



Animal Welfare Institute

900 Pennsylvania Avenue, SE, Washington, DC 20003
awionline.org phone: (202) 337-2332 fax: (202) 446-2131

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Submitted electronically (via www.regulations.gov)

Mr. Don Morgan, Chief
Branch of Delisting and Foreign Species
Ecological Services,
U.S. Fish and Wildlife Service
Headquarters Office, MS: ES
5275 Leesburg Pike
Falls Church, VA 22041– 3803

Re: Docket No. FWS–HQ–ES–2018– 0097

Dear Mr. Morgan:

On behalf of the Animal Welfare Institute (AWI), I submit the following comments on the proposed rule to delist gray wolves from the Endangered Species Act (ESA). 84 Fed. Reg. 9,648 (Mar. 15, 2019). AWI is strongly opposed to this proposal because it is inconsistent with the ESA, is premature, is not based on the best available scientific evidence, and contains numerous other flaws.

AWI is a nonprofit charitable organization founded in 1951 and dedicated to reducing animal suffering caused by people. AWI engages policymakers, scientists, industry, and the public to achieve better treatment of animals everywhere—in the laboratory, on the farm, in commerce, at home, and in the wild.

The proposed rule continues to promote the anti-predator and anti-wolf bias that led to the nationwide slaughter of wolves following European settlement of the United States. That slaughter—which was prompted by an unwarranted human fear of wolves and conflicts with the expanding human and livestock populations—substantially altered the ecology of the country by removing a keystone predator from the landscape. Even during that era, such wide-scale killing was inexcusable. But it was allowed to take place in part because we did not understand, as we do today, the importance of predators to ecosystems and ecosystem function. While improved understanding of that value has led to increased public support for the protection of wolves and other predators, federal and state wildlife agencies continue to adhere to anti-predator biases whereby wolves and other predators are seen as a threat to people, companion animals, livestock, and other wildlife species that generate hunting revenue.

Here, based on a 27-year-old recovery plan for eastern timber wolves, 84 Fed. Reg. at 9,657, the U.S. Fish and Wildlife Service (FWS) has concluded that, with numerical recovery goals met, perceived commitments from the three state wildlife agencies of Minnesota, Wisconsin, and Michigan regarding future wolf management, and an overarching conclusion that other threats to wolves are not substantive, gray wolves no longer require protections afforded under the ESA. Hence, the agency proposes to delist gray wolves in Minnesota (currently listed as threatened) and to delist all other gray wolves nationwide that are currently designated as endangered.¹ Even wolves who are pioneers—those attempting to colonize previously occupied range—the very animals and their habitat that most require ESA protections, have been deemed inconsequential or unnecessary to the recovery of the species. The FWS is apparently satisfied that, (1) two gray wolf metapopulations—primarily occupying relatively small portions of six states (Idaho, Montana, Wyoming, Michigan, Minnesota, and Wisconsin) representing a small fraction of the historical range of the species—is enough, (2) the ESA has served its function, and (3) management should now be turned over to state wildlife agencies. This conclusion is in error and the proposed rule fails to provide a justification for delisting the gray wolf.

Specifically, the proposed rule should not be adopted for the following reasons:

- It is inconsistent with the basic tenets of the ESA because it fails to recover the gray wolf in a significant portion of its range.
- It fails to use the best available scientific evidence, indicated by the deficiencies in the proposed rule and associated biological report that were identified during the peer-review process.
- It is predicated on a fatally flawed decision-making process in that (1) no national recovery plan for gray wolves was prepared, (2) recovery criteria for wolves in the Great Lake states (Minnesota, Michigan, and Wisconsin) were not revised and updated, (3) no scientifically credible status assessment or biological report was prepared, and, as a result, and (4) the information that would have been obtained through these efforts was not used to determine if delisting was warranted.
- It misapplies the FWS Distinct Population Segment (DPS) policy by failing to identify gray wolf DPSs that warrant ongoing protections under the ESA.
- It ignores the significance of illegal take and wrongly assumes that such illegal takes will decrease under state management of gray wolves.

¹ This proposed rule does not apply to gray wolves in the Northern Rocky Mountain states (i.e., Montana, Idaho, Wyoming, eastern Washington, eastern Oregon) which were delisted from the ESA between 2011 (for wolves in Montana, Idaho, eastern Washington and eastern Oregon as mandated by Congress) and 2017 (for wolves in Wyoming) or to Mexican wolves which remain designated as endangered under the ESA.

- It fails to consider in a comprehensive population viability analysis the cumulative impacts of all ongoing and reasonably foreseeable threats to gray wolves and their habitat.
- It falsely presumes that state wildlife agencies, certain federal agencies, and other agencies with authority over wildlife, livestock, and land use planning in wolf occupied habitat—including within the Great Lake states, California, Oregon, and Washington—will implement management actions that are consistent with assurances apparently made to the FWS.
- Relying on state regulations that are clearly insufficient to protect gray wolves and their habitat.
- It ignores the importance of protecting pioneering gray wolves and their habitat as required under the ESA.
- It fails to provide a proper review of the five ESA delisting criteria.

Each of these concerns will be addressed in the analysis provided below. Any one of these deficiencies is sufficient to terminate the current delisting process. In particular, the failure of the FWS—exposed during the peer-review process—to base the proposed rule on the best available science should have already prompted the FWS to, at minimum, suspend the decision-making process until it could amend the biological report. Only then and only if appropriate based on that new evidence, should the FWS consider publishing an amended proposed rule to delist gray wolves. The fact that the FWS has not suspended the decision-making process demonstrates its clear intent to ignore the best available scientific evidence in favor of achieving a longstanding objective of the FWS, state wildlife agencies, certain state legislatures and individual politicians, and the Trump administration to remove federal protections for gray wolves.

1. The proposed rule to delist the gray wolf is inconsistent with the intent of the ESA:

The ESA is the preeminent law for the protection of imperiled species. Its purpose is to “provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section.” The ESA’s purpose of protecting ecosystems is often overlooked, given the attention paid to the individual species, subspecies, and DPSs protected under the Act.

An “endangered species” is defined as “any species which is in danger of extinction throughout all or a significant portion of its range” 16 U.S.C. § 1532(6), while a “threatened species” is “any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.” *Id.* at § 1532(20).

Neither “significant” nor “range” is defined under the ESA. With the exception of one reference to “current range” related to the translocation of species, all other references in the Act to “range” can be interpreted as referring to the historical distribution of the species or subspecies protected under the ESA. Indeed, to suggest that it is only applicable to the current range of the species would allow for the absurd position whereby the current range (and the numbers) of an endangered or threatened species could be reduced so long as the species remain protected in a significant portion of their current range.

The FWS adopted a policy to provide additional guidance on interpreting a “significant portion of its range” in 2014, but that policy was ruled invalid by the courts in 2017 and 2018.² As a consequence, in the proposed rule the FWS evaluated significance based on “any reasonable definition of significant that relates to the conservation of the gray wolf entity” by identifying “any portions that may be biologically important in terms of the resiliency, redundancy, or representation of the species.” 84 Fed. Reg. at 9,684.

If the proposed rule is finalized and all gray wolves are delisted, the species would only occupy approximately 171,000 square miles (Weiss et al., 2014), which represents only 7.2 percent of its estimated historical range (an estimated 2,367,251 square miles).³ This cannot possibly represent a “significant portion of its range” and does not adequately provide for the resiliency, redundancy, or representation of the species. Accordingly, the proposed rule must be withdrawn and ESA protections must continue to be afforded the gray wolf until and unless it has recovered in a significant portion of its range. Even if the FWS elects to delist those gray wolf populations within occupied habitat in the Great Lake states (i.e., northern Minnesota, northern and central Wisconsin, and the Upper Peninsula of Michigan), it must retain ESA “endangered” protections for the remaining wolves throughout the species’ historic range. Such protections are required both to ensure that gray wolves recover in a significant portion of their range and because these pioneering wolves are important to protect the resiliency, redundancy, and representation of the species.

Even though the FWS claims that gray wolves outside currently occupied habitat in the Great Lake states and the Northern Rocky Mountains region are not required to achieve species recovery, it concedes that additional gray wolf habitat is available, particularly in the western states. Indeed, those pioneering wolves who are moving into western Washington, western Oregon, California, Utah, Colorado, Iowa, Illinois, Missouri, North Dakota, South Dakota, Nebraska, Nevada, and Kansas may, if protected under the ESA, eventually colonize habitat sufficient to meet their needs whether the habitat itself is deemed to be high, medium, or low quality.

² See *Desert Survivors v. U.S. Dep’t of Interior*, Case No. 16-cv- 01165-JCS (N.D. Cal. Aug. 24, 2018), *Ctr. for Biological Diversity v. Jewell*, 248 F. Supp. 3d 946, 955–58 (D. Ariz. 2017).

³ Calculated by taking the total land area of the contiguous United States and reducing it by 20 percent given the area identified by the FWS in the proposed rule (see Figure 2) considered to be outside the historic range of the gray wolf.

The ESA's clear purpose of protecting ecosystems on which endangered and threatened species depend requires the FWS, other federal agencies, and state agencies to protect and restore those ecosystems for the benefit of colonizing wolves, not to drop all federal protections for the gray wolf when arbitrary recovery numbers are met or exceeded. For this reason, the proposed rule should be withdrawn and protections afforded by the ESA should be retained.

2. Deficiencies in the decision-making process led to the premature proposal to delist the gray wolf:

The gray wolf was originally listed under legislative predecessors to the ESA in 1967 and then, in 1974, it was listed as endangered under the ESA. In 1978, the gray wolf was reclassified under the ESA, with the Minnesota population listed as threatened and all other gray wolves listed as endangered. At that time (or any time since then), the FWS was required to prepare a gray wolf recovery plan which should have been prepared at a national scale (excluding the Mexican wolf). While the FWS eventually developed a national wolf strategy in 2011, it has failed to ever prepare a national recovery plan for the gray wolf. Instead, it prepared a recovery plan for the eastern timber wolf in 1978 (which was subsequently amended in 1992) and a recovery plan for gray wolves in the Northern Rocky Mountains in 1980 (and revised in 1987).

By failing to prepare the required national recovery plan, the FWS illegally avoided developing nationwide recovery goals for the gray wolf throughout its historic range. Conversely, by preparing the two regional plans, the FWS has now used reported evidence of numerical recovery of gray wolves to delist the Northern Rocky Mountain gray wolves from the ESA and to now propose the delisting of the Great Lakes wolves. According to the FWS, all other gray wolves, including those pioneers attempting to colonize new habitats, are superfluous, unnecessary, or irrelevant to full species recovery. This conclusion is grossly in error and will result in the premature delisting of the gray wolf from the ESA when those wolf populations have not fully recovered. Or, where numerical recovery objectives have been reportedly satisfied—e.g., gray wolves in northern Minnesota, the Upper Peninsula of Michigan, and in northern and central Wisconsin—other threats or factors such as incomplete or dubious scientific evidence for delisting warrant retaining ESA protections for these populations.

The delisting of the bald eagle by the FWS represents a better model for the FWS to follow in delisting gray wolves. Like the gray wolf, bald eagles historically had a nearly nationwide distribution. The FWS, as part of its recovery plan, divided the bald eagle population in the lower 48 states into five regions. 72 Fed. Reg. at 37,346-47. It was only after bald eagle recovery was achieved in each region that the FWS sought to delist the species from the ESA. Other than the lack of a national gray wolf recovery plan and the fact that gray wolves are far more controversial than bald eagles, it is not clear why the FWS is treating gray wolves so differently. Furthermore, in regard to FWS efforts to recover and delist the grizzly bear, a species whose proposed delisting has generated similar levels of controversy to that of the gray wolf, the FWS has not chosen to focus solely on grizzly bears in the Yellowstone National Park and surrounding lands to achieve species recovery but, instead, continues to protect other grizzly bear populations under the ESA while their populations recover. The FWS should, at minimum, explain why its

recovery and delisting processes are not consistent across these three species (gray wolf, bald eagle, and grizzly bear) and, as relevant, other species.

The FWS should withdraw the proposed rule immediately and develop a national gray wolf recovery plan at least for all gray wolves that remain protected under the ESA. Alternatively, particularly if the FWS updates and revises the eastern timber wolf recovery plan, it should, at minimum, prepare a recovery plan, as is required under the ESA, for the gray wolves and habitat not currently covered by a recovery plan. That recovery plan should set recovery standards for the remaining gray wolves and their habitat, including occupied habitat and habitat throughout the species' historic range. That plan, which must be based on the best available scientific evidence and subject to public notice and comment, may conclude that recovery may not be realistic in some portions of the species historic range due, for example, to a lack of suitable habitat (i.e., based on such factors as total area, degree of forest cover (in some habitats), human population density, road density, availability of public land, and amount of agricultural land). Where suitable habitat exists, the plan should provide a framework for restoring healthy and genetically diverse gray wolves to those habitats and set standards to protect the habitat and the animals from adverse, anthropogenic impacts.

Despite the nearly three-decade-old eastern timber wolf recovery plan, the FWS based its decision to delist wolves from Minnesota, Wisconsin, and Michigan on the notion that those wolf populations have purportedly exceeded numerical recovery goals. The significant advancement in our knowledge about the taxonomy, ecology, biology, behavior, and ecosystem benefits provided by gray wolves warrants a fresh examination of the eastern timber wolf recovery plan. It should include a reexamination of the numerical recovery standards for the wolves covered by this plan as well as a reconsideration of the threats to these wolves from both natural and anthropogenic sources. The proposed rule should be withdrawn or, at least, suspended, pending a review of the recovery plan to determine if the recovery criteria must be updated and, in turn, if the wolves covered by the plan (e.g., those in Minnesota, Wisconsin, and Michigan) qualify for delisting.

Finally, the FWS erred in releasing its Gray Wolf Biological Report (biological report) and the proposed delisting rule simultaneously. The biological report should have been completed and subject to peer review prior to and independent of the proposed rule as it, if based on the best available scientific evidence, should have been used as a foundation of the proposed rule. In fact, the expert reviewers identify myriad omissions and deficiencies in the biological report. Had those been identified and the analysis amended and corrected by the FWS, it may have led to a different decision about delisting all or some of the gray wolf population or at least provided a more solid foundation for the FWS to substantiate the delisting proposal. This, in turn, may have lessened the significance scientific and public controversy associated with the proposed rule. In releasing its flawed biological report and proposed rule simultaneously, the FWS have predetermined the outcome of this rulemaking process.

3. The FWS failed to consider the best available scientific evidence in its biological report on the gray wolf and its proposed delisting rule:

The ESA requires that proposals to delist a species, subspecies, or DPSs be based on the best available scientific evidence. It also requires that the FWS subject such delisting proposals to peer review. In hindsight, however, the FWS should have, as indicated above, arranged to have the peer-review on the biological report conducted prior to preparation of the proposed rule, as doing so could have identified deficiencies in its analysis before it formulated the proposed rule. In fact, the results of the peer-review process make it abundantly clear that the FWS failed to base its decisions on the best available science. Since the peer review report by Atkins North America is part of the record, there is no need to restate each deficiency or omission from the biological report or proposed rule. However, AWI has identified some of the more important critiques below.⁴

The peer review addressed the following issues in the biological report:

- Problems with the FWS analysis of habitat suitability involving, among other things, (1) the use of forest cover as a proxy for habitat suitability (versus areas where wolves were subject to less anthropogenic mortality), (2) the suggestion that wolves are absent from certain habitat types (e.g., deserts, mountaintops) instead of existing in lower densities, and (3) for failure to consistently identify potentially suitable habitat in all areas of the gray wolf range (e.g., in Utah and Colorado).
- Errors in the description of sustainable mortality rates for wolf populations, including by failing to examine source-sink dynamics at a broader geographic scale, which can make mortality rates appear to be sustainable because of immigration into populations subject to heavy exploitation.
- Mischaracterization of or failure to clarify the genetics of gray wolves, including by not discussing the genetics of gray wolves, Great Lakes wolves, eastern gray wolves, wolf-coyote hybrids, eastern timber wolf, gray wolves/eastern wolf admixtures, and red wolves.
- The use of outdated historical distribution maps and reliance on historical distribution evidence that may not be accurate and/or is mischaracterized.
- Failure to properly or comprehensively evaluate anthropogenic mortality factors for gray wolves at all levels (i.e., population, subpopulations, ecotypes), including the cumulative impact of all anthropogenic causes or sources of wolf mortality when assessing the impacts of delisting on wolf populations including on wolf reproduction.

