Gray Wolves in the Northern Rockies
Again Staring Down the Barrel
at Hostile State Management

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INTRODUCTION

Once abundant throughout the contiguous United States, gray wolves in the American West were brought to the brink of extinction by the 1930s through one of the most effective eradication campaigns in modern history. As a result, in 1974 gray wolves were protected under the Endangered Species Act¹ (ESA). Due to intensive conservation efforts that included wolf reintroduction to the greater Yellowstone and central Idaho areas, the current wolf population in the northern Rocky Mountains has rebounded to approximately 1650. However, extreme hostility toward wolves continues to threaten the species’ survival in the region. This hostility is expressed in the state laws that will govern wolf management in the absence of federal protection under the ESA. Nonetheless, for the second time in a year, the U.S. Fish and Wildlife Service (FWS) is eliminating federal protection for northern Rockies gray wolves and relegating wolf management to the states. In so doing, FWS has approved state laws in Idaho and Montana that commit to maintaining only 100 to 150 wolves per state. The result is that the northern Rockies wolf population could plummet to an unsustainable level, even in the short term.

This Article argues that FWS’s wolf recovery standards, which provide for a northern Rockies population of only 300 wolves and 30 breeding pairs, are inadequate and unlawful because they are not based on the best available scientific evidence. By removing northern Rockies gray wolves from the list of federally protected species based upon demonstrably inadequate demographic recovery criteria, FWS flouts its conservation mandate under the ESA and places gray wolves in jeopardy of extinction.

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I. BACKGROUND

According to FWS, “wolves were hunted and killed with more passion and zeal than any other animal in U.S. history.”\(^2\) By the 1930s, wolves were all but eradicated from the western United States through poisoning, trapping, and shooting.\(^3\) Gray wolves were among the first species to be listed by the Secretary of Interior as endangered when Congress enacted the ESA in 1973.\(^4\) In 1987, when virtually no wolves roamed the northern Rockies, FWS developed a northern Rockies wolf recovery plan that established a goal of at least ten breeding pairs and one hundred wolves for three consecutive years in each of three recovery areas: northwestern Montana, central Idaho, and the Greater Yellowstone area.\(^5\) In 1994, FWS revised these criteria to require a minimum of “thirty or more breeding pairs... comprising some 300+ wolves in a metapopulation... with genetic exchange between subpopulations.”\(^6\) Protected under the ESA from unregulated killing by humans, gray wolves began to return to their native landscapes in northwestern Montana from populations in Canada. In 1995 and 1996, gray wolf recovery surged when FWS reintroduced sixty-six gray wolves into Yellowstone National Park and central Idaho. Since that reintroduction, the wolf population has grown to approximately 1650 wolves in Wyoming, Montana, and Idaho today.\(^7\)

In February 2008, FWS announced its decision to eliminate ESA protections for wolves in the northern Rockies and leave management to the states.\(^8\) Conservation groups, represented by Earthjustice, sued in federal court and obtained a preliminary injunction restoring the wolf to the list of

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endangered species.\textsuperscript{9} In a meticulous, forty-page opinion, Judge Donald Molloy of the U.S. District Court for the District of Montana detailed substantial deficiencies with FWS’s effort to delist the region’s wolves. These included a current lack of the “genetic exchange” FWS deemed essential to the population’s recovery—and required for delisting—and a wolf management scheme in Wyoming that left the wolf population in “serious jeopardy.”\textsuperscript{10} In response, FWS abandoned the challenged delisting rule and the rule was remanded and vacated in October 2008.

On October 28, 2008, just two weeks after the agency’s final delisting regulation was vacated by the Montana court, FWS “announce[d] the reopening of the comment period for [the] February 8, 2007, proposed rule”—the same proposal that launched the judicially discredited February 2008 delisting of gray wolves in the northern Rocky Mountains.\textsuperscript{11} FWS offered no new information to support its assertion that the region’s wolf population was suitable for delisting. To address the court’s determination that regulatory mechanisms in Wyoming are inadequate to maintain a recovered wolf population, FWS proposed retaining ESA protections for Wyoming wolves while delisting the remainder of the newly designated northern Rocky Mountain distinct population segment (DPS).

