Via Facsimile and Certified Mail/Return Receipt Requested

April 14, 2011

Ken Salazar, Secretary
U.S. Department of the Interior
1849 C Street NW
Washington, D.C. 20240

Fax: 202-208-6956

Rowan Gould, Acting Director U.S. Fish and Wildlife Service 1849 C Street NW Washington, D.C. 20240 Fax: 202-208-6965

RE: Notice of Intent to Sue, Violations of the Endangered Species Act: Unlawful Determination that the Petition to List the Wild Plains Bison (*Bison bison*) Does Not Present Substantial Information Indicating that Listing May Be Warranted

This letter serves as official notice by the Center for Biological Diversity ("Center"), James A. Bailey, Natalie A. Bailey, Noah Greenwald, and Western Watersheds Project of their intent to sue the U.S. Fish and Wildlife Service ("FWS") and Ken Salazar, Secretary of the U.S. Department of the Interior ("Secretary"), for violations of the Endangered Species Act, 16 U.S.C. §§ 1531-1544, in connection with FWS' February 24, 2011 finding that the petition to list the wild plains bison (*Bison bison bison*) does not present substantial information that listing the bison may be warranted. 76 Fed. Reg. 10,299 (Feb. 24, 2011). In making this finding, FWS failed to rely on the best available science, applied an incorrect standard to the petition, ignored the plain language of the ESA, which specifies that any species threatened by one or more of five factors listed in 16 U.S.C. § 1533(a)(1) shall be designated as endangered or threatened, and failed to consider whether the bison is threatened or endangered in a "significant portion of its range." 16 U.S.C. § 1533(a)(3)(1)(A).

I. The Endangered Plains Bison

On June 22, 2009, FWS received a petition from James A. Bailey and Natalie A. Bailey, members of the Center, requesting that FWS list the wild plains bison as endangered or

threatened under the ESA. Bailey, *Petition to list plains bison as threatened under the ESA* ("Petition").¹

As FWS acknowledged in its 90-day finding, wild plains bison once numbered in the tens of millions, but have been reduced to roughly 20,500 individual animals found in 62 conservation herds – a reduction of more than 99 percent. 76 Fed. Reg. at 10,302. Of those 62 conservation herds, at the most only 54 occur within the species' historic range. Plains bison have suffered similar if not more severe declines in range. FWS acknowledged that historically, "habitat for the wild plains bison encompassed approximately 2.8 million square miles." *Id.* at 10,301. Total acreage figures are not available for the remaining 62 conservation herds, but the conservation herd occupying the largest area, which is also the largest herd, is found in Yellowstone National Park. The Park in total includes only 3,472 square miles – or, roughly one-tenth of one percent of the species' historic range. The other herds all occur on much smaller areas, in many cases only hundreds of acres, and consequently have much smaller populations.

Not surprisingly, the majority of the 62 conservation herds contain fewer individuals than what scientists consider minimally viable, *i.e.*, "the smallest population size that provides a high probability (typically 95 percent) of persistence for a given period of time (typically, 100 years)." *Id.* at 10,307.² Only one herd has over 2,000 individuals, only four herds have over 1,000 individuals, and only 14 have more than 400 individuals. Thus, more than three quarters of extant conservation herds do not support sufficient numbers to be considered even minimally viable.³

Ninety-five percent of the current bison population occurs in commercial herds that are managed by private entities for meat and other commodities. Petition at 3 (citing Boyd 2003). Because FWS agreed that it would be inconsistent with the ESA to consider commercial herds bison for listing, 76 Fed. Reg. at 10,301, the petitioned entity is hereinafter referred to as "plains bison."

² FWS cites three sources for estimates of minimum viable population, including estimates of 400 individuals by the Canadian National Wood Bison Recovery Team, 1,000 individuals by the International Union for Conservation of Nature, and 2,000 individuals based on a published scientific review of dozens of studies quantifying MVP for individual species. *Id.*

Moreover, the petitioners submitted to FWS new information on genetic diversity in plains bison herds, including research completed during the past year at the University of Montana. This new information, a technical report for the National Park Service dated June 2010 (Perez-Figueroa et al. 2010), suggested that 2,000-3,000 bison are necessary to retain 95 percent of allelic diversity over 100 years and that less than 90 percent of alleles will be maintained at some immune system loci with these bison