The peer-review addressed the following issues regarding the proposed rule:

⁴ The peer review report includes the actual submissions by the selected peer reviewers. Since those submissions were provided with or without page numbers it would be confusing to try to cite to specific page numbers within the overall report when summarizing the input both on the biological report and proposed rule.

- Mischaracterization or failure to clarify gray wolf genetics by, among other things, (1) not discussing the varied genetic characteristics of gray wolves, Great Lakes wolves, eastern gray wolves, wolf-coyote hybrids, eastern timber wolves, gray wolf/eastern wolf admixtures, and red wolves; (2) failing to consider genetic subdivision of gray wolves (versus treating gray wolves as one, single, genetic entity); (3) failing to consider the role of local adaptations to habitat types which may have influenced gray wolf genetics at a local scale; (4) dismissing genetic threats to smaller wolf populations; (5) falsely presuming that dispersal from a source population is equivalent to ongoing genetically effective dispersal from the source population in order to prevent the emergency of genetic threats or that such dispersal will continue in the face of legal delisting and/or physical changes (alterations in land use); and (6) examining genetic evidence at a population level instead of by considering effective population size to assess genetic viability and diversity.
- Failure to properly consider the substantive impacts of the loss of historic range to gray wolves including temporal and spatial changes to that range and the effect of this loss on the genetic and demographic structure of wolf metapopulations, specific ecotypes, and subspecies.
- Failure to properly consider the esthetic, ecological, educational, historical, recreational, and scientific value of gray wolves.
- Misinterpretation of the “resiliency, redundancy, and representation” aspect of recovery which, contrary to their use by the FWS in the proposed rule, requires that a species be present in “many large populations arrayed across a range of ecological settings” to reduce the potential adverse impact of episodic risks (e.g., from disease or impacts of climate change) that a species be present across a diversity of ecosystems and its role in those ecosystems. Here, instead of recognizing the “full spectrum of such natural variation across the landscape, and on a geographic scale that can truly encompass this ecological diversity and its attendant processes” to satisfy the “representation” prong of these recovery criteria, the FWS is prepared to rid itself of any federal obligation to protect and recover gray wolves based on its claims that gray wolves have now recovered in two regions (i.e., Northern Rocky Mountains and Great Lakes). Furthermore, the FWS has not provided sufficient evidence that the Great Lakes wolf population is sufficiently resilient, redundant, and representative to sustain gray wolves in that area over time or that other gray wolves, including the lone dispersers, are not necessary to achieve recovery of gray wolves.
- Failure to apply its DPS standards by failing to identify as DPSs those gray wolf populations, including those pioneers colonizing the Pacific Northwest (from Canada and from the Northern Rocky Mountain metapopulation), Colorado and Utah (from the Northern Rocky Mountain metapopulation), and the northeastern United States (primarily

from Canada). These populations demonstrate both physical and ecological differences from their source populations. Their protection and recovery would provide additional resiliency and redundancy for gray wolves as a whole. Therefore their loss would represent a significant gap in the range of the taxon.

- The use of outdated historical distribution maps of gray wolves and reliance on historical distribution evidence that may not be accurate and/or is mischaracterized.
- A lack of clarity regarding the definition and interpretation of suitable habitat for gray wolves including (1) applying the suitable habitat criteria to populations instead of individual gray wolves or breeding units, (2) using human density as a proxy for habitat suitability by correlating human density to likelihood of humans killing wolves, particularly given other serious threats, and (3) failing to evaluate the prevalence of illegal killing as part of a habitat suitability determination.
- The ignoring or downplaying of evidence of human-caused mortality to gray wolves or the impact of such mortality to gray wolf populations.
- Failing to seriously evaluate past, present, and potential future human-caused mortality rates for gray wolves, particularly in light of changes in a number of variables over time (e.g., access to wolf occupied habitat, road density, access to firearms and other killing technologies).
- Miscalculating, mischaracterizing, or ignoring the significant role of illegal killing and unreported kills of gray wolves to wolf populations and demographics, including by potentially causing “super-additive” mortality.
- Ignoring the reality of “catch-up killing” by states when given management authority over gray wolves by expanding the use of lethal control to address reported human-wolf conflicts.
- Presuming without any credible empirical evidence that lethal control of wolves to address conflict situations is effective when an increasing body of scientific evidence demonstrates that it is not, that it is wasteful (including economically), and that it can worsen, not improve, conflicts.
- Suggesting that human tolerance of wolves will improve and/or interest in illegally killing wolves will lessen when federal control of gray wolf management is ceded to state wildlife agencies, when no credible evidence of such a change is available.⁵

⁵ The FWS assumes that turning over wolf management to state wildlife agencies will reduce the incentive for illegal killing of wolves without providing any credible evidence to support such an assertion. Indeed, just as legalizing international trade in highly valued wildlife products creates additional opportunities for the illegally

- Failing to properly evaluate the cumulative impact of all anthropogenic causes or sources of wolf mortality at all levels when assessing the impacts of delisting on wolf populations, subpopulation, and ecotypes, including on wolf reproduction.
- Failing to provide the same level of analysis of human-caused mortality for all wolf populations.
- Serious questions were raised regarding the validity of the methodology used to estimate population abundance—in Wisconsin, in particular, but with the potential for similar problems in Minnesota and Michigan.
- Confusion over (1) the use of certain terms, including “current distribution” and “current range,” (2) whether or how the analysis of threats to gray wolves is influenced by the interpretation of such terms, and (3) how the historical range of the species is incorporated into that analysis.
- Deficiencies in the threats analysis, including by not providing the same level of analysis to all wolf populations and public lands associated with the different populations.

Many of those experts who peer reviewed the biological report and proposed rule identified a number of studies that the FWS omitted. The FWS has an obligation not just to cite to these omitted studies, but to evaluate each one and to incorporate relevant information from each study into the biological report or proposed rule.

Overall, the myriad deficiencies and omissions identified in the biological report and proposed rule require the FWS to withdraw both documents, prepare a revised biological report, subject it to a new round of peer review and, once the peer reviewers agree that the analysis is based on the best available scientific evidence, use it as the basis for a new proposed rule (should the updated biological report continue to support delisting of all gray wolves from the ESA).

4. The FWS has not adequately evaluated each of the five listing/delisting criteria:

The ESA requires the FWS to examine five overarching criteria when determining if a species, subspecies, or DPS should be listed under the ESA: (A) the present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of

trafficking of such products by claiming that the products are in legal trade, removing federal protections from gray wolves could result in a similar response. Instead of risking a violation of federal law and the consequences that it entails in regard to potential fines or loss of liberties, those who dislike wolves (regardless of the reason) may take advantage of state management which will include the implementation of hunting, trapping, and expanded lethal control programs to kill wolves illegally—using legal management as a cover for their illicit activities. Even though the state wildlife agencies will still enforce relevant laws governing the management of wolves, state laws may not be as much of a deterrent to illegal activities as federal laws and legal killing may beget illegal killing.

existing regulatory mechanisms; and (E) other natural or manmade factors affecting its continued existence. These same criteria must be evaluated when the FWS is proposing to delist a species. In this case, the FWS analysis of these five factors as related to delisting all gray wolves from the protections of the ESA is not sufficient.

As an initial matter, the format of the proposed rules does not address each of these factors for each population of wolves subject to the delisting proposal (i.e., Great Lake state wolves, pioneering wolves in the Midwest, Northeast, Pacific Northwest, Rocky Mountain states (i.e., Colorado and Utah), and California. The analysis would have been clearer had the FWS adopted a format where it identified the delisting criterion, provided the relevant analysis, and then moved on to the next criterion.

A. The present or threatened destruction, modification, or curtailment of its habitat or range:

The FWS identifies a number of factors that contribute to the determination as to the suitability of habitat for wolves including forest cover, road density, human density, presence of agricultural lands, deer/prey density and biomass, area (i.e., geographic extent of available habitat), and amount of public land ownership. 84 Fed. Reg. at 9,663-64. For the wolves in the Great Lake states, the FWS proclaims that the core wolf habitat (i.e., northern Minnesota, Upper Peninsula of Michigan, northern and central Wisconsin) is secure and will remain so into the foreseeable future. For the remaining wolves impacted by the delisting proposal, no analysis of the security of their habitat either at present or in the future is provided because the FWS has determined, in error, that they are not required to achieve species recovery.

The FWS analysis of this criterion is woefully inadequate. First, since the FWS improperly concluded that those wolves outside of northern Minnesota, the Upper Peninsula of Michigan, and northern and central Wisconsin are not required for gray wolf recovery, it failed to subject the habitat of those wolves to any analysis, in violation of the ESA. Despite its decision to ignore the importance of these pioneering wolves to the overall recovery of gray wolves, it should have subjected their habitat to a comprehensive analysis so that its own decision-makers and the public would be able to consider such information in their analysis of the proposed rule.

Second, the analysis of the security of gray wolf habitat in the Great Lakes states was incomplete and inadequate. Not only are the habitat suitability criteria used by the FWS insufficient, but the FWS also fails to provide credible evidence that its assessment of each of those criteria is accurate. For example, while some of the areas occupied by wolves in and outside the Great Lakes states is public land, the FWS should provide a jurisdictional breakdown of land ownership in all areas occupied by wolves affected by the proposed rule (i.e., federal public land, state public land, private land). In turn, it must identify the agency or agencies with jurisdiction over said lands, the predominant uses of such lands (agriculture, industrial, residential, recreational), the proportion of such lands affected by each land-use category, the existence of conservation easements and/or public land grazing allotments, the type and number of livestock present on public and private agricultural/grazing lands, road and human density data, the

existence of any federal or state agency range or forest management plans and the plan's designation of land uses and future desired conditions that may impact gray wolf habitat, and any state/county/municipal or private future development plans for such lands.

It is impossible to adequately ascertain the security, or lack thereof, of gray wolf habitat without collecting such information and subjecting it to comprehensive analysis and disclosing the results in the proposed rule. Suggesting, as the FWS has done in the proposed rule, that existing habitat in wolf occupied areas of the Great Lakes states is secure because it is rural, road and human density is low, there are limited areas of agricultural land, and deer/prey density is high doesn't provide the level of analysis for a delisting decision, particularly such a consequential delisting decision, and ignores the reality of change.

B. Overutilization for commercial, recreational, scientific, or educational purposes:

For wolves, the primary concern with delisting is the potential, if not likelihood, of overutilization for recreational purposes (i.e., hunting and trapping) and the deficiencies with existing regulatory mechanisms (see criterion D).

The FWS concedes that the delisting of gray wolves, as proposed, will lead to a reduction in wolf numbers in the Great Lake states (Minnesota, Michigan, and Wisconsin) as a result of the implementation of state wolf hunting and trapping seasons and an increase in lethal control of wolves to address purported conflict incidents. In Minnesota, for example, the FWS admits that a population of 450 gray wolves that occupy recover Zone B in Minnesota could be *entirely eradicated* under state management. 84 Fed. Reg. at 9,669. The FWS claims in error that these wolves are not required to satisfy gray wolf recovery criteria and, therefore, the agency would not object to or attempt to intervene to stop such a widescale slaughter.

Indeed, according to the recovery criteria for eastern timber wolves, as long as Minnesota maintains a population of 1,251-1,400 gray wolves and a second population of 100 wolves exists (within 100 miles of the first population) to 200 wolves exists (more than 100 miles from the first population), relisting would not be triggered. Current abundance estimates, as provided in the proposed rule, are 4,400 gray wolves in the northern portions of Minnesota, Michigan, and Wisconsin, which means that 2,800 wolves could be killed by hunters, by trappers, and for lethal control purposes without triggering relisting under the ESA. Considering that there were an estimated 1,000 wolves in these three states when wolves were first listed under the ESA, it is rather astonishing that the FWS is claiming that a population of only 1,600 gray wolves constitutes species recovery for those wolves affected by the proposed rule.

Based on the FWS's evaluation of wolf management plans for Minnesota, Michigan, and Wisconsin as well as from assurances that the agency has been provided by the relevant state wildlife agencies, it concluded that gray wolf populations in those states are secure and will remain so into the foreseeable future. 84 Fed. Reg. at 9,643. For the FWS to place such trust in state wildlife agencies is not a surprise considering the shared objectives of the federal and state governments in regard to wildlife management, including wolf management. It does not,

however, reflect an objective assessment of the reality of gray wolf delisting and likelihood of changes in state wolf management laws, regulations, and plans. Absent a legally binding agreement between the FWS and the states that they will manage wolves at number in excess of relisting limits, protect their habitat (including prey species), monitor the health of wolves, and continually assess a full suite of potential threats to ensure no catastrophic decline in wolf numbers, the FWS is naïve to believe or suggest that nothing will change and that the types of protections provided to wolves and their habitat under federal law will remain sufficiently in place under state management to protect gray wolves and their habitat and avoid the potential for relisting.

As reflected in several of the comments from the expert who participated in the peer review of the proposed rule and biological report, accurately predicting, monitoring, and evaluating the impact of illegal killing or poaching on wolf population demographics and reproductions is fundamental to protecting the populations, including dispersing or pioneering wolves who are so crucial for expanding the range of the species. Furthermore, since the FWS wrongly concluded that pioneering wolves attempting to colonize new habitat are not required for gray wolf recovery under the ESA, it entirely failed to even consider wildlife management practices of many states where gray wolves have been reported in the past and where gray wolves will be found in the future as they try to recolonize habitat within their historic range.

Despite the importance of the public trust doctrine in the management of wildlife, held in the public trust, state wildlife agencies and their associated commissions are primarily beholden to user groups. While they provide opportunities for wildlife protection/welfare organizations to provide input into their decision-making processes, they are fundamentally biased in favor of hunters, trappers, and fishers. Such bias is reflected in the management of wolves in Montana, Idaho, and Wyoming when wolves occupying those states were delisted from the ESA. Those states did not hesitate to permit and implement hunting and trapping seasons immediately after federal delisting. There was no waiting period to ensure that wolf population were healthy and abundant, no consideration of delaying lethal use to permit further population increases, or any evaluation of the ethics or ecological impacts of permitting hunting and trapping.

C. Disease or predation:

The FWS failed to comprehensively examine the impact (or potential impact) of diseases on the gray wolves affected by the proposed rule. In its analysis, the FWS largely focuses its analysis on canine parvovirus, canine distemper virus, Lyme disease, mange, and lice, concluding that “while some diseases may be destructive to individuals, most of them seldom have long-term, population-level effects.” 84 Fed. Reg. at 9,665.

It ignored a suite of other diseases (bacterial and viral) and parasites that can infect wolves or serve as vectors to introduce wolves to expected and novel pathogens. Brand et al. (1995) explained that “disease can affect wolf populations directly by causing mortality or indirectly by affecting physiological and homeostatic processes, thriftiness, reproduction, behavior, or social structure” and that “wolves are hosts to diseases that can affect prey species, thus affecting wolf

populations indirectly by reducing prey abundance or increasing vulnerability to predation.”⁶ In their analysis, Brand et al. (1995) identified a number of infectious and parasitic diseases of gray wolves, including more than 10 viral, bacterial, and mycotic diseases and more than 70 species of helminths and ectoparasites. Viral diseases included rabies, canine distemper, infectious canine hepatitis, canine parvovirus, and oral papillomatosis. Bacterial and fungal diseases included brucellosis, leptospirosis, Lyme disease, tularemia, bovine tuberculosis, and blastomycosis. For helminths, Brand et al. (1995) citing to Mech (1970) reported a minimum of 24 species of nematodes (roundworms), 21 species of cestodes (tapeworms), nine species of trematodes (flukes), and three species of acanthocephala (spiny-headed worms). These include dog heartworm, live flukes, and hydatid tapeworms. Finally, the major ectoparasites that affect gray wolves are lice and mites (which cause mange).

