders the rule arbitrary and capricious under the ESA and the APA.

The Final Rule’s Idaho Analysis is Flawed

The final rule discusses the state of wolf management in states within the NRM DPS, but paints a biased and misleading picture of what is occurring in those states. Because part of the rationale for delisting is that West Coast wolves are part of the NRM DPS, and that the NRM DPS contains a viable and stable population of wolves, this matters, and ultimately,

14 85 Fed. Reg. 69,821.
skews the Service’s analysis to such an extent that it violates the ESA, the ESA’s implementing regulations, and is therefore arbitrary and capricious. In Idaho, for instance, drastic, liberal hunting and trapping policies aimed at significant wolf population reductions removed approximately 60 percent of the estimated 2019 year-end population in 2019-2020, but FWS completely ignores this information.

To conclude Idaho’s wolf population is stable, FWS relies on a leaning tower of baseless assumptions. For example, the final rule assumes the wolf population in Idaho has remained stable post-delisting, even though there is no reliable data to support that assumption. The State of Idaho stopped providing a minimum wolf count on an annual basis in 2015. See 85 Fed. Reg. at 69,800. Following public outcry over the lack of reliable information about wolf abundance, the Idaho Department of Fish and Game (IDFG) in 2019 introduced a new, untested, and unreviewed camera trap survey method to estimate the wolf population that it used to produce an inflated wolf population estimate. Id. There is simply no support for FWS’ assumption that the wolf population in Idaho has remained stable under state management post-2015.

It also states that wolf harvest has had “minimal” effects on the wolf population in Idaho, at least through 2016. 85 Fed. Reg. 69800. But relying exclusively on the period through 2016 undermines this conclusion because wolf hunting and trapping regulations were significantly liberalized beginning in 2017. As the rule admits, beginning in 2017, IDFG removed statewide wolf harvest limits, expanded hunting seasons to 11 or 12 months of the year in most of the state, allowed wolf trapping in all but 2 hunt units, and increased bag limits so a single individual could kill up to 30 wolves. See id. at 69799. The effects of wolf management in Idaho through 2016 are a meaningless basis upon which to project effects of current management.

Indeed, the rule overlooks that IDFG has actually incentivized wolf trapping intended to reduce the wolf population by funding wolf bounties. For example, in 2020, IDFG gave the Foundation 4 Wildlife Management more than $20,000 of public funds to provide “reimbursement” for wolf trappers, and since the fall of 2017, when trapping restrictions were significantly relaxed, trapping has emerged as a leading cause of wolf mortality in Idaho. In the fall of 2019, trappers killed 157 wolves, while hunters killed only 137. Thus, by incentivizing trapping, IDFG is likely to continue to significantly increase wolf harvest.

The rule also underestimates or ignores the effects of mortality from these changes on Idaho’s wolf population. For instance, it states that 21 percent of the Idaho wolf population was killed annually from 2009 to 2015 and that this level of mortality contributed to the stabilization of the population. 85 Fed. Reg. at 69799. But far more than 21 percent of the estimated population was killed in 2019-2020: this past year, 583 wolves were killed in Idaho—more than 50 percent of the generous estimated 2019 year-end population and far more wolves than have been killed in any year since delisting. The screenshot below—from the IDFG Director’s testimony before the Idaho Senate Resources and Environment Committee on October 15, 2020—shows significantly more wolf mortality after Idaho’s wolf
hunting and trapping regulations were liberalized in 2017. But the rule does not consider this information.

Indeed, recent information suggests Idaho’s wolf population cannot be characterized as “stable.” The slide above shows that wolf mortality declined from 2014 to 2017, then increased significantly. This means one of two things: either Idaho’s wolf population exploded post-2017, or Idaho’s permissive hunting and trapping regulations caused a larger proportion of the population to be killed. Neither indicates a “stable” population, and the final rule’s statement that “increased hunter opportunity has not resulted in significant and continuous increases in wolf harvest” is demonstrably false. 85 Fed. Reg. at 69799.