The clock ran out on the Bush administration before it could finalize the wolf delisting rule. On January 20, 2009, President Barack Obama’s Chief of Staff issued a memorandum to the heads of all executive departments and agencies ordering a legal and policy review of almost all pending Bush administration regulations. Regulations that had been sent to the Federal Register but not yet published, including the wolf delisting rule, were to be withdrawn pending completion of the review. Following review of the delisting rule, the Secretary of the Interior would have the discretion to issue the rule without changes, modify the rule, or permanently withdraw the rule. Conservation groups argued that the wolf delisting rule should be permanently withdrawn, allowing the new Obama administration to chart a new course to wolf recovery.

Notwithstanding substantial arguments that the Bush administration’s delisting rule was unlawful, Interior Secretary Ken Salazar announced that he would reaffirm the Bush policy. The delisting rule was finalized by publication


\textsuperscript{10} Id. at 1172, 1175.

in the Federal Register on April 2, 2009 and took effect on May 4, 2009. The day the rule was published, the coalition of thirteen conservation organizations that challenged FWS’s initial wolf delisting rule sent FWS a sixty-day notice of intent to challenge the new delisting rule, pursuant to the ESA’s citizen suit provision, 16 U.S.C. § 1540(g). Plaintiffs filed their lawsuit on June 4, 2009.

II. DISCUSSION

A. The ESA Listing Framework

The ESA was enacted to “provide a program for the conservation of... endangered species and threatened species” and to “provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved.” To receive the full protections of the Act, a species must be listed by the Secretary as “endangered” or “threatened” pursuant to ESA section 4. The ESA defines “endangered species” as “any species which is in danger of extinction throughout all or a significant portion of its range.” The term “species” includes “any distinct population segment of any species of vertebrate fish or wildlife which interbreeds when mature.” Under these definitions, the FWS can list a DPS of a vertebrate species, even when the species as a whole is neither endangered nor threatened. By extending ESA protections to locally vulnerable populations, DPSs are meant to “protect and conserve species and the ecosystems upon which they depend before large-scale decline occurs that would necessitate listing a species or subspecies throughout its entire range.”

Before listing or delisting a species as endangered or threatened, the ESA requires the Secretary to evaluate biological and regulatory factors. The Secretary must make listing determinations “solely on the basis of the best

13. The argument set forth in this article is one of the several ESA violations included in the sixty-day notice letter. See Letter from Doug Honnold and Jenny Harbine, Earthjustice, to Ken Salazar, Secretary of the Interior, and Rowan Gould, Acting FWS Director (Apr. 2, 2009) (on file with author). The plaintiffs have also argued that piecemeal delisting—the exclusion of the Wyoming portion of the DPS from the delisting rule—violates the ESA and represents an arbitrary departure from FWS’s numerous prior statements that such state-by-state delisting is not permitted. See id.
16. Id. § 1533(a).
17. Id. § 1532(b).
18. Id. § 1532(c).
20. Id.
scientific and commercial data available to him after conducting a review of the status of the species.”

B. FWS Wolf Recovery Standards for the Northern Rocky Mountains Are Inadequate to Ensure Long-Term Population Viability

FWS ignored the “best scientific... data available” when it delisted gray wolves in the northern Rocky Mountains based upon inadequate recovery standards. FWS failed to conduct a meaningful evaluation of current scientific information demonstrating that its gray wolf recovery goal does not ensure the long-term survival of the species’ northern Rockies population. Instead, FWS relied upon decades-old criteria that were established when no wolves occupied the northern Rockies landscape. Lacking a scientific basis, these criteria rested on a conservative prediction about the potential success of wolf reintroduction and recovery. This low recovery bar disregards the new reality that, with adequate protection from human-caused mortality and habitat encroachment, wolves can establish a biologically sound population and reclaim their role as a keystone species in the northern Rockies ecosystem.