The FWS must engage in a new analysis of the impacts of disease on wolves to evaluate the diseases, worms, and ectoparasites noted above and to assess their impacts on the wolves affected by the proposed rule. It must also consult more recently published studies including Bryan et al. (2012)⁷ and Stronen et al. (2011)⁸ to assemble a more complete profile of all diseases, parasites, and other conditions that may adversely impact gray wolf health. As wolves are predators, thereby requiring prey to survive, the FWS analysis of disease should extend to their principal prey species, including large ungulates, and any alternative prey species should their preferred prey not be available or accessible. Furthermore, given the direct and indirect impacts of climate change to gray wolves and their ecology, an analysis of known diseases, parasites, and other conditions that may adversely impact gray wolf health is warranted. It must evaluate how existing diseases/parasites could become a greater threat to gray wolves and how new, novel pathogens or disease vectors may immigrate into occupied wolf habitat with potentially injurious or deadly consequences to gray wolves and their prey.

D. The inadequacy of existing regulatory mechanisms:

By proposing delisting, USFWS has deemed the states’ regulatory mechanisms to be sufficient to maintain minimum wolf populations and to ensure that healthy wolf populations persist after delisting.

However, the regulatory regimes adopted in the thirteen states across the gray wolf’s range are largely insufficient to ensure that healthy populations will persist after delisting. First, many of the states’ wolf management plans are vague and unenforceable, make no representations as to

⁶ Brand, C.J., M.J. Pybus, W.B. Ballard, and R.O. Peterson. 1995. Infectious and Parasitic Diseases of the Gray Wolf and Their Potential Effects on Wolf Populations in North America. In Carbyn et al. editors. Ecology and Conservation of Wolves in a Changing World. Part VII - Infectious and Parasitic Diseases. Canadian Circumpolar Institute and University of Alberta.

⁷ Bryan, H.M., C.T. Darimont, J.E. Hill, P.C. Paquet, R.C.A. Thompson, B. Wagners, and J.E.G. Smits. 2012. Seasonal and biogeographical patterns of gastrointestinal parasites in large carnivores: wolves in a coastal archipelago. *Parasitology*. 139, 781–790.

⁸ Stronen, A.V., T. Sallows, G.J. Forbes, B. Wagner, and P.C. Paquet. 2011. Diseases and Parasites in Wolves of the Riding Mountain National Park Region, Manitoba, Canada. *Journal of Wildlife Diseases*. 47(1), pp. 222–227.

the number of wolves that will be protected, and offer few guarantees as to the actions that will be taken in pursuit of the states' management goals. Second, many of the states' management schemes lack guaranteed sources of funding, bringing into doubt the states' ability to carry out the conservation efforts required to ensure viable populations. Finally, many states' management plans prioritize recreational hunting interests and protection of livestock over the maintenance of viable populations.

This is apparent in the extremely aggressive wolf management programs adopted in the states where wolves have already been delisted, which have allowed for drastic reductions in their wolf populations. For example, since 2011, nearly 3,500 wolves have been shot and trapped across Montana, Idaho, and Wyoming.⁹ During the brief time when wolves were delisted in the Great Lakes region, wolf hunting was permitted in Michigan, Minnesota, and Wisconsin. In Minnesota, 25 percent of the state's wolf population was killed during the first hunting season alone,¹⁰ and Wisconsin's population was reduced by 18 percent.¹¹ Upon delisting, Michigan, Minnesota, and Wisconsin will very likely resume their hunting and trapping seasons, and other states may also permit hunting and trapping, which would undermine decades of investment in rebuilding population numbers.

The remainder of this section identifies and discusses the regulatory mechanisms that have been adopted or proposed to manage gray wolves within their range across thirteen states, and why those mechanisms are inadequate to protect wolf populations. This is followed by additional comments on the regulatory mechanisms of other federal agencies and the need for FWS to broaden its analysis to evaluate those regulations to assess their sufficiency to protect gray wolves and their habitat.

1. Montana

In response to the federal delisting of wolves in Montana, the state adopted an aggressive lethal management regime that prioritized hunting and trapping, which drastically reduced the population. In 2011, wolves were removed from the federal list of threatened species across the entire state.¹² Since that time, wolves have been reclassified as a species in need of management in Montana, with Montana's laws, administrative rules, and state plan replacing

⁹ Humane Society of the United States, Wolf Kill Statistics (2016). Available at: <https://www.humanesociety.org/sites/default/files/docs/wolf-kill-stats.pdf>.

¹⁰ Minn. Dep't Nat. Res., 2012 Minnesota Wolf Season Report 1 (2013). Available at: https://files.dnr.state.mn.us/fish_wildlife/wildlife/wolves/2013/wolfseasoninfo_2012.pdf; Minn. Dep't Nat. Res., Distribution and Abundance of Wolves in Minnesota, 2012-13 7 (2013). Available at: https://files.dnr.state.mn.us/fish_wildlife/wildlife/wolves/2013/wolfsurvey_2013.pdf.

¹¹ Wiedenhoef, J.E., et al., Wis. Dep't Nat. Res., Wisconsin Gray Wolf Post-Delisting Monitoring 15 April 2013 Through 14 April 2014 2 (2014). Available at: <https://dnr.wi.gov/topic/Wildlifehabitat/wolf/documents/PostDelistMonitor2014.pdf>.

¹² Perry, S., The Gray Wolf Delisting Rider and State Management Under the Endangered Species Act, 39 Ecology Law Quarterly 439, 451 (2012). Available at: <https://scholarship.law.berkeley.edu/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=1997&context=elq>.

the federal framework.¹³ After wolves were delisted, in all but two years over 300 wolves have been killed annually, with the vast majority of deaths caused by hunting, trapping, and lethal agency control measures.¹⁴ In each year, over 200 wolves have been killed by hunters and trappers.¹⁵ For example, in 2016, hunters and trappers killed 247 wolves,¹⁶ out of a total population of 851,¹⁷ which represents nearly 30 percent of the entire population in 2016. This number increased in 2017, when 17,212 wolf-hunting licenses were issued and hunters and trappers killed 254 wolves,¹⁸ out of a total population of 633,¹⁹ which represents 40.1 percent of the entire population. The fact that there were nearly 1,000 wolves in Montana in 2011²⁰ when species management was turned over to the state demonstrates the drastic decline that has resulted from Montana's management of its wolf population.

Montana has consistently emphasized the importance of further reducing the population through hunting. The first paragraph of the Department of Fish, Wildlife and Parks ("FWP") webpage dedicated to gray wolf management states: "FWP is further committed to allowing hunters, who are showing a real interest in pursuing wolves, to become even more involved in Montana's approach to wolf management. The focus will be on ensuring that Montana's conservation and management program keeps the wolf off the federal endangered species list while pursuing a wolf population level below current numbers to manage impacts on game populations and livestock."²¹

This management philosophy is demonstrated by Montana's decision to liberalize its wolf hunting laws over time. Several wolf management units have no quota at all,²² there are two seasons per year,²³ and electronic calls are now lawful.²⁴ A bill that passed the Montana House this past legislative session, H.B. 279, would have further incentivized wolf hunting and trapping

¹³ Mont. Code Ann. § 87-5-131; Montana Fish, Wildlife & Parks, Montana Annual Wolf Report 2017 1 (2018). Available at: <http://fwp.mt.gov/fishAndWildlife/management/wolf/>.

¹⁴ Montana Fish, Wildlife & Parks, Montana Annual Wolf Report 2017 11-13, 19 (2018). Available at: <http://fwp.mt.gov/fishAndWildlife/management/wolf/>.

¹⁵ *Id.* at 14.

¹⁶ Montana Fish, Wildlife & Parks, 2016 Montana Wolf Harvest Report. Available at: <http://fwp.mt.gov/fishAndWildlife/management/wolf/>.

¹⁷ Montana Fish, Wildlife & Parks, Montana Annual Wolf Report 2017 iv (2018). Available at: <http://fwp.mt.gov/fishAndWildlife/management/wolf/>.

¹⁸ Montana Fish, Wildlife & Parks, 2017 Montana Wolf Harvest Report. Available at: <http://fwp.mt.gov/fishAndWildlife/management/wolf/>.

¹⁹ Montana Fish, Wildlife & Parks, Montana Annual Wolf Report 2017 iv (2018). Available at: <http://fwp.mt.gov/fishAndWildlife/management/wolf/>.

²⁰ *Id.* at iv, 12.

²¹ Montana Fish, Wildlife & Parks, Wolf Program. Available at: <http://fwp.mt.gov/fishAndWildlife/management/wolf/>.

²² Montana Fish, Wildlife & Parks, 2018 Wolf Hunting and Trapping Regulations 8. Available at: <http://fwp.mt.gov/hunting/regulations/>.

²³ *Id.*

²⁴ *Id.* at 2.

by laying the framework to allow killing contests targeting wolves and would have allowed bounties to be paid for each trapped and destroyed wolf.²⁵

Efforts to improve protections and welfare outcomes for wolves from hunting and trapping have met with strong resistance in the Montana legislature. In the 2019 session, S.B. 185, which would have prohibited hunting and trapping of Yellowstone wolves, failed to move out of committee.²⁶ H.B. 287, which would have established mandatory daily trap checks to reduce the amount of time that animals, including wolves, spend suffering in traps, was rejected.²⁷ Similarly, H.B. 517, which would have required trapper education, was tabled in committee.²⁸

Furthermore, in 2015, the Montana Legislature reduced the amount of money that FWP could allocate annually toward wolf management to \$500,000, down from the \$900,000 authorized annually beginning in 2011.²⁹ This 45 percent reduction demonstrates a declining commitment to the sustainable management of wolves, and calls into question whether the state has the will and ability to continue to manage its population in a way that will ensure it does not become threatened again in the future.

2. Wyoming

Similar to Montana, after wolves were delisted in Wyoming in 2017,³⁰ the state adopted an aggressive lethal management regime that drastically reduced the population. After delisting, the state assumed responsibility for managing wolves that inhabit all areas outside of Yellowstone National Park and the Wind River Reservation.³¹ The area that Wyoming manages is divided into three zones: (1) Wolf Trophy Game Management Area (“WTGMA”); (2) Seasonal WTGMA; and (3) all other zones.³² Wolves are designated as trophy game animals year-round within the WTGMA, and may be killed when in the act of doing damage to private property, in self-defense, pursuant to a lethal take permit, and by licensed hunters during an open wolf hunting season.³³ Wolves are designated as trophy game animals in the Seasonal WTGMA from October 15 through the last day of February of the following year and as predatory animals the remainder of the year.³⁴ In all other zones, wolves are classified as predatory animals, which

²⁵ H.B. 279 (2019). Available at: <https://leg.mt.gov/bills/2019/billhtml/HB0279.htm>.

²⁶ Open States, S.B. 185 (2019). Available at: <https://openstates.org/mt/bills/2019/SB185/>.

²⁷ H.B. 287 (2019). Available at: <https://leg.mt.gov/bills/2019/billhtml/HB0287.htm>.

²⁸ H.B. 517 (2019). Available at: <https://leg.mt.gov/bills/2019/BillHtml/HB0517.htm>.

²⁹ Mont. Code Ann. § 87-1-625; Montana Fish, Wildlife & Parks, Montana Annual Wolf Report 2017 20 (2018). Available at: <http://fwp.mt.gov/fishAndWildlife/management/wolf/>.

³⁰ <https://wgfd.wyo.gov/wildlife-in-wyoming/more-wildlife/large-carnivore/wolves-in-wyoming>

³¹ Wyoming Game and Fish Department, et al., Wyoming Gray Wolf Monitoring and Management 2018 Annual Report iv (2019). Available at:

https://wgfd.wyo.gov/WGFD/media/content/PDF/Wildlife/Large%20Carnivore/WYWOLF_ANNUALREPORT_2018.pdf

³² *Id.* at v-vi.

³³ *Id.* at v.

³⁴ *Id.*

may be taken at any time in any legal manner.³⁵ The state does not regulate the take of predatory animals.³⁶

This management regime has resulted in large numbers of wolves being killed. The 2018 Annual Report stated as follows in regards to lethal control:

In 2018, the Wyoming Game and Fish Department implemented a wolf hunting season with the biological objective to reduce the wolf population to approximately 160 wolves in the Wolf Trophy Game Management Area. A mortality limit of 58 wolves was divided between 14 hunt areas in WYO. Wolf hunting seasons were open from September 1, 2018 through December 31, 2018 with the exception of hunt area 12, which opened on October 15, 2018. A total of 43 wolves (39 legal and 4 illegal) were killed during the wolf hunting season. Wolves could also be taken in any legal manner in Wyoming where they are designated as predatory animals. Forty-two wolves were taken by the public under predatory animal status in 2018 Sixty-six wolves were lethally removed by agencies or the public following livestock conflict in an effort to reduce livestock losses to wolves.³⁷

This resulted in 172 deaths in state-managed areas in 2018.³⁸ In contrast, only five wolves died within Yellowstone and the Wind River Reservation in 2018.³⁹ Due to this lethal management, only 196 wolves existed in the areas of Wyoming managed by the state at the end of 2018,⁴⁰ meaning that nearly half of wolves in state-managed areas died in that time period. Breeding pairs decreased from at least 19 in 2017 to at least 13 in 2018, which is only slightly above the minimum delisting criterion of at least 10 breeding pairs.⁴¹ During this same period, the number of wolf packs was reduced by 13 percent, and the average pack size was the lowest it has been since 2000, which was largely attributed to human caused mortality.⁴² Regardless, Wyoming has continued to expand wolf hunting opportunities. In 2017, the “wolf hunting season opened on October 1st but was shifted to September 1st in 2018 to allow greater hunting opportunity,

³⁵ *Id.* at vi.

³⁶ Wyoming Game and Fish Comm’n, Wyoming Gray Wolf Management Plan 3 (2011). Available at: https://wgfd.wyo.gov/WGFD/media/content/PDF/Wildlife/Large%20Carnivore/WYWOLF_MANAGEMENT_PLAN_FINAL.pdf

³⁷ Wyoming Game and Fish Department, et al., Wyoming Gray Wolf Monitoring and Management 2018 Annual Report i, 8, 14 (2019). Available at: https://wgfd.wyo.gov/WGFD/media/content/PDF/Wildlife/Large%20Carnivore/WYWOLF_ANNUALREPORT_2018.pdf

³⁸ *Id.* at i, 8.

³⁹ *Id.* at i.

⁴⁰ *Id.* at i, 8.

⁴¹ *Id.* at 4.

⁴² *Id.* at 5.

especially in view of the higher mortality limit approved for the 2018 hunting season.”⁴³ Hunters were also allowed to purchase up to two wolf hunting licenses, up from only one in 2017.⁴⁴

Wyoming allowed aggressive lethal management of wolves despite the fact that “[r]eproduction and recruitment of pups was markedly low in 2018[.]”⁴⁵ Wyoming attributed this concerning phenomenon to “evidence of density-dependent factors within the WYO wolf population,”⁴⁶ meaning that wolf reproduction was reduced due to higher population numbers that were self-regulating due to environmental constraints. That explanation, however, defies logic, because 2018 marked the lowest population numbers seen since 2012. Furthermore, Wyoming found that “[t]he wolf population demonstrated a lower resilience to human-caused mortality in 2018 than predicted (13.3% human-caused mortality to stabilize the population vs. 25.8% predicted).”⁴⁷ This clearly demonstrates that reduced reproduction and recruitment can be attributed to the state’s aggressive lethal management, not density-dependent factors, which calls into question Wyoming’s ability to manage wolves based on sound scientific principles.

3. Idaho

As occurred in Montana and Wyoming, after wolves were delisted in Idaho in 2011, the state adopted an aggressive lethal management regime that prioritized hunting and trapping, which drastically reduced the population. In 2008, wolf populations in Idaho peaked at 849.⁴⁸ Starting in 2011, when wolves across the state lost federal protections, the state managed wolves under the 2002 Idaho Wolf Conservation and Management Plan, which classified the species as a big game animal that could be lawfully hunted and trapped.⁴⁹ As a result, in 2011 Idaho hunters harvested 376 wolves,⁵⁰ which caused the population to decline significantly. From 2011 to 2015, the population fluctuated between 684 and 786 wolves.⁵¹ In 2017, which is the most recent year for which wolf harvest statistics are available, 283 wolves were killed from hunting and trapping.⁵²

In Idaho, any person can hunt or trap a gray wolf during an open wolf season so long as they have a legal tag.⁵³ During the 2017-18 and 2018-19 hunting and trapping season, the statewide tag limit was five wolf hunting tags per calendar year per hunter, while certified wolf trappers were allotted five gray wolf trapping tags per trapping season, with two trapping seasons per

⁴³ *Id.* at 14.