The Petition also documented many threats to the remaining herds, including hybridization with cattle, loss of genetic diversity related to small population size and isolation, disease and disease management, continued loss of habitat, and domestication through repeated handling, selective culling, disease control, unnatural sex-age structures and lack of effective predators. *See id.* at 10,306-10,308. Despite the fact that the petition clearly documented the bison's tremendous loss of range, severe decline in abundance, and ongoing threats, FWS determined that the petition did not present "substantial information" that listing "may be" warranted.⁴

II. 90-Day Findings Under the Endangered Species Act

The Endangered Species Act was enacted, in part, to provide a "means whereby the ecosystems upon which endangered species and threatened species depend may be conserved" and "a program for the conservation of such endangered species and threatened species." 16 U.S.C. § 1531(b). Section 2(c) of the ESA establishes that it is "the policy of Congress that all Federal departments and agencies shall seek to conserve endangered species and threatened species and shall utilize their authorities in furtherance of the purposes of this Act." 16 U.S.C. § 1531(c)(1). The Act defines "conservation" to mean "the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this Act are no longer necessary." 16 U.S.C. § 1532(3).

The ESA defines an "endangered species" as one that is "in danger of extinction throughout all or a significant portion of its range." 16 U.S.C. § 1532(6). A "threatened species" is "likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." 16 U.S.C. § 1532(20). Once listed as endangered or threatened, species are entitled to the Act's substantive protections, and federal agencies assume duties to conserve, recover, and protect listed species.⁵

numbers. Only one conservation herd meets this standard. FWS did not apparently consider this information.

⁴ Indeed, FWS did not consider threats to plains bison from domestication and removal from natural selection. The finding does not mention selective culling or domestication of conservation herds and there is no information on this topic provided in the finding. Although FWS does refer to disease management as "an essential aspect of wildlife management" the agency does not consider disease management as a means of domestication of plains bison, as it undermines natural selection and ultimately makes the species more vulnerable.

⁵ The ESA vests primary responsibility for administering and enforcing the statute with the Secretaries of Interior and Commence. The Secretaries of Interior and Commerce

FWS makes endangered or threatened species determinations based on five factors: (1) the present or threatened destruction, modification, or curtailment of its habitat or range; (2) overutilization for commercial, recreational, scientific, or educational purposes; (3) disease or predation; (4) the inadequacy of existing regulatory mechanisms; or (5) other natural or manmade factors affecting its continued existence. 16 U.S.C. § 1533(a)(1). Any one of these factors may support a listing determination. *Kern County Farm Bureau v. Allen*, 450 F.3d 1072, 1075 (9th Cir. 2006).

Section 4 of the ESA creates the procedures for determining endangered or threatened species, and enables individuals and organizations to petition FWS to list species as either threatened or endangered. When the Service receives a petition to list a species, it has 90 days to determine whether the "petition presents substantial scientific or commercial information indicating that the petitioned action may be warranted." 16 U.S.C. § 1533(b)(3)(A). "Substantial information" is "the amount of information that would lead a reasonable person to believe that the measure proposed in the petition may be warranted." 50 C.F.R. § 424.14(b). This is a "non-stringent" standard. Ctr. for Biological Diversity v. Morgenweck, 351 F. Supp. 2d 1137, 1141 (D. Colo. 2004) (the ESA "does not contemplate that a petition contain conclusive evidence of a high probability of species extinction to warrant further consideration of listing that species" but "sets forth a lesser standard by which a petitioner must simply show that the substantial information in the Petition demonstrates that listing of the species may be warranted"); see also Moden v. U.S. Fish and Wildlife Serv., 281 F. Supp. 2d 1193, 1203 (D. Or. 2003) ("the standard for evaluating whether substantial information has been presented by an 'interested person' is not overly-burdensome, does not require conclusive information, and uses the 'reasonable person' to determine whether the substantial information has been presented to indicate that the action may be warranted")

If FWS concludes in its 90-day finding that the petition presents "substantial information," the agency must conduct "a review of the status of the species concerned" to determine whether listing the species is "warranted." This status review must be concluded within 12 months of the agency's receipt of the petition. If, at the 12-month finding stage, the agency concludes that such a listing is "warranted," it must publish a proposed rule in the Federal Register listing the species. Within 12 months of publishing the proposed rule, and after a status review, the agency must make a final decision whether to adopt a final rule listing the species. 16 U.S.C. §§ 1533(b)(3)(B), (b)(5).

have delegated this responsibility to FWS and the National Marine Fisheries Service ("NMFS") (also known as National Oceanic and Atmospheric Administration, Fisheries Service), respectively. 50 C.F.R. § 402.01(b). FWS has primary responsibility for administering the Act with regard to most terrestrial species, including the plains bison.