Well-established principles of conservation biology hold that populations need robust numbers of individuals for long-term viability. To avoid the adverse genetic effects of inbreeding, widely accepted scientific studies estimate that a minimum viable population (MVP) requires an effective population size (“Ne”) of 500.23 An effective population size is defined by the number of breeding adult individuals in a population. Since effective population sizes are generally 10 to 20 percent of the census population, this means that a total population count of 2500 to 5000 individuals is necessary to ensure population viability. FWS has never performed a species-specific analysis to determine the minimum viable population size for gray wolves in the northern Rockies. Yet in other rulemakings, FWS has recognized and applied the conservation biology “rule-of-thumb” requiring an effective population size of 500 individuals for long-term population viability.24


23. See MICHAEL E. SOULE & BRUCE WILCOX, CONSERVATION BIOLOGY, AN EVOLUTIONARY-ECOLOGICAL PERSPECTIVE (Sinauer Associates Inc. 1980); OTTO FRANKEL & MICHAEL E. SOULE, CONSERVATION AND EVOLUTION (Cambridge University Press 1981); see also Letter from Lois F. Alexander et al. to Ed Bangs, Western Gray Wolf Recovery Coordinator, Re: Comments on the Proposal to Designate the Gray Wolf Northern Rocky Mountain Distinct Population Segment and to Remove this Distinct Population Segment from the Federal List of Endangered and Threatened Wildlife, at 2 (May 9, 2007) (on file with author). One study estimated the specific MVP for over 100 vertebrate organisms. The mean population value for these vertebrates to maintain viability was estimated to be greater than 7000 individuals. As part of the analysis, Reed estimated the MVP for adult gray wolves (i.e. effective population size) to be 1403. When these data were corrected for forty generations worth of data, the MVP for gray wolves was estimated to be 6332. See David H. Reed et al., Estimates of minimum viable population sizes for vertebrates and factors influencing those estimates, 113 BIOLOGICAL CONSERVATION 23–34 (2003).

Similarly, FWS’s recovery standard for wolves in the northern Rockies conflicts with internationally recognized protocols for assessing the status of wildlife populations. The International Union for Conservation of Nature (IUCN) publishes the “Red List Criteria,” a list of categories and criteria that it applies to determine species’ conservation status. IUCN thresholds for evaluating threat of extinction represent internationally accepted standards in population biology and have been cited and relied upon by FWS in rendering ESA listing decisions.

The IUCN process requires listing a species as “vulnerable”—which is comparable to ESA “threatened” listing—if the population size drops below 1000 “mature” individuals. An individual is classified as “mature” if it is capable of reproducing. This demographic standard addresses the need to maintain genetic diversity within isolated populations. When the number of breeding individuals drops below a certain threshold, the population may lose the genetic diversity necessary for population adaption to changing conditions.

In the case of gray wolves, only a small percentage of the population contributes to its genetic heritage. Wolves typically do not begin breeding until two years of age and only the alpha male and alpha female within a pack reproduce. With an estimated 1645 wolves in 95 breeding pairs, the northern Rockies wolf population is well below the IUCN’s floor for designating a species or isolated population as “vulnerable” due to threats to genetic diversity.

These well-established, objective criteria gave FWS reason to know that it was setting inadequate goals for population size when it drafted the gray wolf recovery plan. Indeed, in 1994, FWS acknowledged the science suggesting that a minimum effective population size of 500 breeding individuals is essential for the population’s long-term survival, but nonetheless reaffirmed its inadequate recovery goals. Since then, the evidence has mounted. Before FWS initially

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(Mar. 11, 2008) (to be codified at 50 C.F.R. pt. 17) (FWS wolverine listing decision); see also 1994 FEIS, supra note 6, at 38.

25. See IUCN, RED LIST CATEGORIES AND CRITERIA, VERSION 3.1 1 (2001) [hereinafter RED LIST CRITERIA].


27. See RED LIST CRITERIA, supra note 25, at 23.

28. Id. at 10.

29. See 2009 Final Rule, supra note 12, at 15,123.


31. See 1994 FEIS, supra note 6, at 38–39.
delisted wolves in February 2008, the agency received a letter signed by nearly 250 scientists stating that:

current numbers of wolves do not meet the minimum requirement for genetic viability. If these numbers are further reduced, the population is certain to face the detrimental genetic consequences associated with isolated populations of few individuals. By any measure, a population of 30 breeding pairs (300 wolves) is insufficient to achieve an effective population size large enough to maintain essential genetic diversity. 32

Indeed, FWS Wolf Recovery Coordinator Ed Bangs has conceded that the FWS recovery standard is too low. 33

In seeking to justify its adherence to a 300-wolf recovery standard, FWS has pointed to other wolf populations that allegedly are healthy despite relative isolation and small population size. For example, FWS asserts without support that wolves within the northern Rockies wolf population will not suffer deleterious effects of inbreeding depression like those afflicting the Isle Royale National Park wolf population in Michigan. 34 In fact, FWS cited Isle Royale as an example of an isolated wolf population that has persisted notwithstanding its small size last year in support of its initial delisting effort. 35 Also, FWS compares northern Rockies wolves to a small, isolated wolf population on Alaska’s Kenai Peninsula that FWS states is genetically healthy. Without providing any current information on the genetic status or genetic trends of Kenai wolves, FWS claims that northern Rockies wolves will similarly remain genetically diverse despite a small population size. Lacking comparative evidence, it is arbitrary for FWS to state that Kenai wolves and Isle Royale wolves are useful indicators of the northern Rockies wolves’ genetic future.

FWS has unlawfully turned a blind eye to substantial scientific evidence that its current northern Rockies wolf recovery standard of 300 wolves and 30 breeding pairs is inadequate to ensure the wolf’s long term viability. This low threshold defining wolf recovery reflected the political and practical reality at the time it was developed, notwithstanding science then available suggesting the necessity of a much larger population. 36 It has now been demonstrated that “a total [wolf] population in the low thousands” is feasible in the northern Rockies. 37 There is no reason for FWS to cling to its politically established recovery goal rather than one based on science, as required by the ESA.

33. Virginia Morell, Wolves at the Door of a More Dangerous World, SCIENCE, Feb. 15, 2008, at 891 (statement of Ed Bangs that “I, personally, think it [the 300 wolf recovery goal] is too low.”).
35. See 2008 Final Rule, supra note 3, at 10,553.
36. See 1994 FEIS, supra note 6, at 38 (“Clearly, finding an area to support $N_e = 500$ of wolves in the lower 48 states is very unlikely, as this would equate to a total population in the low thousands.”).
37. Id. The northern Rockies wolf population has exceeded 1000 since 2005. U.S. FISH AND WILDLIFE SERV., supra note 7, at tbl.4b.
C. After Delisting, States May Implement Aggressive Management Practices Designed to Substantially Reduce Wolf Numbers

While adhering to the inadequate, two-decades-old wolf recovery goal of only 300 wolves and 30 breeding pairs, FWS insists that the northern Rockies wolf population will actually be maintained at much higher numbers even after delisting takes effect. Implicitly recognizing that 300 wolves in the northern Rockies is insufficient, FWS speculates that under state management, the northern Rockies wolf population “is likely to consist of 973 to 1,302 wolves in 77 to 104 breeding pairs.” However, FWS has not sought commitments from the states to maintain those levels and the agency acknowledges that states may fully implement aggressive wolf-reduction policies once FWS relinquishes control. In fact, hostile wolf policies may reduce the northern Rockies wolf population well below the numbers necessary for its survival.

In the final rule delisting northern Rockies gray wolves, FWS stated that “[t]he numerical component of the recovery goal represents the minimum number of breeding pairs and individual wolves needed to achieve and maintain recovery.” Accordingly, FWS required the states of Montana, Idaho, and Wyoming to prepare management plans that would ensure this target minimum number of wolves. Under the rule, a post-delisting status review of the species, which could result in relisting of the species or maintaining the status quo, would only be triggered if one of three conditions are met: (1) the wolf population in any one state falls below 10 breeding pairs and 100 wolves for a single year; (2) the wolf population in any state falls below 15 breeding pairs and 150 wolves for three consecutive years; or (3) changes in state laws “significantly increase the threat to the wolf population.” Thus, regardless of FWS’s wishful speculation about the future size of the wolf population under state management, by delisting wolves, FWS has forfeited its authority to ensure that the wolf population remains above the meager threshold FWS established for population viability.