The final delisting rule also relies on Horne et al. 2019 to claim that wolf killing in Idaho did not affect wolf recruitment. However, Horne et al. 2019 defined “recruitment” as survival up to six months, while the accepted standard for recruitment is survival to a year. Idaho’s liberalized wolf killing most certainly has affected wolf recruitment under the definition commonly used in the scientific community. Indeed, Horne et al. 2019’s reliance on a different standard calls the study’s credibility into doubt. As the final rule notes, Ausband 2015 concluded, using commonly-accepted methods, that there was a decline in pup survival that “may have affected recruitment” after wolf hunts began in Idaho. 85 Fed. Reg. at 69799.

The Final Rule claims that ILWOC (2002) sets forth the State of Idaho’s wolf management objectives, see 85 Fed. Reg. at 69,798, but ignores IDFG’s more recent “predation management” plans and an elk management plan that call for heavy-handed wolf population reductions to purportedly increase deer and elk available for sport harvest.

The Service’s failure to include and analyze this information—which undermines its unsupported and outdated assumptions about the stability of the Northern Rockies wolf population, as well as analyze its import on wolf dispersal to other areas, renders the final delisting rule contrary to the ESA, and otherwise arbitrary and capricious. As a result, the
public and decision-maker cannot truly know the impacts of this large amount of wolf mortality. The Service has clearly failed to rely on the best available information in its analysis of wolf populations and wolf management in areas where wolves do not currently have ESA protections.

V. The Final Rule is Not Based on the Best Available Science

The ESA requires that the Service make listing determinations “solely on the basis of the best scientific and commercial data available.” 16 U.S.C. § 1533(b)(1)(A). However, even a cursory review of the scientific Peer Review\(^\text{15}\) shows that the Service failed to meet this mandate. This is a clear violation of the Act and renders the Service’s proposed determination arbitrary and capricious under the APA. Although the Service did add some responses to the Peer Review and provided some additional information in the final delisting rule in response to the Peer Review, the Service ultimately doubles down on its decisions and largely ignores the substance of the well-thought out and independent peer reviewers.

First, and overall, every single one of the peer reviewers questioned whether the agency’s rule was based in the best available science,\(^\text{16}\) noting there were clear omissions of key

\(^{15}\) Atkins North America, Inc., Summary Report of Independent Peer Reviews for the U.S. Fish and Wildlife Service Gray Wolf Delisting Review (May 2019) [hereinafter “Peer Review”][Note: page numbers cited to in this document reference the Adobe PDF page number of the document as a whole (245 pages total)].

\(^{16}\) See e.g., Peer Review at 113 (“I had some difficulties in my evaluation because many statements throughout both documents do not include citations for the basis of the conclusion … The common absence of citations made it hard to evaluate if the best available information was used and to evaluate the quality of the scientific information.”); Peer Review at 124 (“I found that the proposed rule did not build on the assembled scientific information to provide coherent factual support or logical information for the agency’s conclusions.”); Peer Review at 167 (noting the Service’s use of older publications where more recent, updated publications were readily available); Peer Review at 178 (“There are demonstrable errors in the proposed rule and draft biological report. Several of the Services’ documents’ interpretations and syntheses are neither reasonable nor scientifically sound. In several instances, a different and equally reasonable (or more) and sound (or more) interpretation has been reached in the scientific peer-reviewed literature. In several cases, results in the best journals (ranked independently on a worldwide scale of impact factors) were ignored or overlooked, in favor of non-peer-reviewed interpretations or results from lower-ranked journals.”); Peer Review at 179 (“In sum, I do not find the proposed rule and draft biological report present the best available science”); Peer Review at 183 (“The scientific basis of the gray wolf entity and its range seems questionable on scientific grounds because I found neither consistent terminology for subpopulations of current wolves, nor consistent handling of data on dispersal, discreteness, range, or status across the entity.”); Peer Review at 185 (noting the rule’s summary of human-caused mortality is not “a thorough and comprehensive review of the best available scientific and commercial data. Furthermore, even when the evidence summarized seems to be the best available, I find several key analyses and conclusions drawn from the review are unclear, illogical, or poorly reasoned.”); Peer Review at 237 (“The best available data were not always used.”); Peer Review at 240 (“[T]here are demonstrable errors of fact, interpretation, and logic. Some interpretations of scientific information are not sound. There are several instances where a different
scientific data, and that the publications and analysis relied upon appeared “haphazard” and “ad hoc;” with one reviewer going so far as to state that the science and approach underlying the decision “looks like a predetermined conclusion.” Multiple reviewers commented that the proposed rule failed to properly account for the ESA’s foundational policy of “institutionalized caution,” and inherently avoids due consideration and employment of the “precautionary principle” to wildlife management.

Reviewers raised critical substantive concerns with the Service’s delisting approach as well. Although concerns relating to the Service’s confusing application of its DPS policy to the gray wolf entity, and oversimplified interpretation of genetic structure— among others — were also advanced, we highlight three key considerations raised by reviewers, and but equally reasonable and sound interpretation might be reached that differs from that provided by the Service.”

17 Peer Review at 121 (suggesting key publications wrongly omitted from the proposed rule’s underlying biological analysis report “that need to be addressed in order for the report to provide a comprehensive information base for the rule”); Peer Review at 149 (noting many “overlooked publications”); Peer Review at 177 (noting the rule’s “missing scientific information on all of the following topics: biology, ecology, [and] biological status” and expressing particular concern “by missing information on human-caused mortality, human attitudes leading people to kill wolves, and dispersal”); Peer Review at 203 (“In general, I find the draft biological report ignores a large number of relevant articles published in peer-reviewed journals of the highest rank. Being unaware of them does not seem plausible given the [Service] paid for some of the research in these articles and were sent many of them in previous rounds of delisting.”); Peer Review at 237 (“The review overlooked many rigorous, peer-reviewed studies that are directly relevant to understanding and predicting rates of human-caused mortality among wolves inhabiting the current range of the gray wolf entity. These include studies by Maletzke et al. (2018), O’Neil et al. (2017), Stenglein and Van Deelan (2016), and Stenglein et al. (2015a, 2015b, 2018). This list is not exhaustive and further literature may identify additional relevant studies.”); Peer Review at 237 (noting that “[n]one of the data or analysis cited … related to western listed wolves”).

18 Peer Review at 203
19 Peer Review at 237.
20 Peer Review at 180.
21 Peer Review at 139 (“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.’”).

22 Peer Review at 201.

23 See *Tennessee Valley Auth. v. Hill*, 437 U.S. 153, 194 (1978) (“Congress has spoken in the plainest of words, making it abundantly clear that the balance has been struck in favor of affording endangered species the highest of priorities, thereby adopting a policy which it described as ‘institutionalized caution.’”).

24 Peer Review at 113 (“Overall, the treatment of the DPS status of gray wolves is very confusing to me in the proposed delisting rule … it is now 23 years since the DPS policy was established, and it is hard to understand why the treatment of gray wolves under the ESA is not in compliance with this policy.”).

25 Peer Review at 126 (describing the Service’s genetics description as “an extreme oversimplification of the genetic structure of wolf metapopulations at regional and continental extents”).
inadequately addressed the Service in the final rule, exemplifying the Service’s failure to use and apply the best available science here:

**Misinterpretation of the Three R’s — Resiliency, Redundancy, and Representation**

The entire premise of the Service’s rule rests on the supposition that wolves in the Great Lakes region alone purportedly provide adequate resiliency, redundancy, and representation to sustain populations within the gray wolf entity over time. As noted earlier, the Service (falsely) uses these “3 R’s” to define “significance” under its “significant portion of its range analysis.” And as such, the Service asserts that the relatively few wolves that occur outside the Great Lakes area within the gray wolf entity, including those in the west coast States and lone dispersers in other States, are not necessary for the recovered status of the gray wolf entity.

However, as at least one reviewer explained, the Service’s use of the 3 R’s in the delisting proposal represents a misinterpretation of “both wolf ecology and the [3 R’s] themselves[29]”

> [T]he conservation principles of resiliency, redundancy and representation (the ‘3R’ criteria) as developed by Shaffer and Stein (2000) are quite different than as presented in the rule. The 3 Rs in essence state that, to be considered recovered, a species should be present in **many large populations arrayed across a range of ecological settings**. Redundancy of subpopulations in a metapopulation enhances the viability of each due in part to ‘spreading of risk,’ since episodic threats such as disease outbreaks or long-term trends such as climate change may not affect all subpopulations equally.

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**. Representation applies primarily to a population itself . . . rather than to a population’s contribution to the entire species.[30]

As such, adequate representation of the species “across the diversity of ecosystems inhabited by the species” — and ensuring the species’ presence in “many large populations arrayed

---

26 85 Fed. Reg. 69,885.
27 Id.
28 Id.
29 Peer Review at 130.
30 Peer Review at 130–31 (emphasis added).
across a range of ecological settings” — should be key factors in considering whether “a portion of a species range is significant.”\textsuperscript{31} The Service’s omission of key ecosystems inhabited (or formerly inhabited) by gray wolves — such as in the Southern Rockies, Southwest, and the Pacific Northwest — fails to properly apply this concept, as it is far too narrowly constrained to the ecosystem elements represented by the Great Lakes region alone.

The Service attempts to overcome this serious misinterpretation of the concept by stating merely that it chose to apply the definition at the species-level instead, and in accordance with Smith et al. 2018, 85 Fed. Reg. 69,854, but this does not comport with the best available science. \textit{See} Carlos Carroll et al., Wolf Delisting Challenges Demonstrate Need for an Improved Framework for Conserving Intraspecific Variation Under the Endangered Species Act, BioScience, at 5–6 (2020) (attached).

Notably, Shaffer and Stein (2000) — the authors of the underlying 3 R’s concept employed by the Service in its rule — note the crucial significance of understanding and applying the 3 R’s in the broader ecosystem-based context: “The principle of representation — saving some of everything — will require identifying conservation targets not simply as species and communities but as the complexes of populations, communities, and environmental settings that are the true weave of biodiversity.”\textsuperscript{32} The Service’s narrowed application of the 3 R’s as relating to the sustainability of gray wolves in the Great Lakes region alone blindly misleads the public into thinking that the presence of wolves in the Great Lakes ecosystem alone is enough for recovery to have been achieved under the mandates of the ESA. This is in error and contrary to a proper interpretation of the best available science.

\textit{Defining Habitat Suitability and Failing to Consider Habitats in the Southern Rockies}

Multiple reviewers took issue with the Service’s definition of habitat suitability and its complete omission of suitable habitats in the Southern Rockies and Southwest, such as Colorado and Utah, in determining that removal of ESA protections from the gray wolf entity is warranted.\textsuperscript{33} Rather than overcome this serious flaw in the final rule, the Service instead falls back on its blind assertion that recovery in the Central Rockies (including Colorado and Utah) is plainly not necessary to the recovery of the 44-State entity, regardless. 85 Fed. Reg. 69,885.

\textsuperscript{31} Peer Review at 131 (citing Carroll et al. 2010).
\textsuperscript{32} Peer Review at 131 (citing Shaffer and Stein (2000)); \textit{see also} Carroll et al. (2020) at 11–12.
\textsuperscript{33} \textit{See} e.g., Peer Review at 122 (“The report combines detailed description of the distribution of suitable wolf habitat in some regions with the almost complete omission of such information in other regions. In this respect, the report is inconsistent with previous iterations of wolf listing and delisting rules, which at least attempted a more geographically complete distribution of suitable habitat.”); Peer Review at 179 (“I found the definition of suitable habitat did not conform to standard practice in ecology and conservation, and moreover it contained an unstated value judgment in place of scientific observation.”).
For example, one reviewer faulted the Service for placing human value judgments over
standard scientific practice in defining suitable habitat based on human density, rather than
the reproductive and survival needs of the species.34 The reviewer also faulted the Service for
estimating suitability at the scale of entire populations, rather than of individual members or
breeding pairs.35 And further, the reviewer questioned the Service’s basis for determining
that human presence necessarily equates to unsuitable habitat.36 “[E]cologists do not define
habitat as unsuitable because a predator resides there. Nor should the proposed rule define a
habitat as unsuitable because people live there.”37

The Service’s response to these comments in the final rule fail to overcome the fact the
Service did not apply the best available science to the final rule. See e.g., Carlos Carroll et al.,
Wolf Delisting Challenges Demonstrate Need for an Improved Framework for Conserving
Intraspecific Variation Under the Endangered Species Act, BioScience, at 10 (2020)
(attached).

Regarding the utter failure to consider the availability of ample suitable habitat in regions of
the Southern Rockies and Southwest, reviewers called out the Service for its arbitrary change
of position, as these areas were consistently found to qualify for assessment in the Service’s
prior recovery efforts.38 This oversight is a crucial flaw, as “[h]abitat modeling has suggested
that Colorado alone could support a population of over [1,000] wolves, which would
constitute the second or third largest state wolf population in the contiguous [U.S.], and thus
a ‘core’ population for sustaining the species’ viability.”39 The oversight also ignores the
importance of wolves in this region serving as a key connector between wolves in the
Northern Rockies and Southwestern and Mexican gray wolf populations.40 The best available
science — e.g., Hedrick (2018) — demonstrates that such connectivity would be highly
beneficial to the genetic health and adaptive potential of both the Mexican wolf subspecies
and the broader gray wolf species, especially as both species face range shifts coinciding with

34 Peer Review at 184 (“[I]t is standard practice in ecology to define suitability by observing where
reproduction and survival occur to define suitability, not by imposing a human value judgment on
it”).
35 Peer Review at 184 (“[H]abitat suitability is estimated at the scale of individual animals or breeding
social units, not populations”).
36 Peer Review at 184 (“[D]efining a human behavior (wolf-killing) as a habitat feature is contrary to
long-standing ecological practice. Not all humans’ kill gray wolves or even want to kill gray wolves
(Treves et al. 2013). Therefore, human density is a weak correlate of threat to wolves. Stronger
correlates of inclination to kill wolves have been identified and they do not always occur where
human population density is moderate or high (Smith et al. 2010). Therefore, any claim that the
cause of suitability of habitat is the presence or density of humans would be erroneous.”).
37 Peer Review at 184 (emphasis in original); See also id. at 185 (“[U]nwillingness to curb human-
caused mortality (by the agencies responsible) is a value judgment, not a scientific fact or prediction.
Unwillingness to curb illegal killing does not make wolves less capable of using habitat.”).
38 Peer Review at 138.
39 Peer Review at 138 (citing Carroll et al. 2006).
40 Peer Review at 138–39.
our changing climate. The Service entirely fails to explain why the suitable habitats afforded by places like Colorado and Utah are not significant and fails to rationally explain away the inconsistencies associated with this determination as related to prior rules. Instead it simply argues that recovery in the Central Rockies is not necessary to recovery of the 44-State entity under the Act. 85 Fed. Reg. 69,885. Again, the Service fails to abide by the ESA’s best available science mandate.

**Precedential Impact of the Service’s ‘New’ Approach to Recovery**

Finally, one reviewer summed up the deeply troubling precedential impact the Service’s approach here could have on the recovery of species elsewhere under the ESA: “If applied generally to other species, the interpretation proposed in the current wolf rule would represent a major scaling back of ESA recovery efforts, one which is clearly at odds with the purpose of the Act.” While it is clear that the ESA does not require species to be restored ‘everywhere,’ this is not the same as concluding in favor of the central argument of the proposed rule, which is that recovery in one region (the Great Lakes) is sufficient to delist a species formerly distributed across the continent.” Applying this flawed, minimalist approach to recovery elsewhere will have devastating impacts to the efficacy of the ESA and to the preservation of biodiversity nationwide.

In short, the Peer Review of the Service’s proposal — and the agency’s failure to adequately address the serious faults raised in its final iteration — represents a resounding cry by scientists across the board that the Service needs to go back to the drawing board and put the science first, as the ESA’s best available science mandate appropriately demands.

**VI. The post-delisting monitoring program violates the ESA.**

The post-delisting monitoring program only entails monitoring in the Great Lakes States, and relies on a 2008 plan prepared for a DPS that does not exist. See 85 Fed. Reg. at 69,894; see also Post-delisting Monitoring Plan for the Western Great Lakes Distinct Population Segment of the Gray Wolf (February 2008). The Service’s own Post-delisting Monitoring Plan Guidance notes it should tailor the program to collect and evaluate data “most likely to detect increased vulnerability of the species following removal of ESA protections.” Post-Delisting Monitoring Guidance at 4-1. The Guidance also contemplates different monitoring protocols in different locations due to differences in threats and population dynamics. Id. at 4-2. The Service’s failure to monitor gray wolves outside the Great Lakes States violates the ESA, the Service’s Post-Delisting Monitoring Plan Guidance, and is arbitrary and capricious.

---

41 Id.
42 Peer Review at 140.
43 Id.
44 Peer Review at 140.
VII. **The changes between the proposed and final delisting rules for gray wolf warranted additional peer review and additional public comment.**

The changes to the gray wolf delisting rule between the 2019 proposed rule and the November 2020 final rule are dramatic. Indeed, the text of the rule ballooned several times over, and represents some significant additions of biological and policy information. Because this information was not provided in the proposed rule, the peer review team was deprived of the opportunity to review it, and the public was deprived of the opportunity to comment on it. As such, the final rule violates the APA in that there was insufficient opportunity for peer review and public comment. This renders the final delisting rule arbitrary, capricious, and in violation of the ESA.

**CONCLUSION**

In closing, this sixty-day notice of intent to sue serves to put the Service, the Department of the Interior, and the above-named officials on notice of their liability for violating the ESA and making an arbitrary and capricious decision that violates the ESA related to the decision to remove ESA protections for the gray wolf. WildEarth Guardians, Western Watersheds Project, Cascadia Wildlands, Klamath-Siskiyou Wildlands Center, Environmental Protection Information Center (EPIC), The Lands Council, Wildlands Network, and Klamath Forest Alliance intend to file a lawsuit in federal court unless the Service rectifies the deficiencies described in this letter.

We would, however, prefer to avoid litigation. As such, we welcome the opportunity to meet with the Service to discuss these concerns and attempt to come to a meaningful resolution of these issues to avoid seeking relief from a court after costly and time-consuming litigation. Please let us know at your earliest convenience if you would be interested in such a meeting.

Thank you for your consideration of these issues, and we look forward to hearing from you.

Sincerely,

John R. Mellgren
Western Environmental Law Center
120 Shelton McMurphey Blvd., Ste. 340
Eugene, Oregon 97401
Ph: (541) 359-0990
mellgren@westernlaw.org

Kelly E. Nokes
Western Environmental Law Center
P.O. Box 218
Buena Vista, CO 81211
Ph: (575) 613-8051
nokes@westernlaw.org
On behalf of:

Lindsay Larris  
Wildlife Program Director  
WildEarth Guardians  
2590 Walnut Street  
Denver, CO 80205  
llarris@wildearthguardians.org

Erik Molvar  
Executive Director  
Western Watersheds Project  
P.O. Box 1770  
Hailey, ID 83333  
emolvar@westernwatersheds.org

Nicholas Cady  
Legal Director  
Cascadia Wildlands  
120 Shelton McMurphey Blvd., No. 240  
Eugene, OR 97401  
nick@cascwild.org

Tom Wheeler  
Executive Director  
Envtl. Protection Information Center  
145 G Street, Ste. A  
Arcata, CA 95521  
tom@wildcalifornia.org

Michael Dotson  
Executive Director  
Klamath-Siskiyou Wildlands Center  
P.O. Box 102  
Ashland, OR 97520  
michael@kswild.org

Kimberly Baker  
Executive Director  
Klamath Forest Alliance  
P.O. Box 21  
Orleans, CA 95556  
kimberly@wildcalifornia.org

Mike Petersen  
Executive Director  
The Lands Council  
25 W. Main, Ste. 222  
Spokane, WA 99201  
mpetersen@landscouncil.org

Greg Costello  
Conservation Director  
Wildlands Network  
329 W. Pierpont Ave., Ste. 300  
Salt Lake City, UT 84101  
greg@wildlandsnetwork.org