Kristine M. Akland
Center for Biological Diversity
P.O. Box 7274
Missoula, MT 59807
(406) 544-9863
kakland@biologicaldiversity.org

Collette L. Adkins*
Center for Biological Diversity
P.O. Box 595
Circle Pines, MN 55014-0595
(651) 955-3821
cadkins@biologicaldiversity.org

Margaret Robinson*
Humane Society of the United States
1255 23rd Street NW, Suite 450
Washington, DC 20037
(434) 260-4871
mrobinson@humanesociety.org

Counsel for Plaintiffs

*Seeking admission *pro hac vice*

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MONTANA
MISSOULA DIVISION

CENTER FOR BIOLOGICAL DIVERSITY; THE HUMANE SOCIETY OF THE UNITED STATES; HUMANE SOCIETY LEGISLATIVE FUND; and SIERRA CLUB,

Plaintiffs,

v.

U.S. FISH AND WILDLIFE SERVICE; MARTHA WILLIAMS, in her official capacity as Director of U.S. Fish and Wildlife Service; and DEB HAALAND, in her official capacity as U.S. Secretary of the Interior,

Defendants.

Case No. _____

COMPLAINT

INTRODUCTION

1. Center for Biological Diversity, the Humane Society of the United States, Humane Society Legislative Fund, and Sierra Club (collectively, "Plaintiffs") challenge the unlawful and arbitrary decision of the U.S. Secretary of the Interior, the U.S. Fish and Wildlife Service, and the Director of the U.S. Fish and Wildlife Service (collectively, "Service") to deny Endangered Species Act ("ESA") protections to gray wolves (*Canis lupus*) in the Northern Rocky Mountains.

2. Wolves in this region – encompassing Idaho, Montana, and Wyoming, as well as parts of Washington, Oregon, and Utah – are not currently protected under the ESA, and they face substantial and intensifying threats. Montana and Idaho recently implemented laws aimed at drastically reducing the wolf populations in their states. Among other things, these laws allow for the use of new – and highly effective – methods to kill wolves. As the Service itself concluded, increased killing of wolves in the Northern Rocky Mountains will lead to precipitous population declines in the next ten years.

3. Wolves were once eradicated from the Western United States due to intensive killing by humans and only returned following the reintroduction of wolves to Yellowstone National Park and central Idaho in the 1990s. Idaho and Montana's new laws will erase decades of recovery progress made since that

reintroduction.

4. Significantly, recent scientific research demonstrates that the level of genetic variability observed in wolves in the Northern Rocky Mountains is *already* insufficient to prevent long-term extinction risk. Population declines will cause further harm to the genetic health of these wolves.

5. In addition, the viability of small and fragile wolf populations in other parts of the Western U.S. – such as California and Colorado – depends on wolves dispersing from the Northern Rocky Mountains. Such dispersal allows wolves to colonize new habitat and connects wolf populations, enhancing genetic health. Yet scientific research shows that excessive killing limits wolf dispersal.

6. Given these and other threats, Plaintiffs submitted a formal petition in May 2021 ("Petition"), requesting that the Service protect gray wolves in the Northern Rocky Mountains by listing them under the ESA. The Petition relied upon the best available science and showed that wolves in the region are in danger of extinction (an "endangered" species) or, at minimum, likely to become endangered in the foreseeable future (a "threatened" species).

7. Despite significant scientific evidence demonstrating the imperiled status of wolves in the region and the Service's own predictions of significant population declines over the next ten years, the agency denied the Petition, depriving wolves in the Northern Rocky Mountains of ESA protections. 89 Fed.

Reg. 8391, 8391-95 (Feb. 7, 2024).

8. The Service's decision violates the ESA because it failed to rely on the best available science – in some instances, the Service completely ignored key research that conflicts with the agency's conclusions. Further, the Service supported its decision by relying on unfounded assumptions, providing inadequate explanations, and inconsistently applying the Service's own standards for its listing decisions.

9. Accordingly, Plaintiffs request that this Court declare the Service's denial of the Petition to be arbitrary and capricious and unlawful under the ESA, vacate the illegal decision, and remand the matter to the Service with direction to determine whether the best available science supports protecting wolves in the Northern Rocky Mountains as an endangered or threatened species, by a date certain.

JURISDICTION

10. This Court has jurisdiction over this action pursuant to 16 U.S.C. § 1540(c) and (g)(1)(C) (action arising under the ESA's citizen suit provision), and 28 U.S.C. § 1331 (federal question jurisdiction).

11. The Court may grant the requested relief under the ESA, 16 U.S.C. § 1540(g); 28 U.S.C. §§ 2201 and 2202 (declaratory judgment and further relief); and 5 U.S.C. §§ 704 and 706 (Administrative Procedure Act).

12. By letter and email dated February 7, 2024, the Plaintiffs provided 60 days' notice of their intent to file this suit pursuant to the citizen-suit provision of the ESA, 16 U.S.C. § 1540(g)(2)(C). The Interior Secretary received a physical copy of the notice letter, delivered by certified mail, on February 15, 2024.

13. The Service has not remedied the violations to date, and thus an actual controversy exists between the parties within the meaning of 28 U.S.C. § 2201.

14. Plaintiffs' Article III standing to pursue this case is demonstrated by the allegations below concerning Plaintiffs' and their members' interests in this controversy.

VENUE

15. The U.S. District Court for the District of Montana is the proper venue for this action pursuant to 16 U.S.C. § 1540(g)(3)(A) and 28 U.S.C. § 1391(e). The Service's violations of law occurred in part in this district, gray wolves occur in the district, and a substantial part of the events giving rise to Plaintiffs' claim occurred in the district. Additionally, Plaintiffs have members in this district, and Plaintiff Center for Biological Diversity maintains an office in the district.

16. The Missoula Division is proper given that the Service's violations of law occurred in part in the division, exploited wolves occur in the division, and a substantial part of the events giving rise to the claims therefore occurred in the division.

PARTIES

Plaintiffs

17. Plaintiff CENTER FOR BIOLOGICAL DIVERSITY ("Center") is a national, nonprofit conservation organization headquartered in Tucson, Arizona and supported by over 79,000 members. The Center and its members wish to see viable gray wolf populations in suitable habitat in all significant portions of the wolf's historic range in the lower-48 states, including in the Northern Rocky Mountains; Utah and Colorado (collectively, "Southern Rocky Mountains");[1] and California and the Pacific Northwest (collectively, "West Coast states"). To realize that vision, the Center has halted through litigation multiple unlawful downlisting and delisting attempts by the Service and successfully secured the Service's drafting of a national wolf recovery plan. The Center was a co-petitioner on the Petition.

18. Plaintiff THE HUMANE SOCIETY OF THE UNITED STATES ("HSUS") is a nonprofit organization incorporated in 1954 and headquartered in Washington, D.C. HSUS is the nation's largest animal protection organization, with millions of members and constituents. HSUS' mission is to fight to end suffering for all animals. In furtherance of this mission, and on behalf of its

[1] Southern Rocky Mountains does not include the small portion of Utah designated part of the Northern Rocky Mountains.

members and constituents who are personally vested in ensuring the continued survival of some of the world's most iconic imperiled species, HSUS has worked for many years to improve the plight of the gray wolf, including in the Northern Rocky Mountains and the Western U.S. HSUS has, for example, helped to thwart continuous efforts to delist the gray wolf, including successfully challenging the most recent wolf delisting rule in court. HSUS also works at the state level to strengthen laws and regulations to further protections for gray wolves, and advocates vocally against wolf hunting. HSUS was a co-petitioner on the Petition.

19. Plaintiff HUMANE SOCIETY LEGISLATIVE FUND ("HSLF") is an animal protection organization incorporated under section 501(c)(4) of the Internal Revenue Code and operates as a separate affiliate of HSUS. HSLF was formed in 2004 and is based in Washington, D.C. HSLF's mission is to ensure that animals have a voice before federal and state lawmakers by: advocating for measures to eliminate animal cruelty and suffering; educating administrative and elected officials, as well as the public, about animal protection issues; and supporting humane candidates for office. HSLF has a long history of advocating for the protection of wildlife – especially threatened and endangered species and native carnivores – in Congress and before federal agencies. More specifically, HSLF has spent considerable time fighting against the delisting of the gray wolf under the ESA in Congress as well as thwarting other attacks against gray wolf

protections at the federal level. HSLF was a co-petitioner on the Petition.