Indeed, while FWS contends that Idaho—which hosts the largest wolf population of the northern Rockies states—will conservatively manage wolves, Idaho plans to slash the state’s wolf numbers as soon as delisting occurs. As Idaho’s 2002 wolf management plan emphasizes, Idaho remains committed to wolf eradication. The plan incorporates House Joint Memorial No. 5 as “the official position of the State of Idaho,” which resolved that “wolves be

38. 2009 Final Rule, supra note 12, at 15,142.
39. See id.
40. Id. at 15,132.
41. Id. at 15,167.
42. Id. at 15,133. Because FWS has made clear that it does not view state policies as a threat to wolves unless they would drive the population below FWS’s minimum recovery levels, the third category triggering a status review is virtually meaningless. Id.
removed [from Idaho] by whatever means necessary.\textsuperscript{43} At a rally in early 2007, Idaho governor Butch Otter announced his support for a “gray wolf kill,” in which all but 100 of Idaho’s wolves would be killed after delisting. Speaking to hundreds of hunters, Otter proclaimed, “I’m prepared to bid for that first ticket to shoot a wolf myself.”\textsuperscript{44}

Idaho is now seeking federal approval to kill over 25 wolf packs, which translates to 100–250 wolves, in response to purported chronic livestock depredation. Idaho is also preparing a proposal for federal approval to kill roughly 100 wolves in Idaho’s upper Clearwater Basin in response to wolves’ perceived impacts on ungulate herds.\textsuperscript{45} After delisting occurs, however, federal approval will be unnecessary and Idaho may implement its wolf-killing plans at will. Further, Idaho intends to hold a public wolf hunt in Fall 2009. Although the Idaho Game and Fish Commission has not yet established wolf hunting regulations for 2009, the Commission adopted a wolf mortality quota in 2008 of 428 wolves, which included hunting and other sources of mortality.\textsuperscript{46} Nothing constrains the Commission from establishing an even higher quota in 2009.

Idaho’s open hostility toward wolves is official state policy. While Montana has adopted a more conservative tone, it has made no enforceable commitment to maintaining more than the minimum number of wolves required by FWS’s recovery standard.\textsuperscript{47} There is no support for FWS’s confidence that once federal ESA protections are lifted, Idaho and Montana will retain more than the FWS-established wolf recovery floor of 100 wolves and 10 breeding pairs. The reality that states may aggressively reduce the northern Rockies wolf population underscores the importance of FWS’s definition of wolf recovery and status review thresholds included in the delisting rule. FWS’s wolf recovery standard of 300 wolves and 30 breeding pairs distributed throughout the northern Rockies ecosystem is far lower than the minimum viable population size supported by the best available science.


\textsuperscript{46} See Defenders of Wildlife v. Hall, 565 F. Supp. 2d 1160, 1177 n.6 (D. Mont. 2008).

\textsuperscript{47} Montana established a tentative 2008 hunting quota of 75 wolves out of its population of 422 wolves at that time. See 2009 Final Rule, supra note 12, at 15,168; U.S. FISH AND WILDLIFE SERV., supra note 7, at tbl.4b. Montana has not yet established the hunter harvest targets for 2009.
CONCLUSION

By transferring wolf management authority to the states, FWS has left itself virtually powerless to ensure that the northern Rocky Mountain wolf population remains at sustainable numbers. FWS’s finalized decision to delist northern Rockies wolves without ensuring adequate safeguards to maintain a viable long-term population violates its ESA duty to employ the best scientific data available and to conserve imperiled species. To comply with the ESA’s mandates, FWS must initiate notice-and-comment rulemaking to withdraw the delisting rule and restore ESA protections for gray wolves in the northern Rockies. FWS should apply the process to undertake the thorough legal and policy review required by the Chief of Staff’s January 20, 2009 regulatory review memorandum and to follow President Obama’s direction that agencies employ sound science in decision making with respect to endangered species. If gray wolves in the northern Rockies remain within the management authority of states not obligated to protect them, they are again in peril of plummeting to the brink of extinction.