⁴⁴ *Id.* at 17.

⁴⁵ *Id.* at 6.

⁴⁶ *Id.*

⁴⁷ *Id.* at 18.

⁴⁸ Idaho Dep’t of Fish and Game, Surveys and Inventories, Statewide Report, Wolf 6 (2017). Available at: https://idfg.idaho.gov/sites/default/files/state_wolf_report_2015-2017_040218clc.pdf.

⁴⁹ *Id.* at 4.

⁵⁰ *Id.* at 10.

⁵¹ *Id.* at 6.

⁵² Idaho Dep’t of Fish and Game, 2017 Wolf General Hunt Harvest Statistics. Available at: <https://idfg.idaho.gov/ifwis/huntplanner/stats/?season=general&game=wolf&yr=2017>.

⁵³ IDAHO ADMINISTRATIVE CODE, §13.01.08(201-06).

calendar year.⁵⁴ These regulations therefore allow one person to kill up to 15 wolves per calendar year.⁵⁵ Moreover, hunting has become increasingly liberalized over time. In 2017, the Idaho Department of Fish and Game (“IDFG”), entirely removed statewide wolf harvest quotas,⁵⁶ thereby allowing an unlimited number of wolves to be killed. Huge bounties have also been awarded by a nonprofit in northern Idaho to hunters and trappers who successfully harvest wolves.⁵⁷ The group, the Foundation for Wildlife Management, pays up to \$1,000 per wolf.⁵⁸ To participate in the Idaho Foundation for Wildlife Management program, hunters and trappers pay a membership fee and submit receipts.⁵⁹

IDFG also has authorized lethal control actions not only where wolves cause conflicts with people or domesticated animals, but also where wolves are a significant factor in deer and elk population declines. In March 2018, IDFG killed ten wolves when conducting wolf control actions in northern Idaho’s Lolo elk zone to improve elk survival in the area.⁶⁰ Additionally, in 2019, the Idaho Fish and Game Commission granted the Foundation for Wildlife Management \$23,065 to help fund bounties for wolves harvested in specific elk recovery areas.⁶¹

When wolves in Idaho were removed from the federal endangered species list, the state gave assurances to USFWS that wolves would be managed in a manner similar to bears and mountain lions.⁶² However, IDFG’s lethal management program demonstrates that the state does not treat wolves like other predators. In Idaho, mountain lions and bears are subject to quotas, and no bounty program exists for these species.⁶³ According to state biologists, mountain lions are the primary predator of elk in the state of Idaho, not wolves.⁶⁴ Therefore, aggressive wolf hunting and trapping seasons are not targeted to achieving the state’s goal of increasing elk populations. This demonstrates that Idaho is failing to manage wolf populations based on sound principles of scientific management.

Furthermore, Idaho’s Wolf Management Plan is largely vague, which undermines Idaho’s ability to properly manage wolves. The Plan makes no representations as to the number of wolves that will be protected. It simply states the wolves will be managed “at recovery levels” so long as

⁵⁴ Idaho Dep’t of Fish and Game, 2017-2018 & 2018-2019 Gray Wolves Hunting & Trapping Seasons & General Rules. Available at: <https://idfg.idaho.gov/sites/default/files/seasons-rules-big-game-wolf-2017-2018.pdf>; Idaho Administrative Procedure Act, 13.01.08 § 250- 01(i).

⁵⁵ Idaho Dep’t of Fish and Game, Press Release, *Wolf Control Action Completed in Lolo Elk Zone* (Mar. 12, 2018). Available at: <https://idfg.idaho.gov/press/wolf-control-action-completed-lolo-elk-zone>.

⁵⁶ Idaho Dep’t of Fish and Game, Wolf Harvest Quota. Available at: <https://idfg.idaho.gov/hunt/wolf/quota>.

⁵⁷ Amanda Peacher, *State Of Idaho Funds Controversial Wolf Bounty Program*, Wyoming Public Media (Mar. 28, 2019). Available at: <https://www.wyomingpublicmedia.org/post/state-idaho-funds-controversial-wolf-bounty-program#stream/0>.

⁵⁸ *Id.*

⁵⁹ *Id.*

⁶⁰ Idaho Dep’t of Fish and Game, Press Release, *Wolf Control Action Completed in Lolo Elk Zone* (Mar. 12, 2018). Available at: <https://idfg.idaho.gov/press/wolf-control-action-completed-lolo-elk-zone>.

⁶¹ *Id.*

⁶² *Id.*

⁶³ *Id.*

⁶⁴ *Id.*

those levels do not adversely affect “big game populations, the economic viability of IDFG, outfitters, and guides, and others who depend on a viable population of big game animals.”⁶⁵ The Plan does state it will maintain 15 packs and that management actions will be taken when: (1) there are less than 15 packs; and (2) there are more than 15 packs in the state.⁶⁶ However, because the Plan does not specify what constitutes a “pack,” there could be 15 packs of four wolves, consisting of two adult wolves of the opposite sex and two pups, thereby allowing the “recovery” level of wolves in Idaho to be 60. The minimum population level required to remain federally delisted, however, is 100, and federal rules require Idaho to manage for more than 150 wolves.⁶⁷ The Plan also offers few guarantees as to the actions that will be taken in pursuit of the states’ management goals, other than public education programs and wolf monitoring, which do little to contribute toward the maintenance of a viable population.

The state’s hunting and trapping regimes, as well as its Management Plan, demonstrate that the maintenance of a viable wolf population in Idaho is secondary to the protection of private property and recreational interests of hunters and trappers. This underscores Idaho’s unwillingness to manage wolves based on sound principles of scientific management.

4. Oregon

Oregon’s management of wolves has consistently placed the interests of ranchers above wolf conservation, and removing federal protections will likely result in increased wolf mortality and a decline in the state’s population. Under the current delisting proposal, the wolf population across the entire state would be managed under the Oregon Wolf Conservation and Management Plan. The Oregon Department of Fish and Wildlife (“ODFW”) removed wolves from the state’s endangered species list in 2015, choosing to rely solely on the Federal ESA and the Oregon Wolf Conservation Plan for wolf protections.⁶⁸ The Plan was first adopted in 2005 when there were no known wolves in the state, and it was subsequently updated in 2010 and again in June 2019.⁶⁹

The state’s Plan allows for lethal control as a tool to address depredation when non-lethal deterrence measures are not sufficient. Oregon’s 2019 Plan makes it much easier to kill depredating wolves than under previous versions of the Plan. At the request of a livestock producer or permittee using public land under a valid livestock grazing permit, ODFW may issue lethal control permits under the following circumstances: (1) if it confirms at least two depredations of livestock within a nine-month span; (2) if the requester documents unsuccessful attempts to solve the situation through non-lethal means; (3) if no identified circumstance exists

⁶⁵ Idaho Legislative Wolf Oversight Committee, Idaho Wolf Conservation and Management Plan 18 (2002). Available at: <https://idfg.idaho.gov/old-web/docs/wolves/plan02.pdf>.

⁶⁶ *Id.* at 5.

⁶⁷ Idaho Dep’t of Fish and Game, Press Release, *Fact Sheet: Wolf Delisting* (Jan. 16, 2009). Available at: <https://idfg.idaho.gov/press/fact-sheet-wolf-delisting>.

⁶⁸ Oregon Dep’t Fish and Wildlife, Oregon Wolf Conservation and Management 2018 Annual Report 3 (2019). Available at:

https://www.dfw.state.or.us/Wolves/docs/oregon_wolf_program/2018_Annual_Wolf_Report_FINAL.pdf.

⁶⁹ Oregon Dep’t Fish and Wildlife, Oregon Wolf Conservation and Management Plan ii, 1 (2019). Available at: https://www.dfw.state.or.us/Wolves/docs/2019_Oregon_Wolf_Plan.pdf.

that attracts wolf-livestock conflict; and (4) if the requester has complied with applicable laws, including permit conditions.⁷⁰ Additionally, if there is chronic wolf-related depredation on private or public land, ODFW can authorize state or federal agents to use lethal force to reduce wolf numbers in the area.⁷¹ If a wolf is caught in the act of attacking livestock, the Plan authorizes landowners on private land and permittees on public land to kill the wolf.⁷² This reflects the passage of a law did away with the requirement for a permit in the following instances: (1) the person did not intentionally bait or attract the wolf, (2) the taking is allowed under the Federal ESA, and (3) the wolves are caught in the act of biting wounding or killing livestock or working dogs, or in the act of chasing livestock or working dogs.⁷³ Therefore, ODFW plays no role in managing wolves caught in the act of depredation in areas of the state where wolves are delisted. This standard is far more permissive than what was allowed under the prior version of the Plan, and could result in significant numbers of deaths that would not be subject to oversight from ODFW, thus undermining the state's management regime.

The Plan further authorizes the Oregon Fish and Wildlife Commission (“Commission”) to approve controlled take by the public through a special permit focused on a specific area experiencing conditions that “warrant a management response.”⁷⁴ In 2009, the Oregon Legislature changed the status of wolves from protected non-game wildlife to a special status game mammal under ORS 496,004(9).⁷⁵ To reflect this new status, the Plan contains an updated section that governs wolves as a special status game mammal.⁷⁶ Although general hunting seasons are not permitted, under the Plan controlled hunts that occur within a set timeframe, with specific boundaries, and with a limited number of hunters are allowed, and only require Commission approval.⁷⁷

Oregon has a long history of authorizing lethal control of wolves. ODFW authorized five lethal wolf removals in 2018. In April, ODFW officials killed three members of the Pine Creek pack in increments.⁷⁸ In June, ODFW issued a lethal kill order to staff and a limited duration permit to a livestock producer in the Chesnimnus Area Known Wolf Activity (AKWA), which authorizes the permittee to kill wolves in pasture on public or private land currently occupied by their livestock.⁷⁹ While no wolves were killed during the initial permit, the expired permit was re-issued after the producer experienced another confirmed loss in August.⁸⁰ In August 2017, ODFW killed four members of the Harl Butte wolf pack, and in October 2017 authorized the killing of up to four more wolves from the pack by either ODFW staff or by local livestock

⁷⁰ *Id.* at 50.

⁷¹ *Id.*

⁷² *Id.*

⁷³ H.B. 3452, 77th Or. Leg. Assemb., Reg. Sess. (Or. 2013), O.R.S. 498.014 (3) (2017). Available at: <https://www.oregonlaws.org/ors/498.014>.

⁷⁴ *Id.* at 51.

⁷⁵ *Id.* at 31.

⁷⁶ *Id.*

⁷⁷ *Id.* at 31.

⁷⁸ 2018 Annual Wolf Report, *supra* note 63, at 2.

⁷⁹ *Id.* at 11.

⁸⁰ *Id.* at 1.

producers who were provided with another limited duration lethal take permit.⁸¹ In September 2017, a lethal order authorizing the removal of up to two wolves of the Meacham Pack was issued by ODFW along with a limited duration kill permit to the landowner.⁸² One breeding female wolf was killed before the permit expired.⁸³ In March 2016, ODFW killed four wolves, the alpha male and female, and two younger wolves, of the Imnaha pack after six livestock depredation incidents in Wallowa County occurred within five months.⁸⁴ Furthermore, two wolves were killed after a number of losses in Baker County in 2009,⁸⁵ two wolves from the Imnaha pack were removed in May 2011, and two more kill orders were issued in September of 2011 for Imnaha wolves by ODFW,⁸⁶ which were stopped by the Oregon Court of Appeals.⁸⁷

This demonstrates that if wolves are delisted, it is highly likely that ODFW will continue authorizing numerous killings each year, thereby negatively affecting recovery and the long-term perpetuation of a sustainable wolf population.

5. Washington

Washington's Department of Fish and Wildlife ("WDFW") has authorized a significant number of killings in the area of the state where wolves have already been delisted, which will likely further increase if federal protections are fully removed. Under the proposal, in addition to the population that has already been delisted in the eastern one-third of the state, wolves in the western two-thirds of Washington would be delisted as well. The Washington Department of Fish and Wildlife ("WDFW") would be responsible for managing all wolves within the state, except for those on tribal reservations. Gray wolves are classified as endangered throughout Washington under state law.⁸⁸ Endangered species are protected from hunting, possession, malicious harassment, and killing.⁸⁹ Washington has also enacted a Wolf Conservation and Management Plan and the 2017 Wolf-livestock Interaction Protocol, which set forth the various tools and actions WDFW uses to support wolf recovery.

⁸¹ Oregon Dep't Fish and Wildlife, News Release, *ODFW moves to lethal take for Harl Butte wolves to limit further livestock losses* (Aug. 3, 2017). Available at: https://www.dfw.state.or.us/news/2017/08_Aug/80317.asp.

⁸² Oregon Dep't Fish and Wildlife, News Release, *Dedicated non-lethal efforts fail to limit Meacham Wolf Pack depredations on private land*

ODFW authorizes incremental lethal take of wolves (Aug. 24, 2017). Available at: https://www.dfw.state.or.us/news/2017/08_Aug/082417.asp.

⁸³ *Id.*

⁸⁴ Oregon Dep't Fish and Wildlife, News Release, *Depredations lead to lethal control for wolves in Wallowa County*, OR DEPT. FISH WILDLIFE (March 31, 2016). Available at: https://dfw.state.or.us/news/2016/03_march/033116.asp.

⁸⁵ *Id.*

⁸⁶ *Id.*; Oregon Dep't Fish and Wildlife, News Releases *Wolf killed in Wallowa County in effort to reduce livestock losses* (May 17, 2011). Available at: <https://www.dfw.state.or.us/news/2011/may/051711b.asp>; Oregon Dep't Fish and Wildlife, News Release, *Two Imnaha pack wolves to be killed after another confirmed livestock losses* (September 23, 2011). Available at: <https://www.dfw.state.or.us/news/2011/september/092311.asp>.

⁸⁷ *Cascadia Wildlands v. Or. Fish & Wildlife Comm'n*, A149672 (Or. Ct. App. Oct. 5, 2011).

⁸⁸ Wash. Ann. Code § 232-12-014

⁸⁹ R.C.W. § 77.15.120.

Washington's Plan contains a detailed history of wolf populations, management tools and plan objectives. The Plan established three recovery regions with target numbers and distribution for down-listing and delisting under the state endangered species act within those regions.⁹⁰ The minimum population required for delisting at the state level is 15 successful breeding pairs that are present for three consecutive years within three specified recovery regions.⁹¹ "Successful breeding pair" is defined as an adult male and an adult female with at least two pups surviving to December 31 in a given year.⁹² The Plan states that the total population required for recovery is between 97 to 361 wolves.⁹³ After this minimum population has been reached, wolves could be reclassified as a game animal by the Washington Fish and Wildlife Commission, most likely followed by proposals to hunt wolves.⁹⁴ If wolves are reclassified as a game species, state management goals would have to be established along with an acceptable population size.⁹⁵ The Plan also states that management options would include both non-lethal and lethal measures, with non-lethal options being prioritized while the species is listed, and later transitioning to a more flexible approach as wolf recovery advances.⁹⁶

Despite the Plan's detail and supposed commitment to achieving a viable wolf population, Washington's current wolf management practices paint a different picture, as demonstrated by WDFW's lethal management program, discussed further below. Furthermore, adequate funding is vital for implementing management activities, yet the Plan does not adequately address this. WDFW states it will seek funding from a variety of sources, including special state and federal appropriations and private sources, and will initiate partnerships with universities, agencies, nongovernmental organizations, and other entities.⁹⁷ However, it does not state that there are guaranteed funds, which calls into question the state's capacity to carry out the conservation efforts required to ensure recovery.