If FWS concludes in a 90-day finding that a petition does not present substantial information indicating that a listing may be warranted, the finding may be challenged in federal court. 16 U.S.C. §§ 1533(b)(3)(A), (b)(3)(C)(ii).

III. Violations of the Endangered Species Act

In making the 90-day finding on the Petition to list the plains bison under the ESA, FWS failed to rely on the best available information and applied the wrong legal standard to the Petition, requiring conclusive proof that existing conservation herds face threats and arbitrarily ignoring information demonstrating threats to plains bison and their habitat. The Petition identified cattle grazing, conversion of prairie to cropland, tree invasion, wetland drainage, lack of fire, subdivision of land for housing or other construction, and development of energy, minerals, and petroleum resources as factors in continued loss of bison habitat. Petition at 16. The Petition identified a number of other threats to bison, including introgression with cattle, loss of genetic diversity, and domestication through handling, selective culling, unnatural sex-age structures, lack of predators, and disease management, which has resulted in slaughter of thousands of animals from the Yellowstone herd, as well as others. In identifying these threats – many of which were confirmed in FWS's finding – the Petition presented substantial information to indicate listing of bison may be warranted and FWS's finding is, thus, unlawful.

In addition, FWS unlawfully dismissed threats to the plains bison by limiting its threats analysis to the bison's current range. Thus, FWS reasoned:

When determining whether a species should be listed, we examine the current status of a species, which necessitates examining the species in its current range and analyzing current and future threats to the remainder of the species' distribution. The information the petitioner presented on lost historical range, by itself, does not provide substantial information that listing the wild plains bison may be warranted.

76 Fed. Reg. at 10,304.

Yet, by excluding consideration of the bison's historic range, FWS violated the ESA, as it failed to consider whether plains bison is threatened or endangered in a "significant portion of range." 16 U.S.C. 1532(6) (definition of "endangered"); *id.* § 1532(20) ("threatened species" is "likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range"). Indeed, FWS conceded that conversion of habitat to "cropland and development of grazing land for cattle" has reduced the range of "American bison, including both plains bison and wood bison in conservation and commercial herds" to "less than 1 percent of their historical range". Fed. Reg. at 10,304. FWS failed to assess, let alone explain its implicit conclusion, that

the loss of more than 99 percent of the bison's historic range, in which it can not longer live, is not a "significant portion of its range." *WildEarth Guardians v. Salazar*, 741 F. Supp. 2d 89, 100 (D.D.C. 2010) ("the Finding itself does not indicate that FWS defined, let alone applied, 'significant portion of its range'"); *see also Defenders of Wildlife v. Norton*, 258 F.3d 1136, 1145 (9th Cir. 2001) (FWS must "at least explain [its] conclusion that the area in which the species can no longer live is not a 'significant portion of its range'"). As such, FWS's finding did not determine whether the plains bison – which occupies less than one percent of its historic range – is not "in danger of extinction throughout all or a 'significant portion of its range." Indeed, FWS did not consider the bison's status in a "significant portion" of its range at all.

IV. Conclusion

As explained above, the Secretary and FWS violated Section 4 of the Endangered Species Act as a result of their determination that the petition to list the bison does not present substantial information that listing may be warranted.

If the Secretary and FWS do not act to correct the violations described in this letter, the Center, A. Bailey, Natalie A. Bailey, Noah Greenwald, and Western Watersheds Project will pursue litigation against the Secretary and FWS in U.S. District Court in 60 days from your receipt of this notice. To avoid litigation, the Secretary and FWS must make a new 90-day finding for the bison petition that fully complies with the Endangered Species Act.

If you have any questions, wish to discuss this matter, or feel this notice is in error, please contact me at 503-283-5474.

Sincerely,

Amy R. Atwood

Center for Biological Diversity