20. Plaintiff SIERRA CLUB was founded in 1892 and is the nation's oldest grassroots environmental organization. Sierra Club is incorporated in California and has approximately 690,490 members nationwide. The organization is dedicated to the protection and preservation of the environment. Sierra Club's mission is to explore, enjoy, and protect the wild places of the earth; to practice and promote the responsible use of the earth's ecosystems and resources; and to educate and enlist humanity to protect and restore the quality of the natural and human environments. Sierra Club has consistently advocated for the recovery of gray wolves for decades, including in the Northern Rocky Mountains. Sierra Club was a co-petitioner on the Petition.

21. Plaintiffs' individual members and staff use land in the Northern Rocky Mountains, Southern Rocky Mountains, West Coast states, and elsewhere in the Western U.S. for recreational pursuits, including wildlife viewing, hiking, camping, backpacking, skiing, and aesthetic enjoyment. Plaintiffs' members have lived, visited, studied, worked, or recreated on lands that are home to the gray wolf in the Western U.S., and they have specific intentions to continue to do so frequently and on an ongoing basis in the future. They also have professional pursuits, such as photography and tourism, that depend on the opportunity to view wolves in the wild. These individuals derive recreational, professional, economic,

scientific, educational, aesthetic, moral, spiritual, and other benefits from their interactions with gray wolves, signs of the animals' presence, and wolf habitat.

22. For example, Center member and California resident Joshua Able is a professional wildlife photographer who often photographs wolves and has seen wolves on his property where he lives. He continuously searches his property for wolves and their signs, like scat. In addition to observing wolves on his property, he has made and plans to continue making regular trips to Yellowstone National Park and other wolf habitat in the Northern Rocky Mountains to observe and photograph wolves and their signs. As a professional wildlife photographer, he derives professional and economic value from photographing wolves in Wyoming and other states.

23. Center member and Colorado resident Brett Henderson routinely explores remote and expansive public lands in western Colorado and across the West, and he looks for wildlife wherever he adventures. He captures his trips with photographs, video, and audio, and he posts photos from these trips to his Instagram account to attract prospective customers to his business and for pleasure. During his outings in Colorado, Utah, Wyoming, and other places, he has had multiple encounters with carnivores, like coyotes and bears, but he has not yet seen a wolf. He is planning a backpacking trip in the summer or fall of 2024 in Eagle or

Grand County, Colorado, with the specific hopes of seeing or hearing gray wolves, who now range in portions of both counties.

24. Center staff member and Oregon resident Noah Greenwald has seen wolves in the wild and makes frequent visits to areas in the U.S. where wolves live, including multiple trips every year in Oregon and Washington, with hopes of again viewing wolves. For example, he has plans for summer 2024 to look for wildlife while biking and hiking in northeastern Oregon, where the wolf has had its best recovery in the state, as well as areas in central Oregon and in the southern Washington Cascades, where wolves are present but have yet to recover despite abundant habitat and prey.

25. For another example, HSUS member, HSUS staff member, and Colorado resident Wendy Keefover has a longstanding interest in native carnivores and has been working to protect cougars, gray wolves, and grizzly bears for decades. She also personally supported and advocated for the reintroduction of wolves in Colorado. She is an avid wildlife watcher, hiker, and wildlife photographer. Ms. Keefover makes frequent visits to areas where wolves live in the Western U.S. and has observed wolves in the wild several times, including most recently in 2023. For instance, Ms. Keefover regularly visits gray wolf habitat in and around Yellowstone National Park to view and photograph native wildlife, including gray wolves. She generally makes these trips at least once a year and

plans to continue her annual trips to gray wolf habitat in Yellowstone National Park as long as her health allows. In addition, she intends to regularly travel within Colorado to attempt to view and photograph the state's recently reintroduced wolves. In the summer of 2024, she plans to hike and attempt to view and photograph wolves or their signs in Park County and Rocky Mountain National Park, in areas where wolves will likely range by then given the areas' close proximity to existing wolf range in Colorado.

26. HSUS member, HSUS staff member, and Oregon resident Story Warren has been captivated by wolves since she first saw a wild wolf when she was six years old. As an adult, she regularly visits Yellowstone National Park and surrounding areas in the hopes of observing wolves, and she is planning to visit the park and surrounding areas in the next year. In addition, because of the deep joy she derives from observing wild wolves and signs of their presence, Ms. Warren has made major life decisions by factoring in how they will impact her ability to observe wolves and their signs in the wild. She attended the University of Montana specifically to live near, study, and observe wolves. Ms. Warren then chose to move to Oregon, in part because it was important for her to be able to track wolves. She travels to Central Washington four to five times a year to track and try to observe wolves and intends to continue visiting the area at that frequency. She also intends to travel to wolf range in various parts of Oregon at least twice a year

to track and try to observe wolves, including areas where wolves currently receive ESA protections and portions where they do not.

27. HSUS member, HSUS staff member, and Montana resident David Pauli has provided care to wildlife for decades, personally rescuing and rehabilitating numerous animal species. He is also a lifelong wildlife watcher, certified master tracker, and Montana master naturalist. He estimates that he has seen wild wolves about 100 times since they were reintroduced to the northern Rockies. He regularly seeks out opportunities to view wolves and other wildlife, along with signs of their presence, in and around Yellowstone National Park. He visits the park and surrounding areas four to five times a year – typically including an annual visit to the Lamar Valley – and plans to continue doing so as long as his health allows. Mr. Pauli also visits Glacier National Park and surrounding areas about once a year and plans to continue doing so – and seek opportunities to view wolves and their signs – for as long as his health allows.

28. As another example, Phil Knight has been a Sierra Club member and active volunteer since 2002. He is a 39-year resident of the Greater Yellowstone Ecosystem with a lifelong interest in wildlife study and wildlife conservation. He was involved in advocating for reintroduction of wolves to Greater Yellowstone and the northern Rockies as early as 1988 and has testified in federal hearings to that effect. Since 1999, Mr. Knight has worked as a tour guide in Yellowstone

National Park with an emphasis on wildlife spotting and observation. He has spent countless hours in the field observing gray wolves, learning about them, and teaching his clients about wolves. Mr. Knight has explored and recreated on public lands all over the northern Rockies with his wife and family. He also has spoken out and testified recently regarding predator hunting practices and policies in Montana and Wyoming, including testifying before the Montana Fish and Wildlife Commission in opposition to Montana's 2021 expanded wolf hunting laws. Mr. Knight partially depends on the presence of wolves for his livelihood and works closely with other tour guides and conservationists around the region to demonstrate the value of wild wolves to the economy and ecology of the northern Rockies.

29. Plaintiffs and their members also place a high value on wolves as a species, recognizing that the presence of gray wolves is essential to the healthy functioning of the ecosystems that Plaintiffs' members rely upon. Accordingly, Plaintiffs actively seek to protect and recover the gray wolf, including in the Western U.S., through a wide array of actions such as public education, scientific analysis, and advocacy intended to protect wildlife and promote healthy ecosystems. Plaintiffs and their members also value individual wolves and wolf packs, including in the Northern Rocky Mountains, where wolves lack federal ESA protections.

30. Because Plaintiffs' members seek to view wild wolves and signs of their presence in the Western U.S., they are harmed by the Service's actions and inactions that limit protections for – and stymie recovery of – these wolves. In short, the Service's denial of the Petition reduces Plaintiffs' members' opportunities to enjoy wolves and their signs, thus injuring these members' interests.

31. More specifically, in the Northern Rocky Mountains, where wolves lack ESA protections, the killing of wolves under state management reduces the number of wolves for members to observe and shrinks the wolf's occupied range, where Plaintiffs' members could observe them. Thus, the Service's failure to implement ESA protections makes wolves more difficult to observe in the Northern Rocky Mountains. Plaintiffs' members are also injured because the very animals they enjoy looking for and observing could be legally killed or injured, and they may witness wolves who have been trapped, injured, or killed in the Northern Rocky Mountains.

32. The Service's denial of the Petition also reduces Plaintiffs' members' opportunities to observe wolves in the Western U.S., outside of the Northern Rocky Mountains. Wolves' movements are not restricted by state borders. The absence of federal protections for wolves in the Northern Rocky Mountains makes it more difficult for wolves to survive and disperse from the Northern Rocky

Mountains into adjacent areas, such as the Southern Rocky Mountains or West Coast states, where Plaintiffs' members also seek to observe wolves. Additionally, wolves can be – and have been – killed after moving from states where they are protected under the ESA into the Northern Rocky Mountains, where they are not. This hinders members' opportunities to observe wolves in states, such as Colorado, that border the Northern Rocky Mountains.

33. The Service's decision to deny the Petition and refuse to restore ESA protections for gray wolves in the Northern Rocky Mountains also causes ecological harm in the Western U.S. by reducing the ability of wolves to perform their ecological services as top predators in ecosystems where Plaintiffs' members live and recreate.

34. As such, the Service's Petition denial and the legal violations alleged in this Complaint cause direct injury to the aesthetic, conservation, economic, recreational, scientific, educational, wildlife preservation, and other interests of Plaintiffs and their members.

35. Plaintiffs' and their members' interests have been, are being, and – unless their requested relief is granted – will continue to be adversely and irreparably injured by the Service's failure to comply with federal law. These are actual, concrete injuries, traceable to the Service's conduct, that would be redressed by the requested relief. Specifically, if the Court were to vacate the

Service's denial of the Petition and remand for further action based on the best available science and consistent with the ESA's other requirements, the Service could reinstate federal ESA protections for wolves in the Northern Rocky Mountains, thus redressing Plaintiffs' and their members' injuries. Plaintiffs have no other adequate remedy at law.

Defendants

36. Defendant DEB HAALAND is the Secretary of the United States Department of the Interior and the federal official in whom the ESA vests final responsibility for making decisions and promulgating regulations required by and in accordance with the Act, including listing and critical habitat decisions. Secretary Haaland is sued in her official capacity.

37. Defendant U.S. FISH AND WILDLIFE SERVICE is an agency within the Department of the Interior. The Interior Secretary has delegated her authority to administer the ESA to the Service for terrestrial and freshwater plant and animal species and certain marine species. *See* 50 C.F.R. § 402.01(b). This authority encompasses listing decisions for the gray wolf.

38. Defendant MARTHA WILLIAMS is the Director of the United States Fish and Wildlife Service and is charged with ensuring that agency decisions comply with the ESA, including listing decisions pertaining to the gray wolf. Director Williams is sued in her official capacity.

LEGAL BACKGROUND

Endangered Species Act – Purpose, Listings, and Protections

39. The ESA "represent[s] the most comprehensive legislation for the preservation of endangered species ever enacted by any nation." *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 180 (1978). Its purpose is 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." 16 U.S.C. § 1531(b).

40. The ESA directs the Service to add species it determines are endangered or threatened to a list of federally endangered and threatened species, a process known as "listing." 16 U.S.C. § 1533(a). The listing provisions are contained in Section 4 of the ESA – the section Congress labeled the "cornerstone of effective implementation" of the Act. S. Rep. No. 97-418, at 10 (1982).

41. A species is "endangered" if it "is in danger of extinction throughout all or a significant portion of its range." 16 U.S.C. § 1532(6). A species is "threatened" if it is "likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." *Id*. § 1532(20).

42. The definition of "species" includes "distinct population segments of any species…." 16 U.S.C. § 1532(16). The Service considers a population a distinct population segment ("DPS") if it is "discrete" in relation to the remainder

of the species to which it belongs and "significant" to the species to which it belongs. 61 Fed. Reg. 4722, 4725 (Feb. 7, 1996). If the Service determines that a population segment is both discrete and significant, then the population segment is a DPS that meets the ESA's definition of a "species," and the DPS must be listed if it meets the definition of endangered or threatened.

43. The ESA does not define a key phrase used in the definitions of endangered and threatened – "significant portion of its range." *See generally* 16 U.S.C. § 1532. In 2014, the Service promulgated a "Final Policy on Interpretation of the Phrase 'Significant Portion of Its Range' in the Act's Definitions of 'Endangered Species' and 'Threatened Species.'" 79 Fed. Reg. 37578 (July 1, 2014) ("SPR Policy").

44. The SPR Policy directs the Service to determine whether: (1) the portions may be significant and (2) the species may be "in danger of extinction (endangered) or likely to become so (threatened)" in a significant portion. *Id*. at 37586. Under the SPR Policy, the Service may answer these questions in any order. If both questions are answered in the affirmative, the agency must list the entire species as endangered or threatened. If either question is answered in the negative, however, that is the end of the inquiry. The Service must adequately explain why certain portions of a species' range qualify as "significant" when other

portions do not. *Defs. of Wildlife v. U.S. Fish & Wildlife Serv.*, 584 F. Supp. 3d 812, 828 (N.D. Cal. 2022).

45. Courts have struck down several agency interpretations of "significant," including the one in the SPR Policy, because they failed to give the phrase "significant portion of its range" independent meaning. *See, e.g.*, *Desert Survivors v. U.S. Dep't of the Interior*, 321 F. Supp. 3d 1011, 1072-74 (N.D. Cal. 2018); *Defs. of Wildlife v. Sec'y, U.S. Dep't of the Interior*, 354 F. Supp. 2d 1156, 1168 (D. Or. 2005).

46. The SPR Policy interprets the term "range" as "the general geographical area within which the species is currently found." 79 Fed. Reg. at 37583. Therefore, while the Service does not "base a determination to list a species on the status (extirpation) of the species lost in the historical range," the SPR Policy directs that "evaluating the effects of lost historical range on the viability of the species is an important component of evaluating the current status of the species." *Id*. at 37,584; *see also Humane Soc'y of the United States v. Zinke*, 865 F.3d 585, 605 (D.C. Cir. 2017).

47. The ESA also does not define "foreseeable future." Under its regulations, the Service must "describe the foreseeable future on a case-by-case basis, using the best available data and taking into account considerations such as

the species' life-history characteristics, threat-projection timeframes, and environmental variability." 50 C.F.R. § 424.11(d).

48. When deciding if a species (including a DPS) warrants listing, the Service must assess five categories of threats, also known as "listing factors": "(A) the present or threatened destruction, modification or curtailment of [a species'] habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; [and] (E) other manmade or natural factors affecting [the species'] continued existence." 16 U.S.C. § 1533(a)(1).

49. If a species meets the definition of "endangered" or "threatened" because of "any one or a combination of" these five listing factors, the Service must list the species. 50 C.F.R. § 424.11(c); 16 U.S.C. § 1533(a)(1).

50. The ESA requires the Service to make listing determinations "solely on the basis of the best scientific and commercial data available." 16 U.S.C. § 1533(b)(1)(A). These data "may include, but are not limited to scientific or commercial publications, administrative reports, maps or other graphic materials, information received from experts on the subject, and comments from interested parties." 50 C.F.R. § 424.13.

51. Congress's intention in allowing the Service to list a species as "threatened" based on the "best" scientific data available – instead of requiring

scientific certainty – was for the Service to provide ESA protections to imperiled species *before* they stand on the brink of extinction and beyond any likely hope of recovery. *See* H.R. Rep. No. 412, 93d Cong., 1st Sess. 5 (1973) ("In the past, little action was taken until the situation became critical and the species was dangerously close to total extinction. This legislation provides us with the means of preventive action.") (remarks of Rep. Clausen); *id*. ("By heeding the warnings of possible extinction today, we will prevent tomorrow's crisis.") (remarks of Rep. Gilman).

52. Once the Service lists a species under the ESA, the species receives an array of procedural and substantive protections that are proven to slow and reverse the trend toward extinction and set the species on the road to recovery. For example, Section 9(a)(1)(B) makes it unlawful to "take" endangered species, which means no person can harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect these species without first receiving authorization from the Service. 16 U.S.C. § 1538. Under Section 4(d) of the ESA, the Service must issue regulations to conserve threatened species and may extend to them the statutory protections afforded to endangered species by Section 9. *Id.* § 1533(d).

53. Additionally, ESA Section 4 requires the Service to designate "critical habitat," defined as areas "essential to the conservation of the species," and to engage in recovery planning. *Id.* §§ 1533(a)(3), (f); 1532(5). Section 7(a)(2)

requires all federal agencies to consult with the Service to ensure their actions are "not likely to jeopardize the continued existence" of any listed species or "result in the destruction or adverse modification" of a listed species' critical habitat. *Id.* § 1536(a)(2).

54. These comprehensive protections constitute the effective "program for the conservation of … endangered species and threatened species" that Congress contemplated, *id.* § 1531(b), and are essential to the overall survival and recovery – *i.e.*, conservation – of endangered and threatened species, *see* 50 C.F.R. § 424.02 (explaining that conservation "methods and procedures include, but are not limited to … research, census, law enforcement, habitat acquisition and maintenance, propagation, live trapping, and transplantation").

55. A species does not receive the ESA's substantive protections unless the Service lists it as endangered or threatened. Thus, listing is the crucial first step in the ESA's system of species protections.

Endangered Species Act – Listing Petitions

56. Any interested person can initiate the listing process by filing a petition with the Service to list a species as endangered or threatened. 16 U.S.C. § 1533(b)(3)(A).

57. Upon receiving a petition to list a species, the Service has 90 days to determine whether the petition "presents substantial scientific or commercial

information indicating that the potential action may be warranted." *Id.*; 50 C.F.R. § 424.14(h)(1). This determination is known as a "90-day finding."

58. If the Service makes a positive 90-day finding in response to a petition, it must conduct a "status review" of the species. 16 U.S.C. § 1533(b)(1)(A); 50 C.F.R. § 424.14(h)(2). During the status review, the Service publishes a notice and invites comment on a species' status, which informs the agency's listing determination. 50 C.F.R. § 424.14.

59. Pursuant to internal policy, the Service also uses a "species status assessment" to inform its listing decision.

60. Based on the results of the status review, the Service must make one of three findings within 12 months of receiving the petition, known as a "12-month finding." The Service must find that either: (1) the petitioned action is "warranted"; (2) the petitioned action is "not warranted"; or (3) the petitioned action is warranted, but the Service's issuance of a proposed rule is "precluded because of other pending proposals to list, delist, or change the listed status of species" and the agency is making "[e]xpeditious progress" to list, delist, or change the listed status of qualified species. 16 U.S.C. § 1533(h)(2)(i)–(iii).

61. If the Service issues a finding that listing the species is "not warranted," that finding is a final agency action subject to judicial review. *Id.* § 1533(b)(3)(C)(ii).

Administrative Procedure Act

62. Under the Administrative Procedure Act ("APA"), a reviewing court "shall hold unlawful and set aside agency action, findings, and conclusions found to be … arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A).

63. While the ESA provides for judicial review of a "not warranted" finding, 16 U.S.C. § 1540(g), the APA governs the standard and scope of judicial review, 5 U.S.C. §§ 701–706.

64. Courts have repeatedly held that failure by the agency to utilize the best available science is arbitrary and capricious. *See, e.g.*, *San Luis & Delta-Mendota Water Auth. v. Locke*, 776 F.3d 971, 995 (9th Cir. 2014). An agency's failure to draw rational conclusions from the evidence before it also constitutes arbitrary and capricious action. *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983); *see also Greater Yellowstone Coal., Inc. v. Servheen*, 665 F.3d 1015, 1030 (9th Cir. 2011) (affirming a district court order setting aside the Service's decision to delist Yellowstone grizzly bears because "[t]he Rule did not articulate a rational connection between the data before it and its conclusion").

FACTUAL BACKGROUND

Gray Wolf Ecology and History of Persecution

65. The gray wolf is an iconic creature: highly intelligent and social. Gray wolves are territorial animals who live in tightly knit packs. In these packs, there is generally one pair of breeders, and reproductive opportunities are limited for subdominant ranks.

66. Wolves primarily prey on medium and large mammals. Wolf populations are self-regulating and generally limited by prey availability. Studies have shown that gray wolves are crucial in driving evolution of their prey and balancing ecosystems.

67. As many as two million gray wolves used to roam freely throughout North America. But because of extreme levels of killing – including through government funding of wolf extermination efforts – wolves were nearly eliminated from the lower-48 states by the time they were first listed under the ESA. By the late 1970s, only about a thousand wolves remained in a small part of Minnesota and Michigan's Isle Royale National Park.

68. After receiving protections under the ESA, wolf populations expanded in the western Great Lakes region. After reintroduction to Yellowstone National Park and central Idaho in the mid-1990s, they began establishing a population in the Northern Rocky Mountains, as well as other parts of the Western United States.

69. Despite these victories, gray wolves only inhabit a small fraction of their historical range. Gray wolves are currently found in the Northern Rocky Mountains and the western Great Lakes region, as well as in small portions of the Southern Rocky Mountains, the West Coast states, and the northeastern United States. Gray wolves exist in numbers drastically lower than their historical populations.

Legal Status of Gray Wolves in the Western United States

70. In 2009, the Service issued a final rule removing ESA protections for gray wolves in a Northern Rocky Mountains DPS (i.e., "delisting" them). The DPS included the eastern one-third of Washington and Oregon; a small part of north-central Utah; and all of Montana, Idaho, and Wyoming. 74 Fed. Reg. 15123 (Apr. 2, 2009) (hereinafter "2009 Delisting Rule"). The rule did not remove ESA protections for wolves in Wyoming, but protections were removed for wolves in the rest of the DPS.

71. A federal court held that the 2009 Delisting Rule violated the ESA and reinstated protections for wolves in the DPS. *Defs. of Wildlife v. Salazar*, 729 F. Supp. 2d 1207, 1228 (D. Mont. 2010). That 2010 court decision was then reversed by Congress in 2011. Department of Defense and Full-Year Continuing Appropriations Act, Pub. L. No. 112-10 § 1713 (2011). As directed by Congress, the Service reissued the 2009 Delisting Rule, removing ESA protections for the

wolf population in the Northern Rocky Mountains DPS (excluding Wyoming). Wolves in Wyoming then later lost their federal protections. *Defs. of Wildlife v. Zinke*, 849 F.3d 1077, 1081 (D.C. Cir. 2017).

72. Following the loss of ESA protections in the Northern Rocky Mountains DPS, gray wolf management there was returned to the states.

73. In the Western United States, wolves also occur outside of the Northern Rocky Mountains DPS, including in western Washington, western Oregon, California, and most recently in Colorado.

74. Wolves in these areas lost ESA protections through the Service's 2020 rule that delisted wolves in the lower-48 states. However, a court concluded that the rule violated the ESA and vacated it, restoring ESA protections to all wolves in the lower-48 states outside of the Northern Rocky Mountains DPS. *Defs. of Wildlife v. U.S. Fish & Wildlife Serv.*, 584 F. Supp. 3d 812 (N.D. Cal. 2022).

Threats to Gray Wolves in the Western United States

75. The Service has long recognized that "the future conservation of a delisted wolf population in the [Northern Rocky Mountains] depends almost solely on State regulation of human-caused mortality." 74 Fed. Reg. at 15166. When it exceeds certain levels, human-caused mortality causes population declines in gray wolves. Research also shows that the hunting of one wolf may cause the deaths of other wolves – for example, if the wolf killed was a lactating female whose pups

depended on her for survival. Moreover, recent scientific studies have concluded that the liberalization of wolf killing laws is associated with increases in illegal and concealed mortality (e.g., poaching that is not reported to wildlife managers).

76. Idaho, Montana, and Wyoming allow recreational killing of wolves by hunters and trappers. Wolves are also killed by individuals and government agencies for "depredation control." In other words, wolves are killed to supposedly minimize conflict between wolves and livestock, even though numerous studies have found that lethal control does not reduce such conflict and instead may increase it. Additionally, government agencies kill wolves to supposedly boost populations of elk and other ungulates for hunters to kill.

77. Wolf killing laws in Idaho and Montana have become less and less restrictive since wolves were delisted. The situation worsened in 2021, when both states – with the specific aim of significantly reducing their wolf populations – implemented new laws that drastically liberalize wolf killing.

78. In Idaho, new legislation permits hunters, trappers, private contractors, and others to kill wolves using new methods. Idaho now permits year-round wolf trapping on private property in a large part of the state; unlimited purchase of wolf tags; and baiting, hound-hunting, night hunting, and the use of all-terrain vehicles or snowmobiles to facilitate killing wolves in many areas of the state for at least part of the year. The Idaho Department of Fish and Game's new

wolf management plan aims to reduce the state's wolf population from an estimated population of about 1,300 wolves to just 500 wolves.

79. In Montana, new rules permit the use of strangulation snares and baiting on public and private lands with limited restrictions, and night hunting on private lands; allow an individual to hunt up to ten wolves and trap an additional ten; and lengthen the wolf trapping season. Montana Fish, Wildlife & Parks' proposed new wolf management plan aims to reduce the state's wolf population from an estimated population of about 1,100 wolves to just 450 wolves.

80. In Wyoming, wolves in the state's "predator zone" – which constitutes about 85 percent of the state, including the entire border region shared with Colorado – can be killed at any time, without a license, using virtually any method. The state also sets recreational hunting seasons for wolves in its "trophy game management area."

81. In both Idaho and Montana, hunters and trappers can receive what amount to modern-day bounties for killing wolves. In Idaho, a state board helps to fund these bounties, which can exceed $1,000. The same board funds contractors to kill wolves for depredation control, which includes shooting wolves from aircraft.

82. In all, people kill hundreds of wolves every year in these Northern Rocky Mountain states through hunting, trapping, and depredation control. The

Service reported that, in 2021, 455 wolves were killed in Idaho, 312 wolves were killed in Montana, and 83 wolves were killed in Wyoming for these reasons. In 2022, the Service reported 422 wolves killed in Idaho, 303 in Montana, and 77 in Wyoming.

83. Wolves in Washington, Oregon, California, and Colorado are also killed by people. Wolves can be killed for depredation control in the eastern portions of Washington and Oregon, where they are delisted. In addition, year-round hunting with no bag limits occurs on the Confederated Tribes of the Colville Reservation in Washington, as well as by tribal members on ceded lands to the north of the reservation. Illegal killings also occur; in Oregon, for example, wolf poaching – including by poisoning – is high. Wolves in Colorado can be lawfully killed under the Service's rule governing management of this newly designated "nonessential experimental population." 88 Fed. Reg. 77014 (Nov. 8, 2023). And wolves who leave Colorado and enter Wyoming's "predator zone" risk being killed. In fact, recent media reports have documented Wyoming hunters' history of killing wolves who have entered the "predator zone" from Colorado.

84. Gray wolves are also threatened by decreased genetic variability and decreased connectivity between wolf populations. Recent scientific research concluded that the level of genetic variability observed in U.S. wolf populations, including wolves in the Northern Rocky Mountains, is *already* insufficient for

long-term viability of the species.

85. Further, wolf populations in the West Coast states and Colorado remain small and fragile. Recovery of wolves in these areas depends in part on wolves dispersing from the Northern Rocky Mountains. Such dispersal is critical to allow wolves to recolonize suitable, but currently unoccupied, habitat and enhance genetic variability in fledgling populations. Yet scientific research shows that excessive human-caused mortality limits wolves' ability to disperse and connect with wolves in other areas.

Listing Petition, Initial Response, and "Not Warranted" Finding

86. To address the severe threats facing wolves in the Western United States, Plaintiffs submitted the Petition, requesting one of two alternate DPS designations for the gray wolf: (1) a Northern Rocky Mountains DPS (as delineated in the 2009 Delisting Rule) or (2) a Western DPS, covering the West Coast states, Nevada, the Northern Rocky Mountains, and the Southern Rocky Mountains. The Petition requested that the Service assign the status of either threatened or endangered to one of these two distinct population segments due to the ongoing threats to their survival and recovery.

87. The Service issued a 90-day finding that concluded that "the petitioners present credible and substantial information that human-caused mortality … may be a potential threat to the species in Idaho and Montana" and

that "new regulations in these two States may be inadequate to address this potential threat." 86 Fed. Reg. 51857, 51859 (Sept. 17, 2021). It further concluded that "[t]he petitioners also presented information suggesting … loss of genetic diversity caused by isolation and small population size … may be threats to the gray wolf." *Id.* The Service therefore opened a status review of wolves in the Western United States.

88. The Service failed to make a 12-month finding on the Petition by the ESA's required deadline. As a result, Plaintiffs sued the agency. The parties reached a settlement, requiring the Service to submit a 12-month finding to the Federal Register by February 2, 2024.

89. The Service submitted its 12-month finding in accordance with the settlement, and its decision was published in the Federal Register on February 7, 2024. 89 Fed. Reg. at 8391-95. The Service supported its decision with the "Species Assessment and Listing Priority Assignment Form" ("Form") and "Species Status Assessment for the Gray Wolf (*Canis lupus*) in the Western United States" ("SSA").

90. In its decision, the Service determined that wolves in the Northern Rocky Mountains DPS alone no longer constitute a valid DPS because they are not discrete from wolves in the West Coast states. 89 Fed. Reg. at 8394. Thus, the Service concluded, the Northern Rocky Mountains DPS is no longer a listable

entity.[2] *Id.*

91. The Service found that wolves in the Western U.S. qualify for designation as a DPS but concluded this "Western DPS" did not meet the definition of endangered or threatened in all or a significant portion of the DPS, now or in the foreseeable future. 89 Fed. Reg. at 8394-95. The Service therefore determined that the listing sought in the Petition was "not warranted." *Id.* at 8395.

92. The Service's decision left the existing status of wolves in the Western U.S. unchanged. Wolves in the now defunct Northern Rocky Mountains DPS remain without ESA protections, and wolves in the Western U.S. outside of this region remain listed as endangered.

Scientific Evidence Demonstrates the Imperiled Status of Gray Wolves in the Western U.S.

93. Although the Service concluded that the listing of gray wolves in the Western U.S. was "not warranted," scientific evidence before the agency belies this conclusion.

94. Multiple scientists raised concerns that the methods used by Idaho and Montana to estimate their wolf population sizes *overestimate* the number of wolves

[2] Although the Service concluded that the Northern Rocky Mountains DPS is no longer a listable entity, it still analyzed the status of the gray wolf in this region as part of its assessment of the status of wolves in the Western U.S. Accordingly, "Northern Rocky Mountains" as used in the Complaint refers to wolves in the boundaries of the former Northern Rocky Mountains DPS.

in these states. SSA at 128. For example, Dr. Robert Crabtree and others concluded in a recent study (hereinafter "Crabtree et al. (2023)") that Montana's current population estimating method causes "a precariously misleading situation for decision-makers." This is, in part, because the method suffers from a "severe overestimation bias," which leads to an "estimated wolf abundance 2.5 times larger than true abundance." In other words, if Montana's wolf population has fallen to 100 animals, the state's population estimating method would report 250 wolves. Given this bias, the authors of the study explained, "we fail to see how [Montana's population estimating method] could detect any change in abundance except possibly at or near extirpation levels."

95. The Service did not acknowledge Crabtree et al. (2023) in its SSA, Form, or Federal Register notice denying the petition.

96. As another example, Dr. Bridgett vonHoldt, an evolutionary genetics researcher at Princeton University, warned the Service that the "effective population size" of a wolf population "is far more critical to consider than wolf abundance" and is "central to accurate population viability predictions and conservation decisions."

97. Effective population size refers to the number of animals successfully reproducing in a population. About a decade ago, conservation geneticists widely accepted that an effective population size of 500 is necessary to maintain healthy

genetic variation. Since then, further scientific evidence has shown that an effective population size of 1,000 is a better approximation of the effective population size needed for long-term viability. Lower effective population sizes could have long-term negative impacts through genetic bottlenecks, inbreeding depression, and other threats to genetic health. Notably, Dr. Richard Frankham and others concluded in a 2014 study (hereinafter "Frankham et al. (2014)") that an "effective population size [of] 50 is inadequate for preventing inbreeding depression over five generations in the wild."

98. Additionally, in a species – like gray wolves – with a social structure that limits breeding opportunities in subdominant ranks, the effective population size is just a small fraction of the "censused population" (i.e., the total estimated or counted number of animals). Thus, understanding the ratio of effective to censused population size is critical. For example, if this ratio is 0.1, a censused population of 5,000 animals would be necessary to ensure an effective population size of 500 animals.

99. In a recent peer-reviewed study published in Molecular Ecology (hereinafter "vonHoldt et al. (2023)"), Dr. vonHoldt and others found that for gray wolves in the Western U.S. and the western Great Lakes region, "the effective population size remained at 5.2–9.3% of the census size since mid-2000s." Based on this ratio, they estimated the Western U.S. wolf population to have an effective

population size of at most 335 wolves. They further concluded that the gray wolf numbers "are below sizes predicted to be necessary to avoid long-term risk of extinction" and that "larger wolf populations are necessary to ensure long-term adaptation and survival."

100. vonHoldt et al. (2023) explained that certain activities would further reduce effective population sizes, concluding that "[c]urrent management actions that seek to reduce overall populations and permit hunting during the breeding season have the greatest potential to have negative consequences on effective population sizes."

101. vonHoldt et al. (2023) also found that "wolves in the [Western U.S.] have lower genomic diversity than wolves of the western Great Lakes and have declined over time."

102. When she submitted these findings to the Service during the status review, Dr. vonHoldt warned that "[t]he renewed persecution of wolves is already imposing a tremendous population bottleneck that will remove a significant amount of genetic variation … and increase the relatedness (and thus inbreeding probability) of the [northern Rocky Mountains] wolves" and that "[p]olicy intervention is urgently needed."

103. The Service did not acknowledge vonHoldt et al. (2023)'s findings in its SSA, Form, or Federal Register notice denying the petition.

104. Relatedly, the Service's recovery goal for wolves in the Northern Rocky Mountains is just 30 breeding pairs, comprising at least 300 wolves. 74 Fed. Reg. at 15132. However, this goal was set *nearly 40 years ago*, in 1987 – before key advances in genetic science – and has been proven inadequate by the findings of Frankham et al. (2014) and other scientific studies.

105. Other scientific information submitted during the status review demonstrates the severity of the threats faced by gray wolves in the Western U.S. As one additional example, scientific research shows that high levels of human-caused mortality reduce critical wolf dispersals, which negatively impacts connectivity between wolf populations.

The Service's Faulty Justifications for Its "Not Warranted" Finding

106. As explained above, the Service determined listing of the gray wolf in the Western DPS was "not warranted" under the ESA.

107. First, the Service concluded that wolves in the Western DPS did not meet the definition of an endangered or threatened species throughout "all" of the DPS. 89 Fed. Reg. at 8395.

108. Then, because the ESA also requires the agency to list the Western DPS if wolves meet the definition of threatened or endangered in a "significant portion" of the DPS, the Service identified four portions of the wolf's range to further evaluate as potential significant portions: (1) Idaho; (2) Montana; (3) the

Northern Rocky Mountains; and (4) the West Coast states (western Oregon, western Washington, and California). 89 Fed. Reg. at 8395. The Service concluded that none of these portions independently qualify as endangered or threatened. *Id.*

109. The Service explained that 2,682 of the estimated 2,797 wolves in the Western U.S. occur in the Northern Rocky Mountains. SSA at 130. Its conclusions about the status of wolves in the Northern Rocky Mountains specifically, and across the Western U.S. more broadly, rest largely on its modeling of *future* wolf abundance – even though this modeling shows precipitous drops in the number of wolves due to a decline in the Northern Rocky Mountains population, where most wolves currently live.

110. To estimate the future population size of wolves, the Service conducted population modeling in two areas: (1) across the states and parts of states within the boundaries of the former Northern Rocky Mountains DPS (except the small portion of Utah included in this area) and (2) across the entire states of Idaho, Montana, Oregon, Washington, and Wyoming.[3] SSA at 148. For these areas, the Service "estimated the total number of wolves over time under each future scenario up to 100 years into the future." *Id.* The Service relied on this 100-year timeframe to establish the "foreseeable future" the ESA requires it to evaluate

[3] Due to the limited available data, the Service qualitatively assessed possible changes in other areas of the Western U.S. where wolves currently occur in small numbers or do not yet occur but may in the future. SSA at 149.

in making listing determinations. Form at 65-66.

111. The modeled future scenarios applied various combinations of:

a. Three different rates of wolf killing (which the Service calls "Harvest Scenarios"), with Harvest Scenario 1 having the lowest rates of killing and Harvest Scenario 3 having the highest; and

b. Two different scenarios of disease impact on wolf populations, with one scenario applying recently observed disease rates in wolves living in Yellowstone National Park ("observed YNP disease rates") and the other applying high severity disease outbreaks on top of past observed disease rates ("YNP disease rate + black swan events"). SSA at 160, 163-64.

112. Under every combination of future scenarios and in both geographic areas evaluated, the Service found that wolf killing under state management will lead to sharp declines in the population size of wolves.

113. In the Northern Rocky Mountains (excluding Utah), the Service's modeling showed population declines of a median of 22 percent under the least impactful combination of scenarios, and a median population decline of 68 percent under the most impactful combination. SSA at 190. Below is the Service's population modeling for this area. *Id.* at 191.

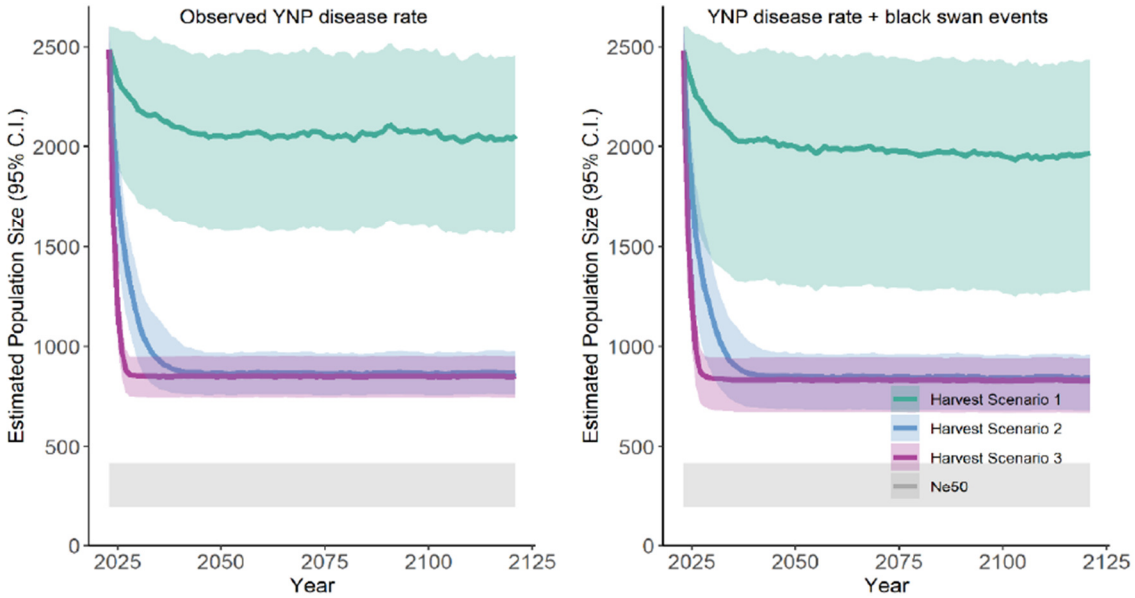

Figure 18. Median projected wolf population size (solid lines) and 95% credible interval (shaded area) in the NRM in Harvest Scenario 1 (green), Harvest Scenario 2 (blue), and Harvest Scenario 3 (pink) for the 100-year timeframe of our simulations. The shaded gray box represents the range of estimated wolf population sizes (192–417 wolves) we calculated to be equivalent to an effective population size of 50.

114. The Service's modeling for the other geographic area it considered (the entire states of Idaho, Montana, Oregon, Washington, and Wyoming) showed similar levels of population decline to those predicted for the Northern Rocky Mountains. *Id.* at 186-87.

115. The Service's modeling relied on several false assumptions that impacted the outputs of the model (e.g., overestimate population size) and undermine the reliability of the conclusions drawn from the modeling.

116. Despite ample evidence that anti-wolf hostility drives management decisions in Idaho and Montana and that these states cannot reliably estimate the size of their wolf populations, the Service assumed that Idaho and Montana "will

stop all legal public harvest when 150 gray wolves or fewer are documented in their respective state." *Id.* at 179. The Service described this assumption as one of the "key conditions" for the conclusions it drew from the modeling. *Id.* at 205.

117. As another example, contrary to the modern science of conservation genetics, the Service found an effective population size of just 50 wolves is necessary "for avoiding deleterious genetic effects." *Id.* at 170. In addition, without subjecting its findings to peer review or considering the controlling finding of vonHoldt et al. (2023), the Service estimated the effective to census population size ratio for wolves in the Northern Rocky Mountains to be 0.17, with a range of 0.12 to 0.26. *Id.*; *id.* at 220 (Appendix 2). This is much higher than the ratio of 5.2-9.3 percent (or 0.052 to 0.093) that vonHoldt et al. (2023) found.

118. The Service therefore concluded that a *censused* population of just 192 to 417 wolves was needed to ensure genetic health in the Northern Rocky Mountains. SSA at 170, 203-04; Form at 74. But as the Service itself warned, its conclusions "will underestimate risk of extinction if deleterious genetic effects are experienced by wolf populations at sizes >417 wolves." SSA at 181. Because vonHoldt et al. (2023) and other studies demonstrate that wolf populations much larger than 417 wolves are at risk for deleterious genetic effects, the Service's conclusions underestimated extinction risk.

119. The Service's modeling also falsely assumed that wolves in the

Northern Rocky Mountains will remain connected with other populations through wolf dispersals, even after high levels of wolf killing. SSA at 181 (assuming "that harvest does not affect connectivity"). But human-caused mortality reduces the size of the wolf population, removes dispersing wolves, and may reduce the incentive to disperse by reducing competition for habitat and prey. All five of the peer reviewers expressed skepticism about the Service's assumptions regarding ongoing connectivity of wolf populations. Making matters worse, the Service's conclusions about the risks of inbreeding depression and other threats to the genetic health of wolves fully depended on the Service's "expectation of continued connectivity in the Western United States and the [Northern Rocky Mountains]." *Id.* at 205.

120. In addition to its future modeling, the Service's "not warranted" finding also relied on its recovery goal for the Northern Rocky Mountains of just 30 breeding pairs, comprising at least 300 wolves, *Id.* at 22, 139-40, 245 (Appendix 6), even though this goal was set before key advances in genetic science.

121. Next, in its analysis of whether the species qualifies as endangered or threatened in a "significant portion" of its range, the Service analyzed the status of wolves in the West Coast states (western Oregon, western Washington, and California). Form at 72-23. This was the only area outside of the Northern Rocky

Mountains that it considered in its "significant portion" analysis. *Id.* at 70.

122. Even though the Service concluded that as few as 107 wolves existed in this portion at the end of 2022, *id.* at 72, it determined they were not endangered or threatened, *id.* at 73. It did not consider the effects of historical range loss on the viability of wolves in the West Coast states.

123. While the Service identified the precarious status of wolves in the West Coast states as a reason to include them in its "significant portion" of range analysis, *id.* at 70, it did not afford the same consideration to wolves in Colorado – even though the status of wolves in that state is even more precarious, SSA at 135 (finding a minimum of eight wolves in Colorado at the end of 2021 and a minimum of two wolves in Colorado at the end of 2022). The Service asserted that this region could not qualify as a "significant portion" because "of the small proportion of occupied current range that exists" there. Form at 70.

124. Moreover, the Service determined that the West Coast states may potentially qualify as a "significant portion" of the wolf's range because wolves in this region occupy unique ecological settings. *Id.* But wolves in the Southern Rocky Mountains were not analyzed as a potential "significant portion," even though the region encompasses a unique ecological setting. The "Nevada-Utah Mountains-Semi-Desert-Coniferous Forest-Alpine Meadow" is found in the Southern Rocky Mountains but not any other portion in the lower-48 states. SSA at

146 (Figure 10).

125. Further, despite concluding that wolves in Colorado were not within a potentially "significant portion" of the wolf's range, the Service relied on the expanding wolf population in Colorado to support its conclusions about the viability of wolves in the Western U.S. *Id.* at 205. Indeed, scientific research shows that Colorado could support between 407 and 814 wolves. *Id.* at 197.

126. The Service did not explain how historical range loss in the Southern Rocky Mountains may be affecting the viability of the current wolf population in that region. Rather, despite the findings of vonHoldt et al. (2023) and other evidence submitted during the status review, the Service concluded there was "not . . . any evidence" of "negative demographic responses to historical range loss," such as "compromised genetic health," in wolves in the Western U.S. Form at 61.

127. Additionally, the Service failed to consider how extensive wolf killing in Wyoming threatens Colorado wolves who cross the border into Wyoming.

128. Because federal lands cover approximately 63 percent of the gray wolf's current range in the Western U.S., SSA at 110, the Service discussed whether inadequate regulatory mechanisms are a threat facing wolves on these federal lands.

129. But the Service did not explain how federal public land management could amount to adequate regulatory mechanisms when (1) approximately 35

percent of the gray wolf's current range in the West is within a Forest Service or Bureau of Land Management grazing allotment, where wolves face intensive predator control and high risk of poaching due to conflicts with livestock and (2) federal land management agencies usually allow state wildlife management regulations on hunting and trapping to govern on federal lands. *Id.* at 112.

130. Moreover, even though the Forest Service manages 52 percent of current wolf range in the Western U.S., *id.* at 112, the Service identified no forest plans that include enforceable standards specific to wolf management.

CLAIM FOR RELIEF

Violations of the ESA and the APA in Determining that Listing the Gray Wolf in the Western U.S. is "Not Warranted" as an Endangered or Threatened "Distinct Population Segment"

131. Plaintiffs reallege and incorporate by reference the preceding paragraphs.

132. The Service's decision that the gray wolf in the Western U.S. does not warrant listing as an endangered or threatened DPS, based on the species' status in "all" or "a significant portion of its range," violates the ESA and is arbitrary and capricious within the meaning of the APA.

The Service's Analysis of the Status of Wolves in the Northern Rocky Mountains Ignores the Best Available Science and Relies on Faulty Assumptions

133. The Service's modeling of future population sizes shows – in every scenario – that wolf killing under state management will lead to precipitous

declines in the population size of wolves in the Northern Rocky Mountains over the next ten years, with the least impactful combination of scenarios projecting a median 22 percent decline and the most impactful combination of scenarios projecting a median 68 percent decline. SSA at 190.

134. Despite these population declines, the Service irrationally concluded that wolves within the Northern Rocky Mountains, which the Service considered in its "significant portion of its range" analysis for the Western DPS, are not in danger of extinction now or in the foreseeable future.

135. The Service's irrational conclusion is largely based on its failure to consider and apply the best available science.

136. As one example, the Service's conclusion does not adequately consider the best available science regarding effective population size. Conservation geneticists have widely accepted that maintenance of healthy genetic variation requires an effective population size of at least 500 animals – not a mere 50 animals, as the Service concluded. SSA at 191.

137. As another example, the Service failed to consider and apply the best available science in calculating the ratio of effective to censused population size for wolves. The Service's calculation – which was not subject to peer review – is 0.17 (or 17 percent). SSA at 20, 170, 220 (Appendix 2). The Service completely ignored vonHoldt et al. (2023), which found that the effective population size for

U.S. gray wolves is, on average, just 5.2 to 9.3 percent of the censused population (or a ratio of 0.052 to 0.093). Relying on a too-large ratio, as the Service did here, results in an overestimation of effective population size.

138. Similarly, the Service's decision unreasonably relied upon the decades-old wolf recovery goals of "30 breeding pairs and 300 wolves." These outdated thresholds were set before key developments in genetic science, and they do not reflect the consensus of modern conservation genetics on the effective population sizes needed to ensure a species' genetic health. Indeed, vonHoldt et al. (2023) – in scientific research the Service entirely ignored – found the effective population sizes of wolves in the Western U.S., including the Northern Rocky Mountains, "are below sizes predicted to be necessary to avoid long-term risk of extinction."

139. As another example of the Service's failure to consider the best available science, the Service relied on initial wolf population estimates for Idaho and Montana without correcting for overestimation bias identified by scientists and acknowledged by the agency. Crabtree et al. (2023) found that the method used by Montana resulted in estimated wolf abundance 2.5 times larger than true abundance, yet the Service did not address these findings.

140. The Service's conclusion that wolves in the Northern Rocky Mountains do not qualify as an endangered or threatened portion of range is also

based on unfounded assumptions.

141. For instance, the Service concluded that Idaho, Wyoming, and Montana will maintain their "existing management commitments." SSA at 208. The Service assumed – with no evidence that such an outcome is certain – that "Idaho and Montana [will] close harvest seasons if their wolf populations fall below 150 wolves." *Id.* at 193. But Idaho and Montana cannot implement such closures without reliable estimates of their populations, as numerous scientists warned. Moreover, abundant evidence that anti-wolf hostility drives management decisions in these states belies the Service's reliance on these states' voluntary future commitments.

142. As another example of the Service's reliance on unfounded assumptions, the Service assumed that wolves in the Northern Rocky Mountains will remain connected with other populations through wolf dispersals, even as wolf killing reduces the size of the wolf population. *Id.* at 181. Yet the best available science contradicts this assumption; it shows that wolf killing "may lead to an overall decline in dispersal events." *Id.* at 38.

The Service's Analysis for Wolves in "Significant Portions" Outside the Northern Rocky Mountains is Arbitrary and Capricious

143. The Service's "significant portion of its range" analysis for areas outside of the Northern Rocky Mountains also violates the ESA and is otherwise arbitrary and capricious.

144. For instance, the Service failed to provide a rational explanation for why the West Coast states do not qualify as an endangered or threatened "significant portion" of the wolf's range. The West Coast states' effective population size is far below the already too-low threshold of 50 wolves that the Service itself has found is required to avoid inbreeding depression. In addition, the Service ignored an important aspect of the problem when it failed to analyze how historical range loss in the West Coast states affects the viability of the current wolf population there.

145. Moreover, the Service concluded the number of wolves in the West Coast states would remain stable or increase in the future, in part by relying on connectivity between these wolves and wolves in the rest of the Western U.S. – even as population sizes in the Northern Rocky Mountains are reduced through human-caused mortality. Form at 73. But the best available science contradicts this assumption; it shows that wolf killing "may lead to an overall decline in dispersal events," SSA at 38, thus limiting this connectivity.

146. As another example, the Service did not consider whether Colorado or the Southern Rocky Mountains could qualify as an endangered or threatened "significant portion" because the Service "determined they could not be considered significant in light of the small proportion of occupied current range that exists" in these areas. Form at 70. The lack of recovery progress in a portion of a species'

range should be a reason for providing the lifesaving protections of the ESA, not disqualifying that portion from consideration. To conclude otherwise flies in the face of the ESA's conservation goals and applies an unlawful interpretation of "significant."

147. Moreover, the Service applied inconsistent standards to assess whether the West Coast states and the Southern Rocky Mountains qualify as potentially "significant portions." If the Service had applied the standard used for the West Coast states, Form at 70, it would have determined that the Southern Rocky Mountains or Colorado warranted further review given their unique ecological setting and wolf population's precarious status.

148. The Service's disqualification of Colorado for having too small of a proportion of current range to be considered a "significant portion" is also contradicted by the Service's reliance on the expanding wolf population in Colorado to support its conclusions about the viability of wolves in the Western U.S. SSA at 205.

149. Further, the Service's discussion as to why Colorado or the Southern Rocky Mountains are not significant supplied so little explanation that it provides insufficient grounds for a court to assess the reasonableness of the Service's determination.

150. Moreover, the Service ignored an important aspect of the problem

when it failed to analyze how historical range loss in Colorado and the Southern Rocky Mountains affects the viability of the current wolf population there.

151. The Service ignored another important aspect of the problem when it failed to analyze how wolf killing in Wyoming threatens Colorado wolves who cross into that state.

The Service's Determination that Wolves in "All" of the Western DPS Are Not Threatened or Endangered is Arbitrary and Capricious

152. The Service's determination that wolves throughout "all" of the Western DPS do not qualify as endangered or threatened is also arbitrary and capricious.

153. The Service estimates a census population of 2,797 wolves in the Western U.S. SSA at 130. Applying the Service's ratio of effective to census population size (0.17), this equates to an effective population size of 475 wolves. The effective population size is even smaller if calculated consistent with the ratio reported in vonHoldt et al. (2023) or if the census population is corrected for the overestimation bias reported by Crabtree et al. (2023) and other scientists. Thus, even under the Service's most rose-tinted calculations, the wolf population in the Western DPS is already lower than the threshold of 500 needed to avoid inbreeding depression.

154. Further, the Service "did not find any evidence" of "negative demographic responses to historical range loss," such as "compromised genetic

health." Form at 61. Yet, once again, the Service entirely ignored the scientific findings of vonHoldt et al. (2023) that gray wolves in the Western U.S. have already experienced declines in genomic diversity and have lower genomic diversity than wolves of the western Great Lakes region.

155. Moreover, these wolves face high rates of human-caused mortality due to overexploitation authorized under state management regimes that will substantially reduce the population in the foreseeable future.

156. Additionally, the Service did not meaningfully explain how federal public land management practices could amount to adequate regulatory mechanisms across the Western DPS. Approximately 35 percent of the gray wolf's current range in the West is within a Forest Service or Bureau of Land Management grazing allotment, where wolves face intensive predator control and high risk of poaching due to conflicts with livestock. SSA at 112. Federal land management agencies lack enforceable standards in their plans to protect wolves and usually allow state wildlife management regulations on hunting and trapping to govern, even in wilderness areas.

157. Further, because most wolves in the Western U.S. are in the Northern Rocky Mountains, most of the deficiencies in the Service's analysis of that region also apply to its analysis of the Western DPS as a whole.

158. For these and additional reasons, the Service's decision that listing the

gray wolf in the Western U.S. as an endangered or threatened species in all or a significant portion of its range is "not warranted" violates the ESA and is otherwise arbitrary and capricious, an abuse of discretion, and otherwise contrary to law. 16 U.S.C. § 1533; 5 U.S.C. § 706(2)(A).

REQUESTS FOR RELIEF

Plaintiffs respectfully request that the Court:

(A) Declare unlawful the Service's February 7, 2024, decision that listing the gray wolf in the Western U.S. as a threatened or endangered species under the ESA is "not warranted";

(B) Vacate the Service's "not warranted" finding for the gray wolf in the Western U.S.;

(C) Remand the matter to the Service for further analysis and a new determination of whether the best available scientific information and data indicates that listing the gray wolf in the Western U.S. is warranted, consistent with the ESA, APA, and this Court's order;

(D) Order the remand to be completed by a date certain set by the Court;

(E) Award Plaintiffs their reasonable fees, costs, and expenses, including attorneys' fees, under 16 U.S.C. § 1540(g)(4) or 28 U.S.C. § 2412; and

(F) Grant Plaintiffs such further and additional relief as the Court may deem just and proper.

Dated: June 17, 2024

Respectfully submitted,

/s/ Kristine M. Akland
Kristine M. Akland
CENTER FOR BIOLOGICAL DIVERSITY
P.O. Box 7274
Missoula, MT 59807
(406) 544-9863
kakland@biologicaldiversity.org

Collette L. Adkins (MN Bar No. 035059X)*
CENTER FOR BIOLOGICAL DIVERSITY
P.O. Box 595
Circle Pines, MN 55014-0595
(651) 955-3821
cadkins@biologicaldiversity.org

Margaret Robinson (DC Bar No. 241415)*
THE HUMANE SOCIETY OF THE UNITED STATES
1255 23rd Street NW, Suite 450
Washington, DC 20037
(434) 260-4871
mrobinson@humanesociety.org

*Seeking admission *pro hac vice*

Counsel for Plaintiffs