

THE ENDANGERED SPECIES ACT AND DELISTING DISTINCT POPULATION SEGMENTS: ANTITHETICAL TO THE STATUTE OR PERMISSIBLE WITH GUIDANCE?

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I. INTRODUCTION

Since the dawn of America's fascination with the "Wild West," the grizzly bear has been ingrained into the nation's culture. But before white America moved further into the continent, the grizzly already played "a central role in the traditions, ceremonies, and the sovereignty of the Native people."¹ As European settlers spread West, the grizzly's habitat shrank; because of this decline, the Endangered Species Act² (ESA) was drafted, specifically with the grizzly in mind.³

1. *Tribal Witnesses Emphasize Spiritual and Cultural Significance of Grizzly Bears*, INDIAN COUNTRY TODAY (May 17, 2019), <https://newsmaven.io/indiancountrytoday/the-press-pool/tribal-witnesses-emphasize-spiritual-and-cultural-significance-of-grizzly-bears-rbr3J79SJEqrix-g8ZbRTg>. See also Jim Robbins, *Hunt of Yellowstone Grizzly Bears Canceled as a Result of Judge's Ruling*, N.Y. TIMES (Sept. 28, 2018), <https://www.nytimes.com/2018/09/25/science/yellowstone-grizzly-hunt.html> ("As we have said repeatedly, the grizzly bear is fundamental to our religious and spiritual practices," said Chief Stanley Grier, of the Piikani Nation and president of the Blackfoot Confederacy Chiefs.").

2. 16 U.S.C. §§ 1531–44 (2018).

3. See *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 183–84 (1978) ("[T]he continental population of grizzly bears which may or may not be endangered, but which is surely threatened Once this bill is enacted, the appropriate Secretary . . . will have to take action to see . . . that these bears are not driven to extinction. . . . [T]he agencies of Government can no longer plead that they can do nothing about it. *They can, and they must. The law is clear.*" (quoting 119 CONG. REC. 42,913 (1973))).

The federal government, alongside state governments, is in the midst of litigation with environmental groups and native tribes. This case, *Crow Indian Tribe v. United States*,⁴ examines an unanswered question under the ESA: may the U.S. Fish and Wildlife Service (FWS) delist a Distinct Population Segment (DPS) of a species that remains listed as protected under the statute? To date, other courts—such as the D.C. Circuit in *Humane Society of the United States v. Zinke*⁵—have answered in the affirmative concerning delisting gray wolves, albeit limited to certain circumstances. One year after the D.C. Circuit’s *Humane Society v. Zinke* decision, the U.S. District Court for the District of Montana followed the D.C. Circuit’s holding in its *Crow Indian Tribe* decision.⁶ The grizzly is used in this Note as a case study on the appropriateness of delisting a DPS from a protected species under the ESA; this Note also explores how such a delisting analysis could proceed if permissible under the statute.

An analysis of this newfound practice of delisting DPSs and possible steps to conform this procedure to the Endangered Species Act is timely and warranted given the ongoing appeal of the U.S. District Court for the District of Montana’s decision in *Crow Indian Tribe* to the Ninth Circuit Court of Appeals.⁷

This Note explores the ongoing debate concerning the permissibility of delisting DPSs of listed species. Section II will first provide an explanation of the ESA, including the protections provided under the statute and how DPSs have historically operated. Next, Section III provides an overview of the lower-48 grizzly today and why the species is so crucial to the Greater Yellowstone Ecosystem. Section IV provides a deep dive into the sparse DPS delisting case law, specifically looking at the U.S. District Court for the District of Montana’s decision in *Crow Indian Tribe*, the D.C. Circuit’s opinion in *Humane Society v. Zinke*, and the ongoing appeal of *Crow Indian Tribe* to the Ninth Circuit Court of Appeals. After this overview of the DPS

4. *Crow Indian Tribe v. United States*, 343 F. Supp. 3d 999 (D. Mont. 2018) (holding the FWS acted arbitrarily and capriciously in delisting the Yellowstone grizzly bear without further consideration of the impact on the remaining members of the lower-48 grizzly designation), *appeal docketed*, No. 18-36030 (9th Cir. Dec. 11, 2018).

5. *See generally* *Humane Soc’y of the U.S. v. Zinke*, 865 F.3d 585 (D.C. Cir. 2017) (affirming district court holding which vacated the FWS’s 2011 rule).

6. *See Crow Indian Tribe*, 343 F. Supp. 3d at 1013 (“*Humane Society* is distinguishable only on a formalistic basis; here, as there, the cleaving of a newly designated segment from an existing listing demonstrates the Service’s failure to grapple with the functional and legal impact of delisting on the listed entity.”).

7. *See generally id.*

litigation, Section V lays out arguments on why delisting DPSs of a listed species does not comport with the ESA. Alternatively, Section VI explores *if* delisting a DPS from a protected species is permissible under the ESA, then what factors should be considered to determine when delisting would be appropriate. Finally, the Note concludes with a brief overview of the themes tackled and what the future of DPS delisting might look like.

II. THE ENDANGERED SPECIES ACT: A PRIMER

This section will examine the purpose of the ESA and explain the specific listing requirements and protections for listed species under the statute. It will also further explain the delisting process and the role of DPSs in the ESA.

A. Purpose of the ESA

The Endangered Species Act provides “for the conservation of . . . endangered species and threatened species” and “provide[s] a means whereby the ecosystems upon which [they] depend may be conserved.”⁸ Terrestrial and freshwater species’ protection are governed by FWS while marine species are under the supervision of the National Marine Fisheries Service (NMFS).⁹ To date, FWS has listed over 2,000 species¹⁰ as endangered or threatened, while NMFS has listed over 150.¹¹

B. How Species are Listed Under the ESA

For a species to warrant protections under the ESA, it must first be listed as either endangered or threatened.¹² Two routes exist for listing: (1) designation by the Secretary and (2) more commonly,

8. 16 U.S.C. § 1531(b) (2018).

9. M. LYNN CORN & ALEXANDRA M. WYATT, CONG. RESEARCH SERV., RL31654, THE ENDANGERED SPECIES ACT: A PRIMER 1 (2016).

10. *ECOS Environmental Conservation Online System: Listed Species Summary (Boxscore)*, U.S. FISH & WILDLIFE SERV. (March 30, 2020), <https://ecos.fws.gov/ecp0/reports/box-score-report>. For further information on how FWS implements the ESA, see *ESA Implementation: Overview*, U.S. FISH & WILDLIFE SERV. (Aug. 12, 2019), https://www.fws.gov/endangered/improving_esa/index.html.

11. *Species Directory: ESA Threatened & Endangered*, NOAA FISHERIES, https://www.fisheries.noaa.gov/species-directory/threatened-endangered?title=&species_category=any&species_status=any®ions=all&items_per_page=25&page=1&sort= (last visited Apr. 4, 2020).

12. CORN & WYATT, *supra* note 9, at 8–10.

through petitions by citizens or state agencies.¹³ Whether the Secretary initiates the process herself, as in option one, or by a petition in option two, the ultimate decision always lies with the Secretary.¹⁴ The difference between these two routes is what initiates the review. If a citizen or interest group is frustrated by the failure of the Secretary to conduct a review of a species, then the citizen petition forces an end to the Secretary's inaction. The Secretary's listing determination under either of these routes must only be made based on "the best scientific and commercial data available to him."¹⁵ However, this does not impose a requirement on the Secretary to go collect further information on a species that is not already known.¹⁶

In addition to the Secretary's listing determination, whether initiated by herself or by a petition, the Secretary must also take note of and report any changes in designation or revisions to any listed species.¹⁷ Read together, these statutory requirements involve (1) a review of all species at least every five years and (2) reports of any change on their listing status or species definition.¹⁸ The listing, delisting, and periodic reviews of listed species all use an identical analysis: determining whether a specific species qualifies for protection when considering only the best scientific and commercial data available.¹⁹ There are five factors that the Secretary considers when determining whether or not to list a species: (1) "present or threatened 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 ; and (5) "other natural or manmade factors affecting its continued existence."²⁰ Only one of these five factors needs

13. See 16 U.S.C. § 1533 (2018) (listing out the two routes to listing a species under the ESA).

14. *Id.*

15. *Id.* § 1533(b)(1)(A).

16. See *Heartwood, Inc. v. U.S. Forest Serv.*, 380 F.3d 428, 436 (8th Cir. 2004) (holding that the ESA "does not require an agency to conduct new studies when evidence is available upon which a determination can be made").

17. 16 U.S.C. § 1533(c)(1).

18. There are three definitions of species under the ESA: species, subspecies, and distinct population segment. *Id.* § 1532(16) (2018).

19. *Id.* § 1533(b)(1)(A) (2018); 50 C.F.R. § 424.11(d) (2019); see also *Humane Soc'y of the U.S. v. Zinke*, 865 F.3d 585, 597 (D.C. Cir. 2017) ("The statute requires the Service to attend to both parts of the listing process—the initial listing, and the revision or delisting—with equal care.").