The Plan also addresses when lethal control will be permitted in response to livestock depredation. The Plan states that lethal removal "may be necessary to resolve repeated wolf-livestock conflicts."⁹⁸ However, it does not detail criteria that must be met to take lethal action.⁹⁹ The Plan states: "lethal removal may be used to stop repeated depredations if it is documented that livestock have clearly been killed by wolves, nonlethal methods have been tried but failed to resolve the conflict, depredations are likely to continue, and there is no evidence of intentional feeding or unnatural attraction of wolves by the livestock owner."¹⁰⁰ However, it also states that

⁹⁰ Wash. Ann. Code § 232-12-297; Wash. Dep't Fish and Wildlife, Wolf Conservation and Management Plan (2011). Available at: <https://wdfw.wa.gov/sites/default/files/publications/00001/wdfw00001.pdf>.

⁹¹ Wash. Dep't Fish and Wildlife, Washington Conservation and Management Plan 9, 58-59, (2011). Available at: <https://wdfw.wa.gov/sites/default/files/publications/00001/wdfw00001.pdf>.

⁹² *Id.*

⁹³ *Id.* at 9, 65.

⁹⁴ *Id.* at 70.

⁹⁵ *Id.*

⁹⁶ *Id.* at 11, 10.

⁹⁷ *Id.* at 11.

⁹⁸ *Id.* at 80.

⁹⁹ *Id.*

¹⁰⁰ *Id.* at 88.

each lethal removal will be “evaluated on a case-specific basis, with management decisions based on pack history and size, pattern of depredations, number of livestock killed, state listed status of wolves, extent of proactive management measures being used on the property, and other considerations.”¹⁰¹

The 2017 Wolf-livestock Interaction Protocol was adopted to guide decision making on when to kill wolves in response to livestock conflicts. The Protocol allows the state to kill wolves more quickly than in previous years. Under the Protocol, WDFW may consider lethal removal of wolves when: (1) WDFW has documented at least three depredation events within 30 days, or at least four depredation events within 10 months; (2) at least two proactive deterrence measures and responsive deterrence measures have been implemented and failed; (3) WDFW expects depredations to continue; (4) WDFW has documented the use of appropriate deterrence measures and notified the public of wolf activities in a timely manner; and (5) the lethal removal of wolves is not expected to harm the wolf population’s ability to reach recovery objectives statewide or within individual wolf recovery regions.¹⁰² Based on this text, as long as these minimal criteria are met, lethal action may be taken, while previously the state had to make calculated decisions based on a wider variety of factors. Both the Plan and the Protocol authorize incremental removal of wolves from packs, with incremental removal being defined as the removal of one to two offending wolves.¹⁰³ Incremental removal includes periods of active removals or attempts to remove wolves followed by periods of evaluation to determine if pack behavior has changed. If depredations continue, additional wolves may be killed, which could result in the eventual elimination of entire packs.¹⁰⁴

WDFW has approved the killing of numerous wolves since adoption of the Plan and Protocol. In August 2016, the Department initiated a lethal removal effort after documenting four confirmed wolf depredations on cattle in Ferry County by the Profanity Peak wolf pack. This effort resulted in the killing of six wolves, including two females removed in early August, and two adult males, one adult female, and one female pup removed in late August after the WDFW staff documented two more confirmed wolf depredations resulting in injuries to two calves, plus two probable wolf depredations resulting in calf mortalities.¹⁰⁵ In September 2017, the WDFW killed one wolf from the Sherman Pack.¹⁰⁶ In August 2018, a Thurston County judge issued an order that allowed WDFW to kill the sole adult male member of the Togo pack, whom the agency said

¹⁰¹ *Id.* at 88.

¹⁰² Wash. Dep’t Fish and Wildlife, Wolf-livestock Interaction Protocol 14-15 (2017). Available at: https://wdfw.wa.gov/sites/default/files/2019-02/final_protocol_for_wolf-livestock_interactions_jun012017.pdf.

¹⁰³ *Id.* at 16; Wash. Wolf Conservation and Mgmt. Plan, *supra* note 85, at 81.

¹⁰⁴ Wash. Wolf Conservation and Mgmt. Plan, *supra* note 85, at 81.

¹⁰⁵ Wash. Dep’t Fish and Wildlife, Wolf Updates, *WDFW removes four more members of Profanity Peak pack* (August 25, 2016). Available at: <https://wdfw.wa.gov/species-habitats/at-risk/species-recovery/gray-wolf/updates/wdfw-removes-four-more-members>.

¹⁰⁶ Wash. Dep’t Fish and Wildlife, Gray Wolf Updates, *WDFW documents fifth depredation by Sherman pack and removes one wolf* (Sep. 1, 2017). Available at: <https://wdfw.wa.gov/species-habitats/at-risk/species-recovery/gray-wolf/updates/wdfw-documents-fifth-depredation>.

had preyed upon livestock in Ferry County.¹⁰⁷ By killing the sole adult male pack member, WDFW left his mate to hunt on her own for herself and her pups. This will likely cause her to return to hunting livestock because livestock is generally easier to catch than wild prey. As WDFW's stated purpose in employing lethal control methods is to change the behavior of the wolves, this decision was counterproductive and not based upon the best available science.

Additionally, in September 2018, WDFW authorized lethal action against the Old Profanity Territory ("OPT") pack, which according to the agency has repeatedly preyed on cattle on federal grazing lands in the Kettle River Range of Ferry County.¹⁰⁸ WDFW recorded six separate incidents in a week where one calf was killed and five others injured on a U.S. Forest Service grazing lot before killing a juvenile wolf, a five-month-old pup.¹⁰⁹ After this removal, six additional livestock depredations were confirmed by WDFW by the OPT pack, five of which were injuries to calves, leading to WDFW killing another member of the pack, an adult female.¹¹⁰ Lastly, in November 2018 WDFW authorized the lethal removal of wolves from the Smackout pack and killed one adult male, which according to the agency repeatedly preyed on cattle on private grazing lands in Stevens County.¹¹¹ WDFW authorized the incremental removal of one to two members of the Smackout pack after recording five separate occasions of depredations since August 20, 2018, with members of the Smackout pack injuring one calf and killing four young female cows on private pastures.

Since 2012, WDFW has documented agency removal of 22 wolves¹¹², 18 of which were killed for the same livestock owner.¹¹³ The state has consistently elevated the interests of livestock

¹⁰⁷ Evan Bush, *Judge's Decision Allows Washington State To Kill Member Of Wolf Pack*, THE SEATTLE TIMES (Aug. 31, 2018). Available at: <https://www.seattletimes.com/seattle-news/judges-decision-allows-washington-state-to-kill-member-of-togo-wolf-pack/>; Wash. Dep't Fish and Wildlife, Gray Wolf Updates, *WDFW plans to take lethal action in response to depredation on cattle by Togo wolf pack* (August 20, 2018). Available at: <https://wdfw.wa.gov/species-habitats/at-risk/species-recovery/gray-wolf/updates/wdfw-plans-take-lethal-action-response>.

¹⁰⁸ Wash. Dep't Fish and Wildlife, Gray Wolf Updates, *WDFW director authorizes lethal action against Old Profanity Territory wolf pack* (Sep. 12, 2018). Available at: <https://wdfw.wa.gov/species-habitats/at-risk/species-recovery/gray-wolf/updates/wdfw-director-authorizes-lethal-action>.

¹⁰⁹ *Id.*

¹¹⁰ Wash. Dep't Fish and Wildlife, Gray Wolf Updates, *WDFW removes second wolf from OPT pack, initiates evaluation* (Sep. 28, 2018). Available at: <https://wdfw.wa.gov/species-habitats/at-risk/species-recovery/gray-wolf/updates/wdfw-removes-second-wolf-opt-pack>.

¹¹¹ Wash. Dep't Fish and Wildlife, *WDFW director authorizes lethal action against Smackout wolf pack* (Nov. 7, 2018). Available at: <https://wdfw.wa.gov/species-habitats/at-risk/species-recovery/gray-wolf/updates/wdfw-director-authorizes-lethal-0>; Wash. Dep't Fish and Wildlife, Gray Wolf Updates, *WDFW removes wolf from Smackout pack, initiates evaluation* (Nov. 15, 2018). Available at: <https://wdfw.wa.gov/species-habitats/at-risk/species-recovery/gray-wolf/updates/wdfw-removes-wolf-smackout-pack>.

¹¹² Wash. Dep't Fish and Wildlife, Washington Gray Wolf Conservation and Management 2017 Annual Report; Washington Gray Wolf Conservation and Management 2016 Annual Report; Washington Gray Wolf Conservation and Management 2015 Annual Report; Washington Gray Wolf Conservation and Management 2014 Annual Report; Washington Gray Wolf Conservation and Management 2013 Annual Report; Washington Gray Wolf Conservation and Management 2012 Annual Report.

owners over recovery of its wolf populations, and delisting would lead to higher levels of wolf killings over a larger span of territory, which could threaten recovery efforts.

6. California

California's ability to manage a viable wolf population is uncertain due to lack of funding and recovery goals, undue emphasis on ungulate populations, and the potential illegal killing of one of only two wolf packs in 2018. If wolves were federally delisted, the California Department of Fish and Wildlife ("CDFW") would assume management responsibilities pursuant to state law. Wolves are listed as endangered under the California Endangered Species Act (CESA).¹¹⁴ Due to its endangered status, take of wolves in California is prohibited except in a few limited circumstances.¹¹⁵ "Take" is defined as hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.¹¹⁶

The state has adopted a Wolf Recovery Plan that provides for wolf management, though it suffers from a variety of defects. The Plan does not identify any target wolf population or identify what a "conserved" condition for wolves means in California,¹¹⁷ in part because "available scientific information is not yet sufficient to predict with confidence where wolves will inhabit California, or how many wolves that habitat will support over the long-term."¹¹⁸ California's Wolf Recovery Plan identified the following five overarching goals: (1) conserve biologically sustainable populations of wolves in the State; (2) manage the distribution of wolves within the State where there is adequate habitat; (3) manage native ungulate populations in the State to provide abundant prey for wolves and other predators, intrinsic enjoyment by the public, and hunting opportunities for hunters; (4) manage wolf-livestock conflicts to minimize livestock losses; and (5) inform the public with science-based information on gray wolves and the conservation and management needs for wolves in California, as well as the effects of having wolves in the State.¹¹⁹

Although the Plan identified numerous areas in which research and monitoring efforts are required to help promote a stable wolf population, those efforts "will rely on the ability to secure future funding,"¹²⁰ and the Plan does not identify secured funding sources or the likelihood of securing necessary funding. The Plan specifically identified the limitations imposed by resource availability as follows:

¹¹³ Ctr. for Biological Diversity, News Release, Washington Wolf Population Rose Slightly in 2018, Despite Destruction of Two Packs (April 5, 2019). Available at:

https://www.biologicaldiversity.org/news/press_releases/2019/washington-wolf-population-04-05-2019.php.

¹¹⁴ Calif. Dep't Fish and Wildlife, Gray Wolf. Available at:

<https://www.wildlife.ca.gov/conservation/mammals/gray-wolf>.

¹¹⁵ Fish Game Code §§ 2080.

¹¹⁶ Fish Game Code §§ 2080.1, 2081 and 2800.

¹¹⁷ Calif. Dep't Fish and Wildlife, Conservation Plan for Gray Wolves in California, Part I 9, 12 (2016). Available at: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=135026&inline>.

¹¹⁸ *Id.* at 10.

¹¹⁹ *Id.* at 4.

¹²⁰ *Id.* at 17.

Current resources available to CDFW for management of nongame wildlife such as wolves are limited. Existing programs, staffing, funding, and resources are not well equipped to take on the new additional responsibilities for conserving and managing wolves without sacrificing some other important threatened and endangered species work To fully implement the elements and strategies of the Plan, an appropriate program will need to be developed within CDFW coincident with staffing and secured funding. Presently, it is rare for such a program on a nongame species to exist in the absence of secured funding and positions.¹²¹

Another barrier to wolf protection is that CDFW may prioritize the maintenance of high numbers of ungulate populations over establishment of viable wolf populations. The Plan expressed concern that wolves could significantly impact and possibly extirpate local elk and deer populations,¹²² and the Plan is vague on how wolves would be managed if their numbers began to impact the small population of elk in northern California and deer populations, which have been “depressed” since the 1970s.¹²³ This is concerning because the Plan highlights the “[s]ignificant effort, funding, and time has been expended to enhance and re-establish” prey populations,¹²⁴ which increases the likelihood that lethal management actions would be taken to protect game populations.

Lastly, there is cause for concern regarding California’s ability to monitor and manage wolves considering the sudden and mysterious disappearance of the Shasta pack, one of California’s two documented wolf packs, in 2018.¹²⁵ CDFW has been unable to pinpoint a cause of this disappearance, though it is widely believed that one or more members of the pack was killed illegally, likely by ranchers.¹²⁶ The fact that CDFW’s investigation has seemingly resulted in no answers as to the fate of half of the state’s wolves casts doubt on the agency’s commitment to protecting wolves within its jurisdiction.

7. Utah

If the proposed rule is finalized, all populations of gray wolves in Utah will be managed by the state’s Division of Wildlife Resources (“DWR”), an agency that has actively prevented the reestablishment of wolves in the state and whose primary concern is the potential negative impact wolves may have on big game hunting opportunities.¹²⁷ Currently, wolves are only

¹²¹ *Id.* at 26.

¹²² *Id.* at 14, 25.

¹²³ *Id.* at 14-15.

¹²⁴ *Id.* at 14.

¹²⁵ Ryan Sabalow, *Did Someone Kill the Shasta Pack, California’s Mysterious Wolf Family?*, Sacramento Bee (Feb. 1, 2019). Available at: <https://www.sacbee.com/news/local/environment/article225258150.html>.

¹²⁶ *Id.*

¹²⁷ Utah Division of Wildlife Resources, 2018 Utah Contract Report (2018). Available at: https://wildlife.utah.gov/wolf/pdf/utah_contract_report_2018-12.pdf (reporting on the efforts of Big Game Forever pursuant to its contract with the State of Utah to restore State management authority over wolves in Utah).

delisted in a small portion of northern Utah. The delisted zone, which occurs north of I-80 and east of I-84, is the only area where DWR has authority to manage, capture or kill wolves.¹²⁸ In the rest of the state, wolves are considered an endangered species and fall under federal control.¹²⁹

In 2010, the Utah Legislature passed the Wolf Management Act, which directed DWR to manage wolves to prevent any packs from establishing within the delisted portion of Utah.¹³⁰ The law also directed DWR to request that USFWS immediately remove any wolves discovered in areas of Utah where they are still listed under the ESA.¹³¹ This prohibits wolves from expanding across their natural range in the state. Although Utah was previously seen as lacking optimal wolf habitat, the Center of Biological Diversity has identified almost 19 million acres of potential habitat based on criteria from scientific studies.¹³² The delisted area borders Wyoming and Idaho, and therefore is the area where wolves would most likely migrate into the state.¹³³ According to DWR, there are no known packs in Utah and only 10-20 wolves have been confirmed in the state since their reintroduction in the northern Rocky Mountains in 1995.¹³⁴ By maintaining, and possibly enlarging, this separation between surrounding wolf populations, Utah is increasing the genetic vulnerability of wolf populations.¹³⁵

If wolves are delisted across the entire state, then DWR will fully implement the Utah Wolf Management Plan,¹³⁶ which was first approved by the Wildlife Board in 2005 and submitted to USFWS in 2007 for review and comment.¹³⁷ To date, USFWS has failed to approve or comment on the Plan.¹³⁸ The Plan was written to guide management of wolves during an interim period covering the time between statewide delisting and the establishment of naturally occurring wolf packs in Utah.¹³⁹ Establishment is defined in the Plan as “at least two breeding pairs of wild

¹²⁸ Utah Division of Wildlife Resources, Federal Delisting Proposal for Gray Wolves (2019). Available at: <https://wildlife.utah.gov/wolf/wolves.pdf>.

¹²⁹ *Id.*

¹³⁰ Utah S.B. 36 (2010). Available at: <https://le.utah.gov/~2010/bills/sbillint/sb0036s01.htm>; Utah Division of Wildlife Resources, Federal Delisting Proposal for Gray Wolves (2019). Available at: <https://wildlife.utah.gov/wolf/wolves.pdf>.

¹³¹ *Id.*

¹³² *Id.*

¹³³ Utah Division of Wildlife Resources, Wolf Management in Utah (March 6, 2012). Available at: http://wildlife.utah.gov/pdf/fact_sheets/wolves.pdf.

¹³⁴ Utah Division of Wildlife Resources, Federal Delisting Proposal for Gray Wolves (2019). Available at: <https://wildlife.utah.gov/wolf/wolves.pdf>.

¹³⁵ Sierra Club Utah Chapter, Utah Wolves. Available at: <https://utah.sierraclub.org/content/utah-wolves>.

¹³⁶ Utah Div. Wildlife Resources, Utah Wolf Management Plan, Publication No. 05-17 (2005). Available at: https://wildlife.utah.gov/wolf/wolf_management_plan.pdf; *see also* Utah Div. Wildlife Resources, Wolf Management in Utah (2012). Available at: https://wildlife.utah.gov/pdf/fact_sheets/wolves.pdf.

¹³⁷ Utah Div. Wildlife Resources, Wolf Management in Utah (2012). Available at: https://wildlife.utah.gov/pdf/fact_sheets/wolves.pdf; *see also* Utah S.B. 36 (2010). Available at: <https://le.utah.gov/~2010/bills/sbillint/sb0036s01.htm>.

¹³⁸ Utah Div. Wildlife Resources, Wolf Management in Utah (2012). Available at: https://wildlife.utah.gov/pdf/fact_sheets/wolves.pdf.

¹³⁹ Utah Div. Wildlife Resources, Utah Wolf Management Plan, Publication No. 05-17, 2 (2005). Available at: https://wildlife.utah.gov/wolf/wolf_management_plan.pdf;

wolves successfully raising at least two young for two consecutive years.”¹⁴⁰ As such, the Plan is not yet in effect.

However, if wolves are delisted, the Plan will be the only source of protections for wolves in Utah. This is concerning because the Plan is largely vague and unenforceable, prioritizes protecting ungulate populations at the expense of wolf populations, and permits hunting and trapping seasons for a species that has no established population. According to the Plan, wolves will be “controlled or populations reduced when they cause unacceptable impacts to big game,” although the Plan does not specify what constitutes an “unacceptable impact.”¹⁴¹ This management tactic will negatively impact the recovery and long-term perpetuation of a sustainable wolf population.

Under the Plan, wolves in Utah would have the same legal management status and be subjected to the same DWR predator management policies as the black bear and cougar, thereby allowing regulated hunting and trapping seasons.¹⁴² Pursuant to Utah Code Title 23, wolves are categorized as furbearers and may lawfully be taken by any person holding a furbearer license so long as the take is in accordance with rules promulgated by the Wildlife Board.¹⁴³ Currently, the public may not hunt, kill or trap wolves,¹⁴⁴ though this would likely change upon delisting.

Furthermore, the Plan states that the maintenance of a viable wolf population is secondary to the protection of the interests of livestock owners. The Plan states livestock owners should not be required to obtain a permit or participate in training prior to “protecting their investments” nor should they be required to follow specific non-lethal control measures prior to using lethal measures to protect livestock.¹⁴⁵ The only requirement for livestock owners or landowners who kill wolves is to report it within 72 hours.¹⁴⁶

The Plan also makes no representations as to the number of wolves that will be protected. Although it states that to the extent practical, every wolf in Utah will be radio-collared and monitored,¹⁴⁷ the Plan does not identify guaranteed sources of funding, but rather lists possible funding options such as voluntary contributions on state tax forms, revenue generated from the sale of wolf hunting licenses, additional taxes on all citizens, using money from the state’s general fund, revenue generated by the sale of “wolf-logo” vehicle license, private donations, and using money from the Endangered Species Mitigation Fund or State Wildlife Grants.¹⁴⁸ Yet without guaranteed funding to support the management activities identified in the Plan, the

¹⁴⁰ *Id.* at 28.

¹⁴¹ *Id.* at 34.

¹⁴² *Id.* at 34.

¹⁴³ Utah Code, tit. 23, § 18-2.

¹⁴⁴ Utah Division of Natural Resources, 2018-2019 Utah Furbearer Guidebook 22 (2018). Available at: https://wildlife.utah.gov/guidebooks/2018-19_furbearer.pdf.

¹⁴⁵ *Id.*

¹⁴⁶ *Id.*

¹⁴⁷ *Id.* at 28.

¹⁴⁸ *Id.* at 39.

state's ability to carry out the conservation efforts required to ensure wolves' viability is doubtful.

8. Colorado

Colorado does not have an established wolf population, and a population is unlikely to become established if wolves lose federal protections. Colorado's Wolf Management Plan,¹⁴⁹ which was developed over fifteen years ago in 2004, outlines broad management goals and identifies important areas for further research, but lacks necessary detail, including population goals and secured sources of funding, and prioritizes ungulate populations over healthy wolf populations. Wolves are designated as a depredating animal and as an endangered species in Colorado.¹⁵⁰ They are also designated as a species at risk.¹⁵¹ The Plan states that in order to "[a]ccept a wolf presence in Colorado," regulations and funding must be in place to both prevent conflicts and to manage any conflicts with humans, livestock, and wild ungulates, hunter opportunities, and habitat impacts that may arise.¹⁵² The Plan outlines the necessity of developing a program for damage payments for livestock losses due to depredation,¹⁵³ though it acknowledges that legislative changes will be necessary to develop a fund for this program.¹⁵⁴ The Plan also discusses the importance of research as a component in wolf management, specifically related to assessing wolf population status and distribution, wolf-livestock interactions, and wolf-wild prey-habitat interactions,¹⁵⁵ but there is no specific statement about how research should be carried out or how it would be funded.¹⁵⁶

Of particular concern is the Plan's discussion of the priority of maintaining healthy ungulate populations, to the potential detriment of any wolf population that may establish itself in the state:

The financial investments and compromises made by the hunting public to restore ungulate populations are significant. Safeguarding those investments for present and future generations is an important priority for many of Colorado's citizens and the CDOW The CDOW recognizes that predator control is a viable and legitimate wildlife management tool that should be available to wildlife managers when needed, and that the management of predators may include measures to control predator populations when necessary to limit their impact on habitat and prey species When predator populations are inhibiting the ability of the CDOW to attain management objectives for other wildlife populations and the

¹⁴⁹ Colorado Wolf Management Working Group, Findings and Recommendations for Managing Wolves that Migrate Into Colorado (2004). Available at:

<https://cpw.state.co.us/Documents/WildlifeSpecies/SpeciesOfConcern/Wolf/recomendations.pdf>.

¹⁵⁰ *Id.* at 32.

¹⁵¹ *Id.* at 32.

¹⁵² *Id.* at 3.

¹⁵³ *Id.* at 3, 10.

¹⁵⁴ *Id.* at 10.

¹⁵⁵ *Id.* at 8.

¹⁵⁶ *See id.* at 37-38.

CDOW determines that predator control actions are necessary, such control actions should be directed by a species management plan that contains information addressing predator management and strategies to implement predator control.¹⁵⁷

In light of these concerns, the Colorado Parks and Wildlife Commission has rejected efforts to reintroduce wolves to the state, citing the importance of the agriculture industry and big game industry to Colorado's economy.¹⁵⁸ Although there have been limited reports of a couple of wolves migrating naturally into the state, no population has established itself, leaving Colorado as the only state in the Rocky Mountains without a wolf population.¹⁵⁹

9. North Dakota

If the proposed rule is finalized, then wolves would be managed by the North Dakota Game and Fish Department ("NDGFD"), an agency that is ill-equipped to manage a species that has not recovered within its borders due to lack of a regulatory framework to protect wolves. According to NDGFD, wolves are rare in North Dakota, with only occasional reported sightings and no known breeding population.¹⁶⁰ North Dakota does not have a state endangered or threatened species list, and it does not have a wolf management plan in place, nor is there any indication that the state would adopt and implement such a plan if federal protections were removed. Therefore, if wolves were delisted, the species would be managed as a furbearer.¹⁶¹ Pursuant to North Dakota's code, no person can hunt, shoot, trap, or otherwise take any furbearer except during the open or lawful season as designated by the Governor.¹⁶² According to the state's 2018-19 Hunting and Trapping Guide, the season for gray wolf is closed and "shall remain closed."¹⁶³ However, if gray wolves were delisted, the Governor could lawfully open hunting and trapping for future seasons without any legal barriers. Notably, since 2011 there have been three reported incidents of wolves being killed illegally in the state.¹⁶⁴ Overall, the absence of a legal framework in place to protect wolves, combined with a readily amendable hunting and trapping season and permissive depredation regulations, demonstrates the state's lack of commitment to

¹⁵⁷ *Id.* at 35-37.

¹⁵⁸ Colorado Parks and Wildlife Comm'n, Resolution 16-01 (Jan. 13, 2016). Available at:

https://cpw.state.co.us/Documents/Commission/policy_procedures/PWC_Resolution_Wolves_in_Colorado.pdf.

¹⁵⁹ Dacia Johnson, *Gray Wolf Spotted in Jackson County; Here's Why It's a Big Deal*, MSN News (July 9, 2019).

Available at: <https://www.msn.com/en-us/news/offbeat/gray-wolf-spotted-in-jackson-county-heres-why-its-a-big-deal/ar-AAE2MfX?ocid=spartanntp>; Jason Blevins, *Colorado Wildlife Officials are Reluctant to OK Gray Wolf Reintroduction. So Advocates Want Voters to Do It*, Colorado Sun (Apr. 25, 2019). Available at:

<https://coloradosun.com/2019/04/25/colorado-gray-wolf-reintroduction-ballot-proposal/>.

¹⁶⁰ North Dakota Fish and Game Dep't, Gray Wolf Fact Sheet. Available at:

<https://gf.nd.gov/wildlife/id/carnivores/wolf>.

¹⁶¹ NORTH DAKOTA CENTURY CODE, Title 20.1-01-02.

¹⁶² N.D. CENTURY CODE, tit. 20.1, § 07-03; NORTH DAKOTA CENTURY CODE, Title 20.1-08-02.

¹⁶³ North Dakota Fish and Game Dep't, 2018-2019 Hunting and Trapping Guide General Guidelines 24 (2018).

Available at: <https://gf.nd.gov/gnf/regulations/docs/combo/combo-combination-guide.pdf>.

¹⁶⁴ Brad Dokken, *N.D. Game and Fish Confirms Federally Protected Wolf Shot in Northeast ND*, West Fargo Pioneer (Mar. 6, 2017). Available at: <https://www.westfargopioneer.com/news/4230072-nd-game-and-fish-confirms-federally-protected-wolf-shot-northeast-nd>.

<https://www.westfargopioneer.com/news/4230072-nd-game-and-fish-confirms-federally-protected-wolf-shot-northeast-nd>.

protecting and restoring wolves. If management were to be turned over to the state, there is almost no possibility of the gray wolf reestablishing a population within this important part of its historic range.

10. South Dakota

If the proposed rule is finalized, then gray wolves would be managed by the South Dakota Department of Game, Fish, and Parks (“SDGFP”), an agency that is unprepared to properly manage wolves due to a demonstrated commitment to allowing hunting of the species and a complete lack of a regulatory framework in place to protect wolves. According to SDGFP, no resident wolf population exists in South Dakota and the state does not currently have a wolf management plan in place, nor is there any indication that the state would adopt and implement such a plan if federal protections were removed.¹⁶⁵ Although transient wolves dispersing from surrounding states have been documented traveling through South Dakota, SDGFP notes that this is an uncommon occurrence.¹⁶⁶ SDGFP has specifically stated it does “not have any plans or intentions of facilitating the establishment of gray wolves in South Dakota.”¹⁶⁷

If management of wolves was turned over to the state, there is little doubt that South Dakota would manage wolves in a manner that would preclude a small resident population from becoming established. Under the state’s fish and game code, wolves are classified as “predator/varmint” along with coyote, gray fox, red fox, skunk, gopher, ground squirrel, chipmunk, jackrabbit, marmot, opossum, porcupine, crow, and prairie dog.¹⁶⁸ In 2013, the South Dakota Legislature enacted a statute stating: “wolves may only be hunted, taken, or killed in any area of the state in which the State of South Dakota has preeminent authority over the management of wolves.”¹⁶⁹ Such authority was granted over areas east of the Missouri River in 2012, though subsequently rescinded by federal court decision. Prior to the court decision, however, South Dakota allowed the harvesting of wolves east of the Missouri,¹⁷⁰ despite the fact that there was no established population. Notably, several wolves have been killed on both sides of Missouri River within South Dakota.¹⁷¹ This demonstrates that South Dakota is unwilling to adopt a regulatory framework that protects the few wolves currently located in the state, which means there is almost no possibility of wolves reestablishing a population within this important part of their historic range.

11. Minnesota

¹⁶⁵ South Dakota Game, Fish, and Parks, Wolf. Available at: <https://gfp.sd.gov/wolf/>.

¹⁶⁶ *Id.*

¹⁶⁷ South Dakota Game, Fish and Parks, *GFP Reminds Individuals that Gray Wolves Remain Protected in South Dakota* (Mar. 20, 2018). Available at: <https://gfp.sd.gov/News/Detail/1092>.

¹⁶⁸ S.D. Code § 41-1-1 (21).

¹⁶⁹ Senate Bill No. 205, Eighty-eight Session, Legislative Assembly, 2013 codified at S.D. Code § 41-6-83.

¹⁷⁰ South Dakota Hunting, Gray Wolf an Endangered Species Throughout South Dakota (Dec. 23, 2014). Available at: <https://southdakotahunting.com/news-article/gray-wolf-endangered-species>.

¹⁷¹ South Dakota Game, Fish and Parks, *GFP Reminds Individuals that Gray Wolves Remain Protected in South Dakota* (Mar. 20, 2018). Available at: <https://gfp.sd.gov/News/Detail/1092>.

Minnesota's management of wolves has been characterized by permissive depredation permit standards, an aggressive lethal management regime, and a management plan that lacks funding. If gray wolves are federally delisted, Minnesota's wolves will be managed under the state's game and fish laws. These laws allow wolves to be killed: (1) by guard animals protecting livestock, (2) at any time without a permit in the defense of a person's own life or the life of another, and (3) at any time without a permit by a livestock owner or owner's agent when the wolf is posing an immediate threat to livestock, a guard animal or a domestic pet.¹⁷² Moreover, after one incident of depredation of livestock, a domestic animal, or a pet, the Minnesota Department of Natural Resources' ("DNR") Commissioner can open the area to "predator controllers," who are certified under the state's wolf-control training program and receive payment for killing wolves.¹⁷³

In 2001, Minnesota adopted the Minnesota Wolf Management Plan, which elevates the interests of the livestock industry over wolf recovery. Under this Plan, the taking or harassing of gray wolves is allowed to eliminate immediate threat to livestock, guard animals or domestic animals and pets, and when wolf depredation on livestock, domestic animals, or pets is verified and the owner requests wolf control.¹⁷⁴ Notably, Minnesota's approach contrasts with the approach adopted by certain other states that relies on observing and waiting for chronic depredation before allowing wolves to be killed.¹⁷⁵ The Plan states: "these depredation procedures will likely result in a larger number of wolves killed, as compared to previous ESA management, [however] they will not result in the *elimination of wolves . . .*"¹⁷⁶ This sets the lowest possible bar and demonstrates a complete lack of commitment to maintaining a viable population.

The Plan has a number of deficiencies. Importantly, the Plan does not specify sources of funding or guarantee that funding exists.¹⁷⁷ Without guaranteed funding to support the management activities identified in the Plan, the state's ability to carry out the conservation efforts required to ensure wolves' viability is questionable. Additionally, the Plan does not guarantee the implementation of specific habitat management activities aimed at preserving wolf habitat. This is important because protecting suitable wolf habitats would secure a future for wolves and allow them to play their valuable ecological role in more of their former range.¹⁷⁸ This would also allow the linking of isolated wolf populations helps combat inbreeding and allows ecosystem rejuvenation.¹⁷⁹

¹⁷² MINN. STATUTES 2018 97B.645, subd. 1-6.

¹⁷³ *Id.* at 97B.671, subd. 4.

¹⁷⁴ Minn. Dep't of Natural Resources, Minnesota Wolf Management Plan 20 (2001). Available at: <https://www.fws.gov/midwest/wolf/stateplans/pdf/mn-wolf-plan-01.pdf>.

¹⁷⁵ *Id.* at 21.

¹⁷⁶ *Id.* at 23.

¹⁷⁷ *Id.* at App II.

¹⁷⁸ Center for Biological Diversity, America's Gray Wolves. Available at: https://www.biologicaldiversity.org/campaigns/gray_wolves/.

¹⁷⁹ *Id.*

Although there is no current open season for wolves,¹⁸⁰ upon federal delisting, state law provides for the killing of wolves by any person with a proper license during the open season in accordance with limits set by the Commissioner.¹⁸¹ In 2011, the Minnesota Legislature authorized the Minnesota Department of Natural Resources (“MDNR”) to implement a wolf hunting and trapping season once wolves were delisted from the federal Endangered Species Act and classified as small game by state statute.¹⁸² In 2012, wolves in the Great Lakes Distinct Population Segment were removed as a listed species under the federal Endangered Species Act.¹⁸³ This prompted the 2012 Legislature to establish wolf hunting and trapping licenses and to clarify MDNR’s authority to implement a wolf hunting and trapping season.¹⁸⁴ A total target harvest in 2012 was set to 400 wolves, and the total harvest for the season was 413 wolves.¹⁸⁵ According to the 2013 Population Survey conducted after the hunt, MDNR estimated the 2013 population at 2,211 individuals, down from a pre-hunt population of 2,600 wolves.¹⁸⁶ This demonstrates that Minnesota’s first hunt resulted in the deaths of almost a quarter of its wolf population. If wolves are again delisted in the state, it is highly likely that hunting and trapping seasons would resume, thus resulting in high numbers of deaths, which would undermine years of recovery efforts.

12. Wisconsin

Similar to Minnesota, after wolves were delisted in Wisconsin in 2011, the state adopted an aggressive lethal management regime that prioritized hunting and trapping, and the state has indicated it will reduce the wolf population back down to the bare minimum after decades of federal recovery efforts rather than protect them at a viable level. If the gray wolf is delisted, Wisconsin wolves will be managed under state law and the 1999 Wolf Management Plan.¹⁸⁷ In 2004, wolves were removed from the state threatened species list¹⁸⁸ when the population reached 373 individuals.¹⁸⁹ Due to this loss of state protections, under state law, hunting and trapping of wolves is allowed in designated areas with harvest quotas designated by Wisconsin Department of Natural Resources (“WDNR”).¹⁹⁰ Currently, all wolf harvest zones are

¹⁸⁰ Minn. Dep’t of Natural Resources, Wolf Hunting and Trapping. Available at: <https://www.dnr.state.mn.us/hunting/wolf/index.html>.

¹⁸¹ MINN. STATUTES 2018 97B.645, subd. 9, 97B.647, subd. 1-5.

¹⁸² Minn. Dep’t of Natural Resources, 2012 Minnesota Wolf Season Report 1. Available at: https://files.dnr.state.mn.us/fish_wildlife/wildlife/wolves/2013/wolfseasoninfo_2012.pdf.

¹⁸³ Minn. Dep’t of Natural Resources, Distribution and Abundance of Wolves in Minnesota, 2012-13, 1. Available at: https://files.dnr.state.mn.us/fish_wildlife/wildlife/wolves/2013/wolfsurvey_2013.pdf.

¹⁸⁴ 2012 Minnesota Wolf Season Report, *supra* note 177, at 1.

¹⁸⁵ *Id.* at 1, 4.

¹⁸⁶ Distribution and Abundance of Wolves in Minnesota, *supra* note 178, at 7.

¹⁸⁷ Wisconsin Dep’t Natural Resources, Gray Wolf Fact Sheet (2018). Available at: <https://dnr.wi.gov/topic/wildlifehabitat/wolf/facts.html#History>.

¹⁸⁸ Wisconsin Dep’t Natural Resources, Wisconsin’s endangered and threatened species laws, (2019). Available at: <https://dnr.wi.gov/topic/EndangeredResources/laws.html>.

¹⁸⁹ *Id.*

¹⁹⁰ Wisconsin Dep’t Natural Resources, 2014 Wolf Hunting and Trapping Regulations.

closed with harvest quotas set to zero, banning wolf harvest except in certain areas with a WDNR depredation permit.¹⁹¹ These areas are closed because due to federal ESA protections.

However, from 2011 to 2014, wolves were federally delisted in Wisconsin.¹⁹² During this time, the state held three wolf hunts, until a judge ordered wolves to be relisted on the federal endangered species list.¹⁹³ The hunting seasons that were permitted during that timeframe caused a dramatic reduction in the wolf population, and provide disturbing insight into how the state would manage wolves if the current delisting proposal is finalized. Prior to the implementation of the first hunting season in 2012 to 2013, the wolf population showed steady population growth through April 2012, when the minimum population was estimated to be 815-880 individuals.¹⁹⁴ After the first hunting season was opened, WDNR recorded 230 wolf mortalities representing 28.22% of the 2012 minimum population.¹⁹⁵ It is not clear how many of these mortalities can be attributed to hunting and trapping. Following this hunting season, the minimum statewide wolf population was estimated to be 809-834 in April 2013.¹⁹⁶ Although this does not represent a significant decline, the 2013-2014 hunting season devastated the population. According to the Wisconsin Wolf Season Report of 2013-14, wolf hunters and trappers harvested 257 wolves.¹⁹⁷ During that time, the statewide wolf quota was set at 275 and 2,510 wolf permits were authorized.¹⁹⁸ The quota represents approximately 33 percent of the minimum wolf population as of April 2013. After the hunting season closed, the statewide minimum wolf population in April 2014 was 660-689 wolves, a decline of 18.4% from the previous year, and “the first substantial decline in the state wolf population since 1993.”¹⁹⁹ If wolves are delisted, it is highly likely that hunting and trapping will be permitted again, because the state law that mandated those hunts remains on the books. This would result in hundreds of wolves being killed each year, which would undermine recovery efforts.

Under the Wolf Management Plan, wolves will not be relisted under the state threatened species list as long as 250 wolves are present outside of Native American reservations, though the state’s management goal is a population of 350 for the late winter count.²⁰⁰ The wolf management goal represents a threshold level that allows MDNR to use a full range of lethal controls, including

¹⁹¹ Wisconsin Dep’t Natural Resources, Wolf Harvest Zones (Dec. 5, 2014).

¹⁹² *Id.*

¹⁹³ Paul A. Smith & Lee Bergquist, *Judge orders gray wolves returned to endangered list*, Journal Sentinel (Dec. 19, 2014).

¹⁹⁴ Wisconsin Dep’t Natural Resources, Wisconsin Gray Wolf Post-Delisting Monitoring 27 January 2012 Through 14 April 2013, 1 (2013). Available at:

<https://dnr.wi.gov/topic/Wildlifehabitat/wolf/documents/PostDelistMonitor.pdf>.

¹⁹⁵ *Id.*

¹⁹⁶ *Id.* at 2.

¹⁹⁷ Wisconsin Dep’t Natural Resources, Wisconsin Wolf Season Report 2013-14. Available at:

<https://dnr.wi.gov/topic/Wildlifehabitat/wolf/documents/Seasonreport1314.pdf>.

¹⁹⁸ *Id.*

¹⁹⁹ Wiedenhoef, J.E., et al., Wisconsin Dep’t Natural Resources, Wisconsin Gray Wolf Post-Delisting Monitoring 15 April 2013 Through 14 April 2014 2 (2014). Available at:

<https://dnr.wi.gov/topic/Wildlifehabitat/wolf/documents/PostDelistMonitor2014.pdf>.

²⁰⁰ Wisconsin Dep’t Natural Resources, Wisconsin Wolf Management Plan 15 (1999). Available at:

<https://dnr.wi.gov/files/PDF/pubs/ER/ER0099.pdf>.

public harvest, to manage the wolf population. While MDNR has stated that the state could support 700 to 1,000 wolves, MDNR has expressed a desire to manage the population at “acceptable” levels.²⁰¹ Although the Plan does not define “acceptable,” the Plan does emphasize that a population size between 335 and 353 was widely viewed as an acceptable size by Wisconsin survey respondents.²⁰² This demonstrates that MDNR values public opinion above sound scientific management. As of April 2018, the statewide minimum wolf population count was 905 to 944.²⁰³ Therefore, if the gray wolf is delisted and the Wolf Management Plan is the only protection, MDNR could kill up to six hundred wolves, or approximately 60 percent of the population, to bring the number down to an “acceptable” population size, thus severely undermining decades of recovery efforts.

Furthermore, the Plan established a highly lenient standard for lethal control of depredating wolves. The Plan divides the state into four management zones, each with different wolf management practices.²⁰⁴ Within zones 1 and 2, depredating wolves could be removed, via translocation, or if translocation is not feasible, then by euthanasia. After federal delisting, wolves could also be killed by landowners pursuant to a MDNR permit for a limited number of wolves during a specific timeframe on land they owned or leased if they have suffered from depredation.²⁰⁵ However, the plan does not define how many wolves are a “limited number” leaving open the possibility of a landowner using the permit to kill multiple wolves. Also after delisting, landowners could kill wolves in the act of attacking pets or livestock. Within zone 3, nuisance or problem wolves may be trapped by government agents or, after delisting, by landowners pursuant to a DNR permit within 5 miles of depredation site. After delisting, landowners could also kill wolves in the act of attacking pets or livestock. Within zone 4 any wolf or wolf-like animal “that lacks fear of people and readily approaches pets, livestock, or people should be captured or controlled” by Federal and state trappers, as well as local law enforcement and animal control officers. Similar to zones 1 and 2, after federal delisting, landowners could kill wolves in the act of attacking pets or livestock, as well as receive MDNR permits to control wolves on their land. Furthermore, the Plan states that USDA Wildlife Services could conduct proactive trapping to reduce chronic depredation problems if the statewide population exceeds 350 wolves. Therefore, rather than waiting for conflict to occur, MDNR would be able to kill entire packs to maintain the population at a level that is satisfactory to the agency, without supporting scientific data.²⁰⁶

Lastly, according to the plan, MDNR is seeking additional sources for funding the compensation program after delisting. The actual cost of management in 2004-2005 was 50 percent higher than the anticipated cost. The Plan states the cost increase reflects more MDNR personnel spending

²⁰¹ *Id.* at 9-10.

²⁰² *Id.*

²⁰³ Wisconsin Dep’t Natural Resources, Wisconsin Gray Wolf Monitoring Report 15 April 2017 Through 14 April 2018 (2018).

²⁰⁴ Wisconsin Wolf Management Plan, *supra* note 195, at 3.

²⁰⁵ *Id.* at 22.

²⁰⁶ Wisconsin Dep’t Natural Resources, Gray Wolf Fact Sheet. Available at: <https://dnr.wi.gov/topic/wildlifehabitat/wolf/facts.html>.

time on wolf-related issues.²⁰⁷ Therefore, when management is left solely up to MDNR, the cost will likely continue to increase. Without guaranteed funds, the state's ability to carry out the conservation efforts in their plan and those required to ensure the wolves' viability is doubtful.

13. Michigan

Michigan's wolf management activities and its Wolf Management Plan prioritize hunting, suffer from a lack of secured funding sources, and place an undue emphasis on social acceptability, as opposed to sound principles of scientific management. The legal status of Michigan's wolf population has varied over the years. Although the wolf population in Michigan is currently listed as threatened under federal law, the wolves were delisted in the state from 2012 to 2014, when they were returned to the federal endangered species list through court order.²⁰⁸ At the state level, wolves were removed from the State Threatened and Endangered Species List²⁰⁹ in 2009 and given Protected Animal status under the State's Wildlife Conservation Order.²¹⁰ Subsequently, however, in 2012 and again in 2013, wolves were classified as game animals in Michigan.²¹¹ Game animal status allows but does not require the establishment of a regulated harvest season.²¹² The 2013 classification allowed the state to proceed with a wolf hunt that year,²¹³ with a recommendation that the target harvest be 43 wolves²¹⁴ out of a total population of 658.²¹⁵ This hunt resulted in the deaths of 23 wolves in November and December of 2013.²¹⁶ The game animal classification was repealed by public referendum in November of 2014.²¹⁷ However, the Legislature subsequently passed a law that again classified wolves as game animals, with an effective date of March 31, 2015.²¹⁸

Michigan's Wolf Management Plan suffers from two primary flaws. First, it identifies a variety of research needs, both scientific and social, to allow the state to best manage its wolf population,²¹⁹ but it fails to identify any secured source of funding for management activities,

²⁰⁷ Wisconsin Wolf Management Plan, *supra* note 195, at 6, 23.

²⁰⁸ See, e.g., Michigan Dep't Natural Resources, Federal Court Order Returns Wolves to Endangered Species List (2014). Available at: <http://web.archive.org/web/20150822172403/http://www.michigan.gov/dnr/0,4570,7-153--344022--00.html>.

²⁰⁹ Part 365 of Public Act 451 (1994).

²¹⁰ Michigan Dep't Natural Resources, Michigan Wolf Management Plan 2 (2015). Available at: https://www.michigan.gov/documents/dnr/wolf_management_plan_492568_7.pdf

²¹¹ *Id.* at 2.

²¹² *Id.* at 28.

²¹³ *Id.* at 57; see also Michigan Dep't Natural Resources, Memorandum to the Natural Resources Comm'n, Designation of Game Species (May 13, 2013). Available at: https://www.michigan.gov/documents/dnr/WCO_Amendment_14of2013_428047_7.pdf

²¹⁴ *Id.* at 3.

²¹⁵ U.S. Fish and Wildlife Service, Wolf Numbers in Minnesota, Wisconsin and Michigan (excluding Isle Royale) – 1976 to 2015 (2015). Available at: https://www.fws.gov/midwest/wolf/population/mi_wi_nos.html.

²¹⁶ Fritz Klug, *DNR calls first Michigan wolf hunt a 'success;' issue to continue to 2014 ballot*, M Live (January 1, 2014). Available at: https://www.mlive.com/news/2014/01/dnr_calls_first_michigan_wolf.html.

²¹⁷ Michigan Wolf Management Plan, *supra* note 205, at 2, 28, 57.

²¹⁸ *Id.*

²¹⁹ See *id.* at 25.

and discusses funding in only vague terms.²²⁰ Sufficient funding is critical for effective management operations, should management of wolves be turned over to the state. Second, the Plan places undue emphasis on the attitudes of Michigan residents toward wolves by including the concept of a “social carrying capacity,” which is defined as: “the range bounded by the minimum and maximum levels of wolves society will tolerate Social carrying capacity is strongly influenced by the actual and perceived benefits and costs associated with particular levels of wolf abundance and distribution.”²²¹ An emphasis on social acceptability increases the risk that wolves will be managed based upon the prevailing politics of the day, as opposed to sound principles of scientific management.

This concern is supported by a decision that casts doubt on the ability of Michigan’s Department of Natural Resources (“DNR”) to properly manage wolves in a manner that is based upon sound science. According to news reports, DNR admitted that “it misled a federal agency into killing three endangered gray wolves in 2016” by “exaggerat[ing] a wolf sighting into a dangerously close encounter [to] persuad[e] the U.S. Fish and Wildlife Service to approve shooting three of an Upper Peninsula pack’s six known adults in 2016.”²²² This action was widely viewed as being politically motivated due to the large payments the state was making to recompense ranchers for cattle loses in the area where the wolves were located.²²³ Michigan’s strong emphasis on social acceptability subjects wolves to the changing whims of public opinion, which leaves wolves vulnerable to management decisions founded on politics, not science. This demonstrates that Michigan is ill-suited to assuming responsibility for management of its wolf population.

Additional regulatory issues that must be considered by the FWS:

Furthermore, although not explicitly included in these criteria, the potential for a delisting decision to trigger the implementation of legally mandated, new regulations and/or to cause existing regulations to be revised must also be evaluated. For example, Michigan, Wisconsin, and Utah have already promulgated laws that will impact wolves once the species is delisted from the ESA and management is turned over to the states. It is expected that other states where wolves have been reported, observed, or where they may try to colonize in the future will use federal delisting as an invitation to promulgate new laws or regulations to dictate wolf management practices. Considering the ongoing bias against predators, including wolves, in state legislatures and within state wildlife agencies and their commissions due to ignorance, the willful disregard of the scientific evidence, and/or bias in favor of minority stakeholders who desire to trap and hunt wolves, such laws and regulations are anticipated to be adverse to, not protective of, gray wolves.

The FWS also indicates that it is confident that other federal land and wildlife management agencies (i.e., the U.S. Forest Service, Bureau of Land Management, Department of Defense,

²²⁰ *Id.* at 61-62.

²²¹ *Id.* at 26, 35-36.

²²² John Barnes, *DNR: State’s Evidence for 2016 Wolf Kill Overstated*, Detroit News (Mar. 24, 2019). Available at: <https://www.detroitnews.com/story/news/local/michigan/2019/03/25/state-overstated-threat-gray-wolves/2473841002/>.

²²³ *Id.*

National Park Service) will continue to manage their lands and/or wildlife, including wolves, to prevent the need for gray wolf relisting under the ESA. This confidence appears to be based on nothing of substance other than a mere expectation that the land and wildlife management policies of these agencies will not change in any substantive way in the foreseeable future. This again reflects a level of naiveté that is troubling and is not based on any type of substantive analysis as the ESA requires.

For example, the FWS does not identify (1) which national forests manage lands within occupied wolf habitat in Minnesota, Michigan, or Wisconsin; (2) when the relevant forest management plans were adopted; (3) the characteristics of any grazing allotments (i.e., number, stock type, permitted grazing levels, management of dead livestock) that are permitted under such plans; (4) how wildlife, including wolves and their prey species, are managed under those plans; (5) how any hunting and trapping are managed pursuant to those plans; (6) what role, if any, the U.S. Forest Service plays in authorizing or restricting wildlife management practices on its lands; and (7) whether such plans include specific provisions related to wolves and when or if those plans will be updated and amended either as a routine matter or in response to gray wolf delisting.

Traditionally, the U.S. Forest Service and Bureau of Land Management have managed their lands but delegated wildlife management responsibilities to the relevant state wildlife agency, allowing the state agency to dictate wildlife management policies and prohibitions on those federal lands. There is no reason to believe that the relationship between the U.S. Forest Service and the state wildlife agencies in Minnesota, Michigan, and Wisconsin is any different. Absent the disclosure and analysis of forest-specific management plans and ongoing assessment of any changes to such plans as related to livestock and wildlife, including wolf, management, the FWS cannot and should not assume that the U.S. Forest Service will continue to manage forests consistent with gray wolf recovery requirements.

The same analysis must be done of the plans of other federal agencies responsible for land and wildlife management in occupied and potential gray wolf habitat (e.g., Department of Defense, Bureau of Land Management, U.S. Army Corps of Engineers, Bureau of Reclamation). While lands and wildlife managed by the National Park Service should be, given National Park Service statutory and regulatory standards, more protected over the long-term than land under the jurisdiction of other federal agencies, even National Park Service management standards, regulations, and policies must be monitored given the potential for efforts to either amend park-specific enabling legislation to permit hunting (including of wolves) or to amend the National Park Service Organic Act (54 U.S.C. § 100101 et seq.) to entirely open the national park system to hunting, trapping, and fishing, as some minority stakeholders and their allied organizations have proposed in the past.

Similarly, the FWS should have evaluated any laws, regulations, or policies of other state agencies, like an agricultural/livestock department or state forestry department, that may have responsibility for management standards or practices that could impact wolves and their habitat. Excluding these agencies from the analysis to assess the adequacy of existing (or future) regulatory mechanisms that could cause, directly or indirectly, the overutilization of wolves is

inconsistent with the ESA and the need to engage in due diligence before any species delisting decision, particularly one as controversial and consequential as delisting gray wolves, is made.

E. Other natural or manmade factors affecting its continued existence:

Climate change is and will continue to impact gray wolves and their habitat, including their prey, throughout the species' range. From the Northeast, Great Lakes, Rocky Mountains, and the west, including the Pacific Northwest, climate change is altering temperatures and precipitation patterns with impacts—some adverse—on ecosystems, including on gray wolves.

These impacts are ecosystem-wide, altering growing conditions for vegetative communities which, in turn, may impact the elk, mule deer, white-tailed deer, moose, other ungulates, and other prey species relied on by wolves. In some regions, certain ungulate species may benefit from the changing climate, while other species may suffer, potentially forcing wolves to change their feeding ecology to survive. Changing climatic conditions can also cause wolf habitat to be more susceptible to larger and more severe wildfires, potentially diminishing its suitability for wolves. In addition, increasing ambient temperatures, including a reduction in the number of days where the temperature remains below freezing, increases the likelihood that new pathogens, parasites, and other vectors of disease will invade and becoming established in wolf-occupied habitat. If wolves are immunologically naïve to such pathogens, the consequences could be catastrophic due to direct mortality or by making the animals more susceptible to existing pathogens, increasing chronic stress conditions, and adversely impacting reproduction. Such changes can also increase the severity of existing pathogens or introduce new pathogens to wolf prey species, which could force wolves to alter their feeding behaviors, distributions, or movements to find suitable prey.

Finally, such changes may alter human use of wolf habitat, potentially increasing human density if climate change makes wolf-occupied habitat more suitable for human habitation, causes shifts in livestock production patterns, or increases recreational opportunities. Such impacts, if they were to occur, could reduce the suitability of habitat for wolves and/or result in greater human-wolf conflicts, which inevitably will cause increased lethal control of wolves, particularly if wolves lost the protections provided by the ESA.

In volume II of its Fourth National Climate Assessment, the United States Global Climate Change Research Program provides an assessment of the impacts of changing climates on different regions of the United States.²²⁴ While this assessment is focused on assessing the impacts of climate change on humans and human communities, each regional analysis provides a broad-scale summary of likely climate change impacts (positive and negative) on the environment (terrestrial, fresh water, marine) and wildlife. The FWS has not considered such impacts (positive or negative) on gray wolves in its proposed delisting rule. For its analysis, the

²²⁴ See: USGCRP, 2018: Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II [Reidmiller, D.R., C.W. Avery, D.R. Easterling, K.E. Kunkel, K.L.M. Lewis, T.K. Maycock, and B.C. Stewart (eds.)]. U.S. Global Change Research Program, Washington, DC, USA, 1515 pp. doi: 10.7930/NCA4.2018

FWS should focus specifically on region-specific analyses of the impact of a changing climate on gray wolves and their habitat, including their prey. In some cases, these impacts may provide short or long-term benefits to gray wolves. But the analysis, to be credible, must be all encompassing by evaluating the direct and indirect implications of climate change on all aspects of gray wolf ecology, biology, and behavior.

Additionally, the FWS entirely ignores domestic and international trade as a potential threat to gray wolves, particularly if the demand for wolf pelts was to spike. According to the United National Environment Programme-World Conservation Monitoring Centre trade database for species listed under the Convention on International Trade in Endangered Species of Wild Fauna and Flora, the United States exported 59 gray wolf trophies and 162 gray wolf skins (from wild caught gray wolves) from 2010 through 2017 (reported imports of these same products was 30 and 48, respectively). Other gray wolf specimens, including live gray wolves, were also exported during that period. Considering how the incentive to kill furbearing species is positively correlated with pelt price, should there be an increase in demand for wolf pelts or other products, this could trigger an increase in hunter/trapper efforts to kill gray wolves. The FWS should evaluate this potential threat.

Fundamentally, while the proposed rule attempts, albeit weakly, to provide a justification to delist gray wolves throughout the lower 48 states, the FWS must engage in a population viability analysis (PVA) to ensure that delisting is appropriate given current population abundance estimates, demographic trends, and threats to gray wolves. The FWS should undertake such a PVA to examine the full suite of parameters that may dictate the viability and persistence of gray wolf population in order to understand how current conditions impact gray wolf populations and trends and, more importantly, to model how future scenarios, including the possible reduction in the suitability of gray wolf habitat and increased mortality from hunting, trapping, poaching, and lethal control may shape gray wolf population demographics.

5. The FWS should consider the ecosystem services provided by gray wolves to ascertain the full suite of impacts inherent to the delisting proposal:

In addition to engaging in a more comprehensive examination of the adverse impact of the proposal to delist gray wolves on the stability, health, demographics, and reproductions of gray wolves due to the inevitable implementation of hunting and trapping seasons and liberalizing of lethal control policies and opportunities, the FWS must also consider the associated indirect impacts of gray wolf population decline on ecosystem health and function. Gray wolves are a top-line predator; as such, a healthy and abundant gray wolf population can help control ungulates numbers. They often prey on the weak, young, old, and infirmed thereby removing sick animals to the benefit of overall herd health. In areas where chronic wasting disease has been detected, predation by wolves may be able to slow the spread of the disease and reduce its prevalence in infected herds.²²⁵ Through predation, intraguild competition, and territory marking and defense, wolves can control mesocarnivores, including coyotes. By instilling fear in their

²²⁵ See <https://mountainjournal.org/predators-and-chronic-wasting-disease>

ungulate prey, they can change the ecology of their prey, altering their movements and distributions, moving them from preferred habitat to alternative and potentially more marginal habitat. In turn, this can release tree and other plant species from ungulate browsing pressure, facilitating their restoration and associated ecosystem benefits.

Ripple and Beschta (2003)²²⁶ determined that, after wolves were reintroduced into Yellowstone National Park, the fear they instilled in park elk released cottonwood and willow at certain sites from elk-imposed browsing pressure, which improved riparian ecosystem health. As riparian conditions improved, new beaver colonies were identified which, in turn, should result in other benefits to the affected riparian habitat in the park. Beschta and Ripple (2009) examined the impact of large predator loss and their restoration on vegetation in several national parks, demonstrating the trophic impacts, both negative and positive, associated with large predator eradication or restoration to the landscape.²²⁷ More recently, Ripple et al. (2014) found that:

In North America and Eurasia, cervid densities were, on average, nearly six times higher in areas without wolves than in areas with wolves. As early as the 1940s, cervid irruptions, after wolf and other predator declines, were first documented in various ecosystems of western North America. The shift in plant communities consequent to the cascading effects of wolf extirpations and of recoveries have been found across a variety of areas of North America, representing a wide range of productivity. In Yellowstone National Park, wolves were reintroduced in 1995–1996, making this park one of the most predator-rich areas in North America. This reintroduction triggered various direct and indirect effects, as mediated by both mesopredators and cervid prey²²⁸ [internal citations omitted].

6. The FWS has not properly implemented its DPS policy for gray wolves outside of currently designated DPS's:

In determining if wolves exist as a DPS, FWS policy requires consideration of the discreteness of the population segment, its significance, and its status (i.e., whether it qualifies for ESA listing pursuant to the five listing criteria). 61 Fed. Reg. at 4,725. While the FWS makes clear that not all circumstances that could qualify a population as a DPS could be encompassed in its DPS policy, standards for determining discreteness include whether a population segment is markedly separated from other populations of the same taxon due to physical, ecological, physiological, or behavioral factors which can include (but does not necessarily include) morphological and genetic differences. *Id.* The FWS is clear that a determination of discreteness does not require absolute separation from other population segments of the same taxon, as there can be overlap in

²²⁶ Ripple W.J., and R.L. Beschta. 2003. Wolf reintroduction, predation risk, and cottonwood recovery in Yellowstone National Park. *Forest Ecology and Management*. 184: 299–313.

²²⁷ Beschta, R.L., and W.J. Ripple. 2009. Large predators and trophic cascades in terrestrial ecosystems of the western United States. *Biological Conservation*. 142: 2401-2414.

²²⁸ Ripple, W.J., J.A. Estes, R.L. Beschta, C.C. Wilmers, E.G. Ritchie, M. Hebblewhite, J. Berger, B. Elmhagen, M. Letnic, M.P. Nelson, O.J. Schmitz, D.W. Smith, A.D. Wallach, and A.J. Wirsing. 2014. Status and Ecological Effects of the World's Largest Carnivores. *Science*. 343: 151-162.

the ranges or occupied habitat of the population segments. *Id.* at 4,724. Another standard is the presence of international governmental boundaries with different management regimes (i.e., exploitation of the target species, habitat conservation standards, regulatory mechanisms) on either side of the boundary. *Id.* at 4,725.

Determining the significance of a population is, again, not subject to absolute criteria but, rather, requires a case-by-case assessment. Standards offered by the FWS for determining significance include (1) persistence of the discrete population segment in an unusual or unique ecological setting, (2) evidence that the loss of the population segment would result in a significant gap in the taxon's range, and (3) evidence that genetic characteristics of the population segment differs markedly from other populations of the same species. *Id.*

In the proposed rule, the FWS concludes that none of the gray wolf population segments (outside the existing DPS for the Great Lakes wolves and the Northern Rocky Mountain gray wolf DPS) affected by the proposed rule qualify as a DPS, as none are discrete. 84 Fed. Reg. at 9,653. Other than disclosing this finding, the FWS provides no substantive discussion or explanation as to the basis of its decision. It did not explain why small number of pioneering wolves in the Pacific Northwest, California, Utah, Colorado, North Dakota, Illinois, Iowa, Missouri, New York, New Hampshire, Vermont, and Maine attempting to find suitable habitat to expand the current range to areas from which it had been extirpated, do not qualify as DPSs.

Considering the FWS standards for discreteness and significance (and recognizing that the standards are fluid), it is difficult to imagine how wolves that are expanding into areas where wolves have not been present for decades or longer are attempting to find suitable habitat where they can survive and reproduce do not qualify as a DPS. To find and potentially colonize such areas likely requires adaptation to different ecological circumstances and altered behavioral characteristics that may be different from their source populations. While morphological and genetic differences may not be measureable at present in all populations, in time, as the wolves colonize new areas, they may become unique wolf ecotypes demonstrating behavioral characteristics that allow them to survive under different ecological conditions. For wolves in the northern states, immigration and emigration is common across the Canadian-U.S. border. The FWS did not articulate Canadian wolf management practices in Canada's southern provinces but, according to information available from the International Wolf Center and individual southern provinces in Canada, gray wolves are classified as "game species" in each of the southern provinces and subject to hunting that is not, at present, consistent with U.S. management practices, except for management strategies in Montana, Idaho, and Wyoming.

If such wolf population segments are discrete then they must also be significant. Wolves that are pioneers, colonizing ecosystems and habitats where wolves have not travelled for decades or longer, are clearly exploring unusual or unique ecological settings, particularly since, due to anthropogenic factors, those habitats have changed since their ancestors occupied the same landscapes. Furthermore, such wolves are indisputably critical to the larger taxon since the pioneers may identify the remaining habitat areas and connecting corridors thereby facilitating a more complete recovery of the species. They also would represent supplemental populations that

could help augment or strengthen existing source populations if mismanagement or a stochastic event triggered a catastrophic decline in the abundance of wolves in those source populations. The significance of losing those supplemental, satellite, or additional populations is reflected in the proposed rule, which, if implemented, would result in two regional wolf metapopulations with no expectation or requirement that there would be any wolves outside of said metapopulations are allowed to exist.

The FWS must revisit its gray wolf DPS analysis to make a new, objective determination as to whether any gray wolf population segments qualify as a DPS instead of drawing a self-serving conclusion intended to achieve a predetermined outcome.

Conclusion:

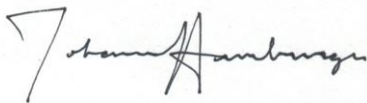
In its haste to achieve a long-time objective of several state wildlife agencies, select politicians, and current leadership of the Department of the Interior, the FWS has prepared a proposed delisting rule for gray wolves that is replete with deficiencies. The significant problems identified by those asked to peer review the biological report and proposed rule, including the omission of a number of important studies, are telling as to the anti-predator and anti-wolf bias that infects the proposed rule. Add to such deficiencies the additional flaws identified in this comment letter, including the inadequacies of state regulations to protect gray wolves, and the FWS has no choice but to withdraw the proposed rule. Then, should it continue to wrongly believe that gray wolves no longer qualify for protections under the ESA, it must reassess the best available scientific evidence and publish a new, more comprehensive and scientifically sound biological report and proposed rule for public comment.

Thank you in advance for considering these comments. Should you have any questions or need additional information, please contact me at dj@awionline.org or, by telephone, at (609) 601-2875.

Sincerely,



DJ Schubert
Wildlife Biologist



Johanna Hamburger
Wildlife Attorney