20. 16 U.S.C. § 1533(a)(1).

to be present to warrant listing.²¹

C. How the ESA Protects Listed Species

Once a species has been listed by either FWS or NMFS, the ESA provides protections against federal and private actions that can harm individual members of the species. The Act ensures preservation of species habitat and requires formal consultation before the enactment of measures that could harm the species' existence. For example, Section 9 of the ESA prohibits actions that result in the unauthorized 'taking' of a listed species.²² A "take" includes any "means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct."²³ This definition of take is not without controversy; in 1975, the definition of "take" was expanded to also include "significant habitat modification or degradation where it actually kills or injures wildlife."²⁴

Another protection under the ESA is the prohibition on "destruction or adverse modification" of designated critical habitat by federal agencies and federally-approved activities.²⁵ Regions designated as critical habitat are "specific areas within the geographical area occupied by the [listed] species" and other areas that the Secretary deems "essential for the conservation of the species."²⁶ Unlike listing decisions, the Secretary determines critical habitat designations based not only on the best available commercial and scientific data, but also the potential economic impact.²⁷

Lastly, under Section 7 of the ESA, federal agencies are required to consult with FWS and NMFS on actions that risk the "continued

21. *Id.*

22. *Id.* § 1538(a)(1)(B) (2018).

23. *Id.* § 1532(19). To better understand "takings" under the ESA, see generally John J. Dvorske, *Construction and Application of Prohibited Acts Under Sec. 9(a) of the Endangered Species Act of 1973*, 16 *U.S.C.A. § 1538(a)*, 9 A.L.R. Fed. 3d Art. 3 (2016) (discussing takings under the ESA). For an analysis on why ESA litigation has mostly strayed away from takings, see Paul Boudreaux, *Understanding "Take" in the Endangered Species Act*, 34 *ARIZ. ST. L.J.* 733, 737-43 (2002).

24. 50 C.F.R. § 17.3 (2019). This broad definition of "take" was upheld in *Babbitt v. Sweet Home Chapter of Cmty. for a Great Oregon*, 515 U.S. 687 703-04 (1995).

25. 16 U.S.C. § 1536(a)(2) (2018).

26. *Id.* § 1532(5)(A).

27. *Id.* § 1533(b)(2). For an explanation of critical habitat designations, see CORN & WYATT, *supra* note 9, at 15-17.

existence” of a listed species.²⁸ Whenever the Secretary determines that federal or federally-approved actions could harm a listed species, the agency must perform a biological assessment (BA).²⁹ If the Secretary determines that the proposed federal or federally-approved action is “not likely to jeopardize the continued existence” of a listed species, she then issues a biological opinion (BiOp) listing out how the approved action can ensue without jeopardizing or adversely modifying critical habitat.³⁰ However, if the proposed action *may affect* the continued existence of a listed species or adversely modify critical habitat, “then the agency must terminate the action, implement an alternative proposed by the Secretary, or seek an exemption from the Cabinet-level Endangered Species Committee.”³¹ In making this determination the Secretary must rely on the “best scientific and commercial data available.”³² Consultation with FWS or NMFS is required whenever the proposed action “*may affect* [a] listed species or critical habitat.”³³ Whether an agency action may affect a protected species or its critical habitat is a low bar.³⁴

D. How a Species is Delisted

Once a listed species “has recovered to the point that it no longer requires federal protection,” it is removed from protection under the

28. 16 U.S.C. § 1536(a)(2).

29. *Id.* § 1536(c). See generally Theodore Z. Wyman, Annotation, *Construction and Application of the Consultation Requirement Under Section 7 of the Endangered Species Act*, 16 U.S.C.A. § 1536(a) to (d), 1 A.L.R. Fed. 3d Art. 4 (2015) (explaining § 7 in practice); Steven G. Davison, Comment, *Federal Agency Action Subject to Section 7(A)(2) of the Endangered Species Act*, 14 MO. ENVTL. L & POL’Y REV. 29, 52–53 (2006) (providing further analysis of § 7’s biological assessment requirements).

30. 16 U.S.C. §§ 1536(a)(4), 1535(b)(4) (2018).

31. *Weyerhaeuser Co. v. U.S. Fish & Wildlife Serv.*, 139 S. Ct. 361, 366 (2018). While this case specifically approaches consultation requirements related to critical habitat adverse modification, it is the same analysis for jeopardizing the continued existence of a listed species under 16 U.S.C. § 1536(b)(4).

32. 50 C.F.R. § 402.14(d) (2019). The “best scientific and commercial data available” standard forbids any “reference to possible economic or other impacts” and instead only relies on scientifically sound information. CORN & WYATT, *supra* note 9, at 14 (quoting 50 C.F.R. § 424.11(b) (2019)).

33. *Id.* § 402.14(a) (emphasis added).

34. Interagency Cooperation – Endangered Species Act of 1973, as Amended; Final Rule, 51 Fed. Reg. 19,926, 19,949–50 (June 3, 1986) (codified at 50 C.F.R. pt. 402). This threshold of whether an action “*may affect*” the protected species requires a low hurdle; the regulation itself admits as much: “*Any possible effect*, whether beneficial, benign, adverse or of an undetermined character, triggers the formal consultation requirement, as suggested by one commentator” *Id.* (emphasis added).

ESA, or “delisted.”³⁵ In effect, the ESA exists as an “all-or-nothing” protection mechanism; a species either warrants full statutory safeguards as a listed species or, alternatively, is provided no federal protection.³⁶ Because there is no middle ground for species protection, environmental groups hold ample reason to scrutinize delisting decisions which open up formerly-protected species to hunting and habitat loss. While there is no explicit delisting protocol laid out in the statute, the statute’s legislative history indicates that delisting is simply the inverse of the five-factor listing analysis.³⁷ When a species no longer meets the criteria for any of the five listing factors, it warrants removal from the ESA.³⁸

Similar to listing a species, there are two routes for delisting. Every five years, the Secretary is required to review the status of listed species; at this point, the Secretary may determine that the species no longer warrants protection.³⁹ A citizen petition may also result in a species being delisted.⁴⁰ As when listing a species, only the best scientific and commercial data may be considered when making such decisions.⁴¹

E. Distinct Population Segments—ESA Protections for Populations at Risk

The ESA defines “species” as not only species but also as “any subspecies of fish or wildlife or plants, and any *distinct population segment* [DPS] of any species of vertebrate fish or wildlife which

35. See generally Frank B. Cross, *Federal Environmental Regulation of Real Estate, Delisting*, 3 FED. ENVTL. REG. OF REAL ESTATE § 7:9 (2019) (discussing the process of delisting, specifically focusing on the Yellowstone grizzly bear).

36. Madeline Kass, *Strategic Dodging of ESA Listing Determinations*, 29 NAT. RES. & ENV'T 54, 54 (2015). The only protection these delisted species are warranted is a five-year review by FWS/NMFS. See generally U.S. FISH & WILDLIFE SERV., DELISTING A SPECIES (2011), <https://www.fws.gov/endangered/esa-library/pdf/delisting.pdf> (explaining five-year review process for recently delisted species).

37. See H.R. REP. NO. 97-567, at 12 (1982). The House report accompanying the 1982 amendments to the ESA noted that the minor amendments made to the listing provision were intended to “clarify that delisting *should be based on the same criteria* and conducted according to the identical procedures as listing a species.” *Id.* (emphasis added). For a review of the five factors, see 16 U.S.C. § 1533(a)(1).

38. Holly Doremus, *Delisting Endangered Species: An Aspirational Goal, Not a Realistic Expectation*, 30 ENVTL. L. REP. 10434, 10438 (2000).

39. 16 U.S.C. § 1533(c)(2).

40. *Id.* § 1533(b)(3)(A).

41. 50 C.F.R. § 424.11(d) (2019).

interbreeds when mature.”⁴² However, the original 1973 statute fails to provide a definition for DPS. As a result, FWS and NMFS released clarifying guidance in 1996, evaluating DPS listing criteria under “discreteness” and “significan[ce].”⁴³ “Discreteness” is defined by FWS as (1) “markedly separate from other populations of the same taxon as a consequence of physical, physiological, ecological, or behavior factors” and (2) “is delimited by international government boundaries holding differences in control of exploitation, management of habitat, conservation status, or regulatory mechanisms exist that are significant in light of section 4(a)(1)(D) of the [ESA].”⁴⁴

Additionally, “significance” is defined in FWS’s rulemaking under the following non-exclusive factors: (1) “[p]ersistence of the discrete population segment in an ecological setting unusual or unique for the taxon,” (2) “[e]vidence that loss of the discrete population segment would result in a significant gap in the range of taxon,” (3) “[e]vidence that the discrete population segment represents the only surviving natural occurrence of a taxon that may be more abundant elsewhere as an introduced population outside its historic range,” or (4) “[e]vidence that the discrete population segment differs markedly from other populations of the species in its genetic characteristics.”⁴⁵

The goal of DPS listing is to “[c]onserv[e] genetic resources and [m]aintain[] natural systems and biodiversity over a representative portion of their historic occurrence.” Ideally, providing statutory protections for specific at-risk populations will minimize the risk of the entire species population finding itself endangered or threatened.⁴⁶ By designating a DPS of an otherwise non-listed species, FWS can provide ESA protections before the DPS population becomes extinct. Instead of waiting for the DPS to threaten the viability of the species, FWS can now step in sooner when protective measures would be less costly.⁴⁷ Once a DPS is listed, that specific population warrants the same

42. 16 U.S.C. § 1532(16) (emphasis added).

43. Policy Regarding the Recognition of Distinct Vertebrate Population Segments Under the Endangered Species Act, 61 Fed. Reg. 4,722, 4,725 (Feb. 7, 1996). “Discreteness” and “significance” are the two factors laid out by FWS in their 1996 policy document laying out criteria to determine DPS designation and do not stem from the statute itself.

44. *Id.*

45. *Id.*

46. *Id.* at 4,723.

47. See *Nat’l Ass’n of Home Builders v. Norton*, 340 F.3d 835, 842 (9th Cir. 2003) (noting how “[t]he ability to designate and list DPSs allows the FWS to provide different levels of protection to different populations of the same species.”).

protections awarded to other ESA-listed species.⁴⁸ FWS's regulation states that DPS classification is to be used "sparingly" and restricted to "when the biological evidence indicates that such action is warranted."⁴⁹ The FWS/NMFS joint-guidance for listing a DPS does not explain how an agency may delist a DPS from a currently-listed species.

III. GRIZZLIES OF THE LOWER-48

Section III dives into the status of the lower-48 grizzly. First, this section will explore current populations of the grizzly in the contiguous United States. Second, it explores and discusses the importance of the grizzly in the Greater Yellowstone Ecosystem.

A. *The Grizzly Bear Today*

Two hundred years ago 50,000 grizzly bears roamed the lower-48 states.⁵⁰ However, ensuing habitat destruction has left the grizzly with only two percent of its former range.⁵¹ By the 1970s, such loss, coupled with hunting and conflicts with people and livestock, had driven grizzly numbers below 1,000.⁵² Since the enactment of the ESA, species numbers are recovering and sit above 1,500.⁵³ The modern lower-48 grizzly is confined to the following six "Recovery Ecosystems" that FWS considers prudent to "establishing viable [grizzly] populations" in the contiguous United States:⁵⁴

48. Policy Regarding the Recognition of Distinct Vertebrate Population Segments Under the Endangered Species Act, 61 Fed. Reg. at 4,725.

49. *Id.* at 4,722. The author's analysis of FWS's and NMFS's endangered and threatened species listings found 54 current DPSs listed by FWS and 58 current listings by NMFS. *ECOS Envtl. Conservation Online System: Listed Animals*, U.S. FISH & WILDLIFE SERV., <https://ecos.fws.gov/ecp0/reports/ad-hoc-species-report?kingdom=V&kingdom=I&status=E&status=T&status=EmE&status=EmT&status=EXPE&status=EXPN&status=SAE&status=SAT&fcrithab=on&fststatus=on&fspecrule=on&finvpop=on&fgroup=on&header=Listed+Animals> (last visited May 14, 2020); NOAA FISHERIES, *Species Directory: ESA Threatened & Endangered*, *supra* note 11.

50. Nick Mott & Josh Burnham, *Timeline: A History of Grizzly Bear Recovery in the Lower 48 States*, MONT. PUB. RADIO (May 14, 2019), <https://www.mtpr.org/post/timeline-history-grizzly-bear-recovery-lower-48-states>.

51. *Id.*

52. *Id.*

53. *Id.*

54. U.S. FISH & WILDLIFE SERV., GRIZZLY BEAR RECOVERY PLAN, at ix (1982), https://www.fws.gov/montanafieldoffice/Endangered_Species/Recovery_and_Mgmt_Plans/Grizzly_Bear_Recovery_Plan.pdf. The Grizzly Bear Recovery Plan was updated in 1993. *See*

- The Greater Yellowstone Ecosystem (GYE), approximately 600 bears;
- North Cascades Ecosystem, less than 20 bears (with only “sporadic sightings” since 1996);
- Selkirk Ecosystem, roughly 80 bears;
- Cabinet-Yaak Ecosystem, about 40 bears;
- Northern Continental Divide Ecosystem (NCD), approximately 765 bears; and
- Bitterroot Ecosystem, not believed to contain any bears.⁵⁵

Today, the GYE and NCD Ecosystems comprise over ninety percent of remaining grizzlies in the lower-48.

B. Why Grizzly Bears Matter for the Greater Yellowstone Ecosystem

The effects of a healthy, stable grizzly bear population hold crucial consequences for the well-being of its surrounding ecosystem, ranging from needed seed dispersal⁵⁶ to population control.⁵⁷ A brief survey of second-order effects from a flourishing grizzly population clarify the importance of preserving this species for the preservation of the Greater Yellowstone Ecosystem itself.

One important consideration is that grizzlies are incredibly efficient at seed dispersal within an ecosystem.⁵⁸ By ingesting plant

generally U.S. FISH & WILDLIFE SERV., GRIZZLY BEAR RECOVERY PLAN (1993), https://www.nps.gov/noca/upload/Grizzly_bear_recovery_plan.pdf (discussing the grizzly bear recovery plan that was enacted in 1993).

55. GRIZZLY BEAR RECOVERY OFFICE, U.S. FISH & WILDLIFE SERV., GRIZZLY BEAR (URSUS ARCTOS HORRIBILIS) 5-YEAR REVIEW: SUMMARY AND EVALUATION 24 (2011), http://igbconline.org/wp-content/uploads/2016/03/110801_Grizzly_bear_Final_5yr_review.pdf.

56. Mary F. Wilson & Scott M. Gende, *Seed Dispersal by Brown Bears*, *Ursus arctos*, in *Southeastern Alaska*, 118 CANADIAN FIELD-NATURALIST 499, 501–02 (2004).

57. See generally Joel Berger et al., *A Mammalian Predator-Prey Imbalance: Grizzly Bear and Wolf Extinction Affect Avian Neotropical Migrants*, 11 ECOLOGICAL APPLICATIONS 947 (2001) (explaining how abundant grizzly and wolf populations in Grand Tetons National Park led to increased migratory birds).

58. Josh Nowak & Elizabeth E. Crone, *It is Good to be Eaten by a Bear: Effects of Ingestion on Seed Germination*, 167 AM. MIDLAND NATURALIST 205, 208 (2012) (“Our results suggest . . . [seeds transported] through the digestive tract of a bear positively influences germination.”); see also Wilson & Gende, *supra* note 56, at 500–01 (discussing grizzly seed dispersal in Alaska); Yasaman N. Shakeri et al., *Salmon-Supported Bears, Seed Dispersal, and Extensive Resources Subsidies to Granivores*, 9 ECOSPHERE 1, 5–11 (2018) (explaining bear seed dispersal more generally for salmon-rich environments); Mary F. Wilson, *Mammals as Seed-Dispersal Mutualists in North America*, 67 OIKOS 159, 161–66 (1993) (studying seed dispersal for mammals in general, with focus on bears). For a brief overview of seed germination, see Leonie Bentsink & Maarten Koornneef, *Seed Dormancy and Germination*, ARABIDOPSIS BOOK, no. 6, Dec. 2008, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3243337/> (discussing the basics of seed dormancy and subsequent germination).

seeds that survive digestion which then spread through their scat, species such as the grizzlies aid in “plant reproduction and plant-frugivore interactions,” increasing suitable habitat for further reproduction.⁵⁹ Specifically, grizzlies are “beneficial consumers of huckleberries and serviceberries” that are prevalent in their habitat.⁶⁰ Because of grizzlies’ effect on seed germination, the ecosystem in the Yellowstone is more likely to have a healthier habitat that is more conducive for plant species.

Additionally, grizzlies keep ecosystem species’ populations in check.⁶¹ Species that they feed on, such as elk⁶² and moose,⁶³ are naturally capped due to such predation; this limits their prey species’ ability to reproduce at rates that are unsustainable for healthy propagation of their habitats’ available plants.⁶⁴ When grizzlies are absent and over-consumption of vegetation occurs, migratory birds are affected as well through the loss of available nesting.⁶⁵

Yellowstone has already been forced to reintroduce a predator

59. Nowak & Crone, *supra* note 58, at 205; *see also* Ana Traveset, *Effect of Seed Passage Through Vertebrate Frugivores’ Guts on Germination: A Review*, 1 PERSPECTIVES IN PLANT ECOLOGY, EVOLUTION & SYSTEMATICS 151, 154–70 (1998) (providing overview of how seeds survive in the digestive tracts of frugivores, such as bears).

60. Nowak & Crone, *supra* note 58, at 207.

61. JAMES PEEK ET AL., MANAGEMENT OF GRIZZLY BEARS IN BRITISH COLUMBIA: A REVIEW BY AN INDEPENDENT SCIENTIFIC PANEL 4 (2003), http://www.env.gov.bc.ca/wld/documents/gbear_finalspr.pdf.

62. For an analysis of the relationship between grizzly and elk populations, *see generally* Glen F. Cole, *Grizzly Bear-Elk Relationships in Yellowstone National Park*, 36 J. OF WILDLIFE MGMT. 556 (1972). “Grizzly predation with competitive scavenging was a nonessential but assisting adjunct to other natural processes that regulated the elk population.” *Id.* at 556. “The presence of a grizzly population in Yellowstone Park appears essential to have representative natural equilibriums among interacting secondary consumers, to maintain natural relationships between secondary and primary consumers, and to retain the scientific values of ecological systems with an intact native biota.” *Id.* at 561.

63. *See Berger et al., supra* note 57, at 949 (diagramming moose and grizzly relationship).

64. *See id.* at 948 (“Moose populations are controlled by predation and, in its absence, by food, and they achieve states of relative equilibrium that depend on carnivore abundance.”) (citation omitted). “Moose may have important localized effects on ecosystems, partly because they consume large quantities of woody shrubs and young trees including aspen, willow, and cotton-wood, and because they achieve high densities that, in riparian zones, may exceed 20 individuals/km² for up to 5-6 months per year.” *Id.* (citation omitted).

65. *Id.* at 954. The authors note that there was “a cascade of ecological events that were triggered by the local extinction of grizzly bears (*Ursus arctos*) and wolves (*Canis lupus*) from the southern Greater Yellowstone Ecosystem.” *Id.* at 947. “Avian species richness and nesting density varied inversely with moose abundance.” *Id.*

species driven to extinction in its ecosystem before: gray wolves.⁶⁶ Despite heavy controversy, the 1995 reintroduction of wolves has provided numerous positive changes to the Greater Yellowstone Ecosystem. While some ecosystem change was expected, such as decreased elk populations,⁶⁷ there were other unexpected co-benefits, including increased numbers of beavers,⁶⁸ willow and aspen trees resurgence,⁶⁹ regained prominence of aspen trees,⁷⁰ greater number of foxes as a result of decreased coyote populations,⁷¹ and tens of millions of dollars in ecotourism.⁷² The story of the wolf reintroduction has important parallels to the Yellowstone grizzly; there are untold consequences from the loss or reintroduction of a predator species from Yellowstone. Going forward, the loss of any species, particularly one such as the grizzly, could hold disastrous effects on the ecosystem writ large.

IV. DPS DELISTING LITIGATION

This section delves into the limited case law surrounding DPS delisting: the U.S. District Court for the District of Montana's 2018 decision in *Crow Indian Tribe*, and the D.C. Circuit Court of Appeal's 2017 *Humane Society v. Zinke* decision. The section will first explore recent delisting attempts of the Yellowstone grizzly by FWS. Then, following an introduction into *Crow Indian Tribe*'s procedural posture and the controversy at the heart of the litigation, the relevant holding of *Humane Society v. Zinke* will be explained to demonstrate this major turning point in DPS litigation. Lastly, this Note will discuss the ongoing Ninth Circuit appeal of the District of Montana's *Crow Indian*

66. See generally DOUGLAS SMITH & GARY FERGUSON, *DECADE OF THE WOLF: RETURNING THE WILD TO YELLOWSTONE* (1st ed. 2005) (providing a detailed account of the wolf reintroduction into Yellowstone).

67. Douglas W. Smith et al., *Yellowstone After Wolves*, 53 *BIOSCIENCE* 330, 336–37 (2003).

68. William J. Ripple & Robert L. Beschta, *Trophic Cascades in Yellowstone: The First 15 Years After Wolf Reintroduction*, 145 *BIOLOGICAL CONSERVATION* 205, 206–07 (2011).

69. *Id.* at 207–08.

70. *Id.* at 208.

71. Yao-Hua Law, *When Wolves Return to the Wild, Everything Changes*, BBC (May 17, 2017), <http://www.bbc.com/earth/story/20170516-when-wolves-return-to-the-wild-everything-changes>. See generally Thomas M. Newsome et al., *A Continental Scale Trophic Cascade from Wolves Through Coyotes to Foxes*, 84 *J. ANIMAL ECOLOGY* 49, 52–57 (explaining the relationship between wolves, coyotes, and foxes). With increased wolf populations comes a greater number of foxes, which in turn can lead to declines of other species such as jackrabbits. *Id.* at 56.

72. An often-cited statistic for wolf-derived ecotourism value in Yellowstone is \$35 million. James W. Duffield et al., *Wolf Recovery in Yellowstone: Park Visitor Attitudes, Expenditures, and Economic Impacts*, 25 *YELLOWSTONE SCI.* 13, 17 (2008).

Tribe decision.

A. Lower-48 GYE Delisting (Attempts)

FWS has sought, unsuccessfully, to delist the lower-48 grizzly several times in the past two decades. In 2007, FWS listed the GYE-segment of grizzlies as a DPS and subsequently removed the segment from the ESA's threatened species list.⁷³ The delisting decision was quickly and successfully challenged by the conservation group Greater Yellowstone Coalition.⁷⁴ The U.S. District Court in Montana struck down FWS's rule on two grounds: (1) "inadequate regulatory mechanisms to protect the grizzly bear once delisted" and (2) FWS "did not adequately consider the impacts of global warming and other factors on whitebark pine nuts, a grizzly food source."⁷⁵ Upon appeal, the Ninth Circuit reversed the trial court's finding of inadequate regulatory mechanisms.⁷⁶ However, the Ninth Circuit affirmed the district court on FWS's failure to adequately consider the loss of the whitebark pine, which is an important food source "'at high risk for loss over much of its geographic distribution' in the Yellowstone area."⁷⁷ The Ninth Circuit chastised FWS, writing that "the Service cannot take a full-speed ahead, damn-the-torpedoes approach to delisting—especially given the ESA's 'policy of institutionalized caution.'"⁷⁸

After further analysis of whitebark pine and other factors affecting the GYE grizzlies' existence, FWS again proposed delisting the GYE DPS in 2016,⁷⁹ finalizing its rule in 2017.⁸⁰ FWS re-examined the effect

73. Removing the Yellowstone Distinct Population Segment of Grizzly Bears from the Federal List of Endangered and Threatened Wildlife, 72 Fed. Reg. 14,865 (Mar. 29, 2007) (codified at 50 C.F.R. pt. 17).

74. Greater Yellowstone Coalition, Inc. v. Servheen, 672 F. Supp. 2d 1105, 1115–16 (D. Mont. 2009), *order clarified*, No. CV 07-134-M-DWM, 2009 WL 10677467 (D. Mont. Nov. 17, 2009), and *aff'd in part, rev'd in part, and remanded*, 665 F.3d 1015 (9th Cir. 2011).

75. *Id.* at 1109, 1126.

76. Greater Yellowstone Coalition, Inc. v. Servheen, 665 F.3d 1015, 1025, 1032 (9th Cir. 2011) (internal citations omitted).

77. *Id.*

78. *Id.* at 1030 (citing *Ariz. Cattle Growers' Ass'n v. Salazar*, 606 F.3d 1160, 1167 (9th Cir. 2010)).

79. Endangered and Threatened Wildlife and Plants; Removing the Greater Yellowstone Ecosystem Population of Grizzly Bears from the Federal List of Endangered and Threatened Wildlife, 81 Fed. Reg. 13,174 (proposed March 11, 2016) (to be codified at 50 C.F.R. pt. 17).

80. Endangered and Threatened Wildlife and Plants; Removing the Greater Yellowstone Ecosystem Population of Grizzly Bears from the Federal List of Endangered and Threatened Wildlife, 82 Fed. Reg. 30,502, 30,536–40 (June 30, 2017) (codified at 50 C.F.R. pt. 17).

of whitebark pine loss on grizzlies in Yellowstone.⁸¹ The agency ultimately concluded that the “best scientific and commercial data available” indicates that the loss of the whitebark pine “is not a threat to the GYE grizzly bear population and is not an impediment to long-term population persistence.”⁸²

The proposed delisting of the GYE DPS would have immediate effects; Wyoming and Idaho quickly declared intentions to begin grizzly hunting before the rulemaking was halted by the courts.⁸³ Litigation subsequently resulted again, concerning issues of statutory interpretation and the ESA. However, a D.C. Circuit Court of Appeals decision released mere months after FWS’s re-released final rule would completely change the debate concerning delisting DPSs.

B. GYE Litigation

On August 30, 2017, native and environmental groups filed suit in U.S. District Court for the District of Montana against FWS and the Department of Interior. Their suit challenged the FWS’s June 22, 2017 “decision to designate the grizzly bears occupying the area in and around Yellowstone National Park a ‘distinct population segment’” and the population’s removal from protection under the ESA.⁸⁴ In the U.S. District Court for the District of Montana, *Humane Society of the United States v. Zinke* is only persuasive authority, putting forth the question: would this court adopt similar reasoning or chart its own path of DPS analysis? One year later, on August 30, 2018, the plaintiffs sought urgent action as time became of the essence: only two days later the first hunt of grizzlies inside the lower-48 was to begin.⁸⁵ The Yellowstone grizzly would find itself front and center of this unanswered question concerning DPS delisting and comprehensive reviews.

81. *Id.*

82. *Id.* at 30,540.

83. Jim Robbins, *Grizzly Bears Can Now Be Hunted Near Yellowstone After Wyoming Vote*, N.Y. TIMES (May 24, 2018), <https://www.nytimes.com/2018/05/24/science/grizzly-bears-wyoming-hunt.html>; Press Release, Idaho Dep’t Fish & Game, Fish and Game Commission Approves Grizzly Bear Hunt (May 10, 2018), <https://idfg.idaho.gov/press/fg-commission-approves-grizzly-bear-hunt>.

84. Complaint for Declaratory and Injunctive Relief at 1, *Crow Indian Tribe v. United States*, 343 F. Supp. 3d 999 (D. Mont. 2018) (No. 9:17-cv-00119-DLC).

85. Karin Brulliard & Nick Mott, *Judge Halts First Grizzly Hunts in Decades Two Days Before Their Start*, WASH. POST (Aug. 31, 2018), <https://www.washingtonpost.com/science/2018/08/31/judge-halts-first-grizzly-hunts-decades-two-days-before-their-start/>.

1. Who Are the Parties?

This lawsuit concerning the GYE grizzly population, *Crow Indian Tribe v. United States*,⁸⁶ included Native American tribes and environmental groups pitted against FWS, the Interior Department, the intervenor states of Wyoming, Idaho, and Montana, hunting interest groups such as Safari Club International and the National Rifle Association, and farm groups like the Wyoming Farm Bureau Federation and the Wyoming Stock Growers Association.⁸⁷

The Native American plaintiffs saw this legal battle as deeply personal; Lawrence Killsback, President of the Northern Cheyenne Nation, explained that the grizzly is seen as “a relative entitled to our respect and protection from harm,” arguing the inappropriateness of state-sanctioned hunting regimes.⁸⁸ Partnered with environmental groups such as the Sierra Club, the Center for Biological Diversity, and the National Parks Conservation—all of whom were represented by Earthjustice⁸⁹—the lawsuit became a textbook example of native and environmental groups working alongside one another to defeat pro-hunting federal and state action.⁹⁰

While the grizzly holds immense value to the Native American

86. *Crow Indian Tribe v. United States*, 343 F. Supp. 3d 999, 1015 (D. Mont. 2018), *appeal docketed*, No. 18-36030 (9th Cir. Dec. 11, 2018).

87. *Id.*

88. Nick Visser, *A Federal Judge Restored Endangered Species Protection for Grizzlies in Yellowstone*, MOTHER JONES (Sept. 25, 2018) <https://www.motherjones.com/environment/2018/09/a-federal-judge-restored-endangered-species-protection-for-grizzlies-in-yellowstone/>.

The grizzly bear is integral to the culture and spiritual practices of the Northern Arapaho people. Our elders teach how the grizzly bear brought us our medicines. Grizzlies know not only about roots and herbs for physical healing but also about healing mental conditions, they say,” said Lynnette Grey Bull, senior vice president of the Global Indigenous Council and spokesperson of the Northern Arapaho Elders Society. “In the socio-economic bondage we survive in, our reservation communities need that healing more than ever today. The grizzly bear isn’t a ‘trophy game animal.’ The grizzly is our relative, a grandparent. The frontier mentality practice of ‘trophy hunting’ our relative is abhorrent to us, and in no way reflects the ‘best available science’ precept of the Endangered Species Act.

Tribal Witnesses Emphasize Spiritual and Cultural Significance of Grizzly Bears, INDIAN COUNTRY TODAY (May 17, 2019), <https://newsmaven.io/indiancountrytoday/the-press-pool/tribal-witnesses-emphasize-spiritual-and-cultural-significance-of-grizzly-bears-rbr3J79SJEqrix-g8ZbRTg>.

89. *Crow Indian Tribe*, 343 F. Supp. 3d at 1002.

90. Another well-publicized example of native and environmental groups working together against federal action can be seen in the Bears Ears litigation. Complaint for Injunctive and Declaratory Relief, Nat. Res. Def. Council, Inc. v. Trump (D.D.C. Dec. 7, 2017) (No. 1:17-cv-02606).

nations and environmental groups, the intervenor states held time-pressing interests in FWS's GYE DPS delisting, with state hunting programs set to begin only two days following the plaintiffs' filing for equitable relief.⁹¹ Wyoming prepared to permit twenty-two grizzly bears to be hunted just outside Yellowstone National Park's borders while Idaho approved one male grizzly hunt.⁹² The consequences for the lower-48 grizzly population are critical: the Yellowstone grizzly population totals approximately 600 bears, over forty percent of all remaining grizzlies in the U.S. outside Alaska.⁹³ Despite no party claiming the lower-48 grizzly is ready for delisting, FWS's action would remove the second-largest grizzly population from ESA protection while also actively considering the delisting of the largest collection of grizzlies in the lower-48: the Northern Continental Divide Population.⁹⁴ If delisting both populations were to be successful, the protected lower-48 grizzly population would number fewer than 100.⁹⁵

2. GYE Grizzly Litigation Proceedings

Before ruling on the merits of the lawsuit, U.S. District Court Judge Dana Christensen granted a Temporary Restraining Order and Preliminary Injunction pausing the grizzly hunts on the evening of August 30, 2018, mere days before the first state-approved hunt was to begin.⁹⁶ The temporary pause to the grizzly hunt would later be extended one more time before Judge Christensen ruled on Earthjustice's Motion for Summary Judgement.⁹⁷

In September 2018, Judge Christensen struck down FWS's delisting of the GYE grizzly DPS, ruling that FWS "acted arbitrarily and capriciously by failing to consider the impact of delisting on both

91. Bruillard & Mott, *supra* note 85.

92. See Robbins, *supra* note 83.

93. GRIZZLY BEAR RECOVERY OFFICE, *supra* note 55, at 24.

94. Endangered and Threatened Wildlife and Plants; Draft Conservation Strategy for the Northern Continental Divide Ecosystem Grizzly Bear, 78 Fed. Reg. 26,064 (Notice May 3, 2013), <https://www.govinfo.gov/content/pkg/FR-2013-05-03/pdf/2013-10492.pdf>.

95. GRIZZLY BEAR RECOVERY OFFICE, *supra* note 55, at 24. The Montana court points to the Service itself acknowledging that "it would be difficult to justify a distinct population segment in an area where bears . . . have not been located for generations," showing the precarious situation for the remaining four Recovery Ecosystems. *Crow Indian Tribe v. United States*, 343 F. Supp. 3d 999, 1023-15 (D. Mont. 2018), *appeal docketed*, No. 18-36030 (9th Cir. Dec. 11, 2018) (internal citations omitted).

96. Order for Temporary Restraining Order, *Crow Indian Tribe v. United States*, 343 F. Supp. 3d 999 (D. Mont. Aug. 30, 2018) (No. 9:17-cv-00089-DLC).

97. Order Extending Temporary Restraining Order, *Crow Indian Tribe v. United States*, 343 F. Supp. 3d 999 (D. Mont. Sept. 30, 2018) (No. 9:17-cv-00089-DLC).

the Greater Yellowstone grizzly population and [the remnant population].”⁹⁸ Because the plaintiffs did “not challenge the [FWS’s] power to interpret the ESA as allowing for contemporaneous designation of a [DPS] and delisting of the same segment,” the court “assumes that the Service has [this] legal authority.”⁹⁹ But the court ruled that FWS’s “piecemeal approach, isolating and delisting populations without questioning the effect on other populations, presents an irresolvable conflict with ESA’s ‘policy of institutionalized caution’” and statutory language.¹⁰⁰

Following the “arbitrary and capricious standard” where the court “may not vacate an agency’s decision unless the agency failed one of four factors,¹⁰¹ Judge Christensen’s analysis dove into the second factor of whether or not FWS “failed to consider an important aspect of a problem” by omitting any comprehensive analysis of the remnant grizzly population.¹⁰² Under the ESA’s policy of “institutionalized caution”¹⁰³ and relevant statutory language, the court performed a piece-by-piece analysis of Section 4’s relationship to delisting DPSs of protected species.¹⁰⁴ Judge Christensen concluded that “the Service must consider how the delisting affects *other members of the listed entity* [the lower-48 grizzly].”¹⁰⁵ Despite FWS “simply point[ing] to the continued listing of the continental grizzly as proof that the delisting would do no harm to members of the species outside the [GYE],” Judge Christensen pointed out the obvious: “decreased protections in the [GYE] necessarily translate to decreased chances for interbreeding,” which clearly “may influence the other continental

98. *Crow Indian Tribe*, 343 F. Supp. 3d at 1013.

99. *Id.* at 1010.

100. *Id.* at 1013 (quoting *Ariz. Cattle Growers Ass’n v. Salazar*, 606 F.3d 1160, 1167 (9th Cir. 2010)).

101. “Under the arbitrary and capricious standard, the Court may not vacate an agency’s decision unless the agency ‘relied on factors which Congress had not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.’” *Id.* (quoting *Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983)).

102. *Id.* (quoting *State Farm Mut. Auto. Ins. Co.*, 463 U.S. at 43).

103. *Id.* (citing *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 194 (1978)). The Supreme Court has held that the ESA makes it “abundantly clear that the balance has been struck in favor of affording endangered species the highest of priorities,” a policy that the Court describes as “institutionalized caution.” *Id.*

104. For an explanation of this statutory interpretation, see *infra* Part II.E.

105. *Crow Indian Tribe*, 343 F. Supp. 3d at 1014 (emphasis added).

populations,” making FWS’s argument fall flat with the court.¹⁰⁶ Furthermore, Judge Christensen wrote, this very “isolation and lack of connectivity between grizzly populations was a recognized threat at the time of the original [FWS] listing” for the lower-48 grizzly.¹⁰⁷ The district court remanded the agency action back to FWS, holding that “Section 4 of the ESA demands that the Service consider the *legal* and *functional* effect of delisting a newly designated population segment on the remaining members of a listed entity,” considerations not performed by FWS for delisting the GYE grizzly DPS.¹⁰⁸

Interestingly, the Service itself appeared to realize weaknesses in its delisting decision. FWS pursued what the plaintiffs deemed an “unorthodox, post-decisional public comment period regarding the impact of the D.C. Circuit Court of Appeal’s 2017 ruling on a similar statutory question¹⁰⁹ by providing subsequent justifications for its delisting and supplementing previously omitted reviews of the GYE and remnant populations.¹¹⁰ Judge Christensen labelled this move by FWS as “a last-ditch attempt to prove to the [c]ourt that’s its review was sufficient.”¹¹¹ Judge Christensen was unconvinced by the agency’s post-hoc review, regarding it as nothing more than “a summary of the Final Rule and a discussion of its sufficiency ‘in light of the [D.C. Circuit Court of Appeal’s] opinion.’”¹¹²

Reprimanding FWS, the court stated that the agency’s refusal to consider the remnant population was “simplistic at best and

106. *Id.* The district court did not hold much weight into FWS’s promulgation which stated “[g]rizzly bears will remain listed in the remainder of the lower 48 States outside of the GYE DPS” as proof of their continued legal status under the ESA. Endangered and Threatened Wildlife and Plants; Removing the Greater Yellowstone Ecosystem Population of Grizzly Bears from the Federal List of Endangered and Threatened Wildlife, 82 Fed. Reg. 30,502, 30,546 (June 30, 2017) (codified at 50 C.F.R. pt. 17).

107. *Id.* (citing Amendment Listing the Grizzly Bear of the 48 Conterminous States as a Threatened Species, 40 Fed. Reg. 31,734, 31,734 (codified at 50 C.F.R. pt. 17)).

108. *Crow Indian Tribe*, 343 F. Supp. 3d at 1015 (emphasis added). The Montana court focused most of its analysis on the functional effects of delisting the GYE on remaining populations, while the *Humane Society* court delved deeper into the legal concerns of whether or not the remnant population would still constitute a species under the ESA.

109. *See infra* Part IV.D.

110. Plaintiffs’ Memorandum in Support of Motion for Partial Summary Judgement, *Crow Indian Tribe v. United States*, 343 F. Supp. 3d 999 (D. Mont. January 12, 2018) (No. 9:17-CV-00117-DLC), 2018 WL 1250550 (citing Endangered and Threatened Wildlife and Plants; Review of 2017 Final Rule, Greater Yellowstone Ecosystem Grizzly Bears, 83 Fed. Reg. 18,737 (April 30, 2018) (codified at 50 C.F.R. pt. 17)).

111. *Crow Indian Tribe*, 343 F. Supp. 3d at 1014.

112. *Id.* at 1011 n.5, 1011.

disingenuous at worst.”¹¹³ Judge Christensen’s holding in the Yellowstone grizzly case mirrors the analysis of the D.C. Circuit Court of Appeal’s ruling in *Humane Society of the United States v. Zinke*.¹¹⁴ *Humane Society of the United States v. Zinke* is an important chapter in DPS litigation. The D.C. Circuit Court of Appeals tackled whether or not FWS could delist a DPS of the protected gray wolf, a novel case of ESA statutory interpretation. The next section will dive into the D.C. Circuit Court of Appeal’s analysis of what FWS may do concerning DPSs and delisting in *Humane Society v. Zinke*, which was fully adopted by the District of Montana in *Crow Indian Tribe*.

3. *Humane Society of the United States v. Zinke*: Forever Changing the DPS Debate

December 2011 marked a new turn for DPS litigation, when FWS designated gray wolf (*canis lupus*) populations within nine Midwestern and Great Plains states as a DPS separate from the larger listed species.¹¹⁵ The Humane Society of the United States challenged FWS’s unprecedented actions—classifying a DPS from a listed species and simultaneously delisting DPS classification of a listed species—marking a major turning point in DPS litigation.¹¹⁶ Simultaneous to demarcating this DPS from a listed species, a novel practice for the agency, FWS also delisted the new DPS.¹¹⁷

The U.S. District Court for the District of Columbia struck down the Service’s actions on multiple fronts in *Humane Society of the United States v. Jewell*.¹¹⁸ The holdings relevant to the DPS delisting debate and grizzly litigation include ruling that the ESA forbids the crafting of a new DPS from a listed species for the sole purpose delisting the segment.¹¹⁹

113. *Id.* at 1013.

114. *Humane Soc’y of the U.S. v. Zinke*, 865 F.3d 585, 597–613 (D.C. Cir. 2017).

115. Endangered and Threatened Wildlife Plants; Revising the Listing of the Gray Wolf (*canis lupus*) in the Western Great Lakes, 76 Fed. Reg. 81,666, 81,670 (Dec. 28, 2011) (codified at 50 C.F.R. pt. 17).

116. *Humane Soc’y of the U.S. v. Zinke*, 865 F.3d 585 (D.C. Cir. 2017).

117. Endangered and Threatened Wildlife Plants; Revising the Listing of the Gray Wolf (*canis lupus*) in the Western Great Lakes, 76 Fed. Reg. at 81,723.

118. *Humane Soc’y of the U.S. v. Jewell*, 76 F. Supp. 3d 69, 109–34 (D.D.C. 2014).

119. *Humane Soc’y of the U.S. v. Zinke*, 865 F.3d at 595 (citing *Humane Soc’y of U.S. v. Jewell*, 76 F. Supp. 3d at 128–32).

4. *Humane Society* Holds FWS May Designate and Delist a DPS from a Listed Species

On appeal, the D.C. Circuit Court of Appeals tackled several issues concerning ESA delisting in *Humane Society of the United States v. Zinke*.¹²⁰ Two crucial questions were: (1) can FWS create a DPS from a listed species and, (2) if so, and most importantly to the grizzly litigation, must FWS consider the “remnant” population that remains listed during the requisite delisting analysis?¹²¹ Through tackling these two issues one can better understand the holding laid out in *Crow Indian Tribe*, the grizzly delisting case.

The D.C. Circuit ultimately overruled the trial court’s ruling on prohibiting DPS-designations from listed species for delisting purposes.¹²² Performing an arbitrary and capricious review,¹²³ the court granted deference to FWS’s view that the ESA “allows the identification of a [DPS] within an already-listed species, and further allows the assignment of a different conservation status to that segment if the statutory criteria for uplisting, downlisting, or delisting are met.”¹²⁴ Holding that FWS can make a DPS from a listed species, the court then moved to the question of whether or not a proper analysis was performed.

5. *Humane Society* Court Holds FWS Must Consider the Remnant Population when Delisting a Protected DPS

Ultimately, the court held that FWS failed to perform a proper delisting analysis because the Service failed to consider the status of the ‘remnant’ gray wolf population not being delisted within the new DPS.¹²⁵ While the *Humane Society* court held that FWS may carve out a DPS from an “already-listed species,” it must first “determin[e] whether the remnant itself remains a species so that its own status

120. Note that the defendant in *Human Society v. Jewell* became Secretary Zinke due to the change in presidential administrations.

121. *Humane Soc’y of the U.S. v. Zinke*, 865 F.3d at 600–01.

122. *Id.* at 600.

123. Under 5 U.S.C. § 706(2)(A) of the Administrative Procedure Act, a court may only “overturn an agency decision if it is ‘arbitrary capricious, an abuse of discretion, or otherwise not in accordance with law.’” *Id.* at 595 (quoting 5 U.S.C. § 702(2)(A)). Here, the agency “must examine the relevant data and articulate a satisfactory explanation for its action including a ‘rational connection between the facts found and the choice made.’” Charles H. Koch, Jr. & Richard Murphy, *Modern Arbitrariness Review – Start Farm Synthesis*, 4 ADMIN. L. & PRACTICE § 11:30.20 (3d ed.) (2020) (quoting *Motor Vehicle Mfrs. Ass’n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983)).

124. *Humane Soc’y of the U.S. v. Zinke*, 865 F.3d at 600.

125. *Id.* at 600–01.

under the Act will continue as needed;” to do otherwise would be to approach the proposed DPS with “blinders” on.¹²⁶ The court explained that § 4(c)(1) of the ESA requires FWS to “revise” its protected species listings “to reflect recent determinations, *designations*, and *revisions*” that are made “in accordance with” § 4(b).¹²⁷ In turn, § 4(b)(1)(A) mandates that FWS make decisions “‘after conducting a review of the status of *the species*’ as listed.”¹²⁸ Because § 4(c)(2)(A) “requires that the review cover the ‘species included in a *list*,’”¹²⁹ the court logically concluded that § 4(b)(1)(A)’s mandate of the *listed* species review must incorporate the previously whole listed population, meaning both the proposed-delisted population *and* the remnant population.¹³⁰ By assessing the effect of this DPS delisting on the remnant population, the Service would be able “to look at the whole picture of the listed species, not just a segment of it,” which is the point of Section 4 species reviews.¹³¹ The Service itself, the court pointed out, agrees with this interpretation.¹³² The *Humane Society* court alluded to the Service’s own Solicitor’s Opinion that acknowledged that this ‘review’ “can reasonably be read to include any and all of the composite segments or subspecies that might be included within a *taxonomically listed species*.”¹³³ The court in *Humane Society* held that if the remnant of a listed species is not reviewed, then FWS would be “delist[ing] an already-protected species by balkanization,” resulting with “a leftover group [sic] becom[ing] an orphan to the law,” contrary to the purpose of § 4(b)(1)(A)’s required species review.¹³⁴

Because of Section 4, courts generally hold that the ESA “requires a comprehensive review of the entire listed species and its continuing

126. *Id.*

127. *Id.* at 596 (emphasis added). For an explanation of the connection between these statutory requirements, see *infra* Part II.E.

128. *Humane Soc’y of the U.S. v. Zinke*, 865 F.3d at 601 (quoting 16 U.S.C. § 1533(b)(1)(A) (2018)).

129. *Id.* (quoting 16 U.S.C. § 1533(c)(2)(A) (2018) (emphasis added)).

130. 16 U.S.C. § 1533(b)(1)(A) (2018).

131. *Humane Soc’y of the U.S. v. Zinke*, 865 F.3d at 601.

132. *See id.* (citing OFFICE OF THE SOLICITOR, U.S. DEP’T OF INTERIOR, M-37018, U.S. FISH AND WILDLIFE SERVICE AUTHORITY UNDER SECTION 4(C)(1) OF THE ENDANGERED SPECIES ACT TO REVISE LISTS OF ENDANGERED AND THREATENED SPECIES TO ‘REFLECT RECENT DETERMINATIONS’ 7–8, 7 n.10 (2008)).

133. *Id.* (emphasis added).

134. *Id.* at 603. The leftover group could become an “orphan to the law” because there is no guarantee the carved-out species would constitute a “species” under the ESA. *Id.*

status.¹³⁵ Having started the process, the Service cannot call it quits upon finding a single [DPS].¹³⁶ This ‘comprehensive review’ language will prove pivotal in the *Crow Indian Tribe*’s own analysis.

Without performing a comprehensive review, FWS would have a “backdoor route to the *de facto* delisting of already-listed species, in open defiance of the [statute’s] specifically enumerated requirements for delisting.¹³⁷ Despite the species as a whole still warranting protected status under the ESA, now FWS would be “‘sidestep[ping]’ the process ‘Congress has plainly’ prescribed for delisting.”¹³⁸ “Worse still,” as the D.C. Circuit noted, FWS openly admitted this.¹³⁹ The court noted that “with the [new DPS] carved out, the remnant [population] is no longer a protectable ‘species’ and [FWS] has proposed its delisting for that reason alone.”¹⁴⁰ When FWS itself concedes that the remnant population may not justify protection under the ESA, there seems to be a logical flaw in the agency’s delisting justifications. If delisting a protected species’ DPS leads to the inevitable consequence that the remnant listed species population may not qualify as a ‘species’ under the ESA and thus warrant delisting as well (despite the fact that the species as a whole would fit the statutory definition for being listed), the agency action is antithetical to the ESA. The court remedied this concern by requiring FWS to perform the comprehensive review of not only the proposed delisted DPS, but also the remnant population to ensure its continued status under the ESA.¹⁴¹

This careful analysis by the D.C. Circuit reemerged in *Crow Indian Tribe*, acting as the foundation for its own statutory interpretation.

135. *Id.* at 601.

136. *Id.*

137. *Id.* at 601–02. The court finds further evidence for its interpretation by pointing to FWS’s own policy defining DPSs, where it would simply not make sense for a segment to be ‘discrete’ and ‘significant’ without first “determining whether the remnant itself remains a species so that its own status under the [ESA] will continue as needed.” *Id.* at 601 (citing Policy Regarding the Recognition of Distinct Vertebrate Population Segments Under the Endangered Species Act, 61 Fed. Reg. 4722, 4725 (Feb. 7, 1996)).

138. *Id.* (quoting *Nat. Res. Def. Council, Inc. v. Env’tl. Prot. Agency*, 489 F.3d 1364, 1372 (D.C. Cir. 2007)).

139. *Id.* at 602.

140. *Id.* (citing *Endangered and Threatened Wildlife and Plants; Removing the Gray Wolf (Canis lupus) from the List of Endangered and Threatened Wildlife and Maintaining Protections for the Mexican Wolf (Canis lupus baileyi) by Listing it as Endangered*, 78 Fed. Reg. 35,644, 35,688 (June 13, 2013)). The court noted that “[t]he Service did not deny that position at oral argument.” *Id.*

141. *Id.* at 601.

6. Crow Indian Tribe on Appeal: What will the Ninth Circuit Do?

The District Court for the U.S. District of Montana's decision in *Crow Indian Tribe* was ultimately appealed by FWS, Wyoming, Idaho, Montana, and various hunting groups to the Ninth Circuit Court of Appeals, with parties litigating on (1) whether FWS must also consider the status of the remaining carved out species and (2) what constitutes the court-mandated comprehensive review.¹⁴² FWS and the other appellants object to the *Crow Indian Tribe* decision's requirement of conducting a comprehensive review, an additional step they claim "improperly imposes procedures not required by the ESA" onto FWS.¹⁴³ FWS did not challenge the District Court's requirement that the agency consider the Yellowstone grizzly delisting's functional and legal effect on the remaining grizzly population, an analysis "it has already started working on."¹⁴⁴ FWS still, however, challenges what must be considered in the District Court's mandated 'comprehensive review,' an ambiguous term that stems from the terminology adopted by the D.C. Circuit Court of Appeals in *Humane Society v. Zinke*.¹⁴⁵ FWS argues all it must do is conduct a review of the functional and legal impact of the GYE delisting on the remnant population as it sees fit, not a comprehensive review which remains undefined.¹⁴⁶ The agency claims "unless [they] determine that delisting a DPS entails listing, delisting, downlisting, or uplisting *the rest of the species*," it is not required to conduct a five-factor analysis under § 4(a)(1) of the ESA or any additional considerations that it does not deem appropriate.¹⁴⁷ Unlike FWS, other appellants, including the states of Idaho and Wyoming, challenge the district court's requirement of considering the effects of the GYE delisting on the remaining

142. *Crow Indian Tribe v. United States*, 343 F.Supp.3d 999 (D. Mont. 2018), *appeal docketed*, No. 18-36030 (9th Cir. Dec. 11, 2018). The parties also litigated other issues such as jurisdiction, FWS's conclusions that the GYE grizzly faces no threat from lack of genetic diversity, and FWS's failure to "require a commitment to a recalibration mechanism based on speculative change in the population estimator." Opening Brief for Appellant State of Idaho at 11, *Crow Indian Tribe v. United States*, No. 18-36030 (9th Cir. June 7, 2019), 2019 WL 2489105. While these issues are important and worthy of further discussion, they are outside the scope of this Note.

143. Opening Brief for Appellant State of Idaho, *supra* note 142, at 10.

144. Opening Brief for Federal Appellants at 1, *Crow Indian Tribe v. United States*, No. 18-36030 (9th Cir. May 24, 2019), 2019 WL 2317681 at *1.

145. *Id.* at 13–16, 23–28.

146. *Id.* at 15.

147. *Id.* at 16 (emphasis added).

species.¹⁴⁸

While “trying to predict what . . . judges . . . are likely to do is often little more than an educated guessing game,” there are ample reasons to believe that the Ninth Circuit will follow the U.S. District Court for the District of Montana and D.C. Circuit courts in striking down FWS’s DPS analysis.¹⁴⁹ Because of the ESA’s interest in institutionalized caution, logical statutory interpretation of Section 4, and overwhelming policy interests in preserving the remnant population’s listing, there is a strong likelihood of the plaintiffs succeeding in this next stage of litigation. If the Ninth Circuit affirms the U.S. District Court for the District of Montana’s holding in *Crow Indian Tribe*, it should explain what a comprehensive review entails to provide clarity to an ambiguous and undefined term. Alternatively, there are persuasive reasons for the Ninth Circuit to strike down the entire practice of delisting DPSs of a protected species altogether.

V. DELISTING A PROTECTED SPECIES’ DPS: DOES THIS MAKE SENSE?

This section dives into reasons why the Ninth Circuit could hold that delisting a DPS from a protected species simply does not conform with the ESA. Numerous legal arguments call into question the FWS’s practice of delisting; this practice likely does not comport with the ESA. This section looks at why delisting DPSs does not make sense because of (1) inconsistency with the purpose of DPS itself, (2) legal consequences for the remaining species population, and (3) problematic subdividing, all of which will be explored in the sections below. Additionally, this section proposes a possible justification under the statute for FWS’s recent delisting decision, while noting that a BiOp would have nonetheless been required. The next section will explain what a comprehensive review should entail if the Ninth Circuit Court of Appeals affirms the U.S. District Court for the District of Montana’s decision in *Crow Indian Tribe*.

148. Opening Brief for Appellant State of Idaho, *supra* note 142, at 13–19; Opening Brief for Appellant State of Wyoming at 46–50, *Crow Indian Tribe v. United States*, No. 18-36030 (9th Cir. June 7, 2019), 2019 WL 2489104, at *46–50.

149. Mark K. Osbeck, *Lawyer as Soothsayer: Exploring the Important Role of Outcome Prediction in the Practice of Law*, 123 PENN. ST. L. REV. 41, 44 n.9 (2018) (quoting NANCY L. SCHULTZ & LOUIS J. SIRICO, JR., *LEGAL WRITING AND OTHER LAWYERING SKILLS* 184 (6th ed. 2014)).

A. *The Purpose of DPS Likely Forbids the GYE Delisting*

FWS guidance articulates that the purpose of listing a DPS is to prevent the large-scale decline of a species.¹⁵⁰ Given this backdrop, the agency's decision to delist the GYE DPS tugs at common sense and fails to comport with its own guidance on the matter. Furthermore, since the process of delisting a DPS goes against the overall mission of the ESA to conserve vulnerable species, one should be skeptical of a decision to do so without clarifying guidance from FWS. There is no mention of an existing agency framework justifying the delisting of a DPS for a listed species nor any guidance documents or rationale for how to carry out the process. Furthermore, there is no agency guidance articulating the relevant questions concerning the overall species' health for delisting a DPS that would be necessary to investigate as part of the delisting process.¹⁵¹ Additionally, the agency itself has previously warned of the logical consequences of delisting a DPS from a protected species.

B. *Consequences of Delisting Listed Species' DPS, Effect on Remnant Population*

When pursuing the piecemeal delisting of a protected species, there are open legal questions on whether the remaining listed species-segment would constitute a "species" under the ESA,¹⁵² which is a requirement for protection. Tellingly, FWS even admits to the danger of delisting fragments of protected species through a back door, warning "that a future hostile administration would use the lack of sound legal standing to try to remove the remaining small populations from ESA protection."¹⁵³ FWS has since sought to moot this concern regarding the remnant population's listing status by simply stating in

150. See Policy Regarding the Recognition of Distinct Vertebrate Population Segments Under the Endangered Species Act, 61 Fed. Reg. 4,722 (Feb. 7, 1996). FWS states that DPS designation is meant to advance the purpose of the ESA, specifically through "conserving genetic resources" and "maintaining natural systems and biodiversity over a representative portion of [the species'] historic occurrence. *Id.* at 4,723.

151. See generally U.S. FISH & WILDLIFE SERV., DISTINCT POPULATION SEGMENTS (DPS) (2014), https://www.fws.gov/greaterSageGrouse/documents/ESA%20Process/20141002_ESA_DPS.pdf (explaining DPS practice with no mention of how delisting a DPS would operate).

152. The three definitions of species under the ESA are: species, subspecies, and DPS. 16 U.S.C. § 1532(16).

153. Opening Brief of Plaintiff-Appellees Northern Cheyenne Tribe et al. at 31, *Crow Indian Tribe v. United States*, No. 18-36030 (9th Cir. Aug. 5, 2019), 2019 WL 3816438, at *31.

its final rule that “[g]rizzly bears will remain listed in the remainder of the lower-48 States outside of the GYE DPS.”¹⁵⁴ However, this statement is meaningless if the remnant does not constitute a ‘species’ under the ESA.

Under the ESA a species may only be defined as a: (1) species, (2) subspecies, or (3) a DPS.¹⁵⁵ If the remnant population does not constitute any of these definitions, the protected status could likely be removed through the delisting mechanisms provided by statute. While FWS claimed the remnant population of grizzlies would remain protected, the agency cannot stop citizen suits from pro-hunting groups petitioning for the delisting of the remnant grizzly population under the claim that it no longer matches the ESA’s definition of “species.”¹⁵⁶ Critics of this concern may point out there is no guarantee that citizen petitions would ultimately prevail with regard to this open legal question. However, when the agency itself has openly worried about uncertain future consequences, one should have concerns on the practice comporting with the ESA and the policy rationales FWS itself sets out for identifying DPSs.

This piecemeal fragmentation of a listed species through DPS delisting is not simply an abstract question but one that the grizzly is on trajectory to confront. The most numerous grizzly DPS, the Northern Continental population—totaling approximately 765 bears—may also be delisted, with FWS going so far to admit it “may be eligible for delisting in the near future” and that its “data indicates that this population has likely met recovery goals,” paving the way for a second DPS to be delisted.¹⁵⁷

154. Endangered and Threatened Wildlife and Plants; Removing the Greater Yellowstone Ecosystem Population of Grizzly Bears from the Federal List of Endangered and Threatened Wildlife, 82 Fed. Reg. 30,502, 30,546 (June 30, 2017) (codified at 50 C.F.R. pt. 17).

155. 16 U.S.C. § 1532(16).

156. Citizen suits can be brought by individuals or groups “to compel the Secretary to perform a nondiscretionary duty under the ESA’s listing-related provisions in Section 4,” such as delisting a population that no longer meets the statutory definition of ‘species.’ CORN & WYATT, *supra* note 9, at 23. This is the very concern FWS has discussed in the past. GRIZZLY BEAR RECOVERY OFFICE, *supra* note 55, at 23.

157. Endangered and Threatened Wildlife and Plants; Review of 2017 Final Rule, Greater Yellowstone Ecosystem Grizzly Bears, 83 Fed. Reg. 18,737, 18,739 (April 30, 2018) (codified at 50 C.F.R. pt. 17); *see also* Endangered and Threatened Wildlife and Plants; Removing the Greater Yellowstone Ecosystem Population of Grizzly Bears From the Federal List of Endangered and Threatened Wildlife, 82 Fed. Reg. 30,502, 30,536–40 (June 30, 2017) (codified at 50 C.F.R. pt. 17) (stating “[t]he [Northern Continental] grizzly bear population is likely biologically recovered”); Endangered and Threatened Wildlife and Plants; Draft Conservation Strategy for the Northern Continental Divide Ecosystem Grizzly Bear (Notice May 3, 2013) (laying out draft Conservation Strategy to assess appropriateness of delisting the Northern

If both of these DPSs were to be delisted, ninety percent of the lower-48 grizzly population would no longer be listed as protected as threatened under the ESA, despite the overall population still not warranting a delisted status.¹⁵⁸ Grizzly hunting in the Northern Continental Ecosystem appears possible in the near future if this second DPS is delisted. Montana has proposed its own management plan for the Northern Continental grizzly if it loses ESA protection which acknowledges that hunting is “the preferred method for managing [overpopulated] grizzly numbers,” while debate continues on accurate carrying capacity numbers for the Recovery Ecosystem.¹⁵⁹

If these two DPSs were delisted, the remaining four populations of lower-48 grizzlies would constitute less than ten percent of remaining grizzlies and hold two Recovery Ecosystems that have few to no grizzlies left.¹⁶⁰ FWS itself admits that “it would be difficult to justify a [DPS] in an area where bears . . . have not been located for generations,” putting the grizzly on track for balkanization through DPS delisting, until the remaining segments are too fragmented to constitute a species under the ESA and become “legal orphans to the law.”¹⁶¹ In addition to these practical consequences, further questions surrounding subdividing remain.

C. Subdividing Framework Difficulties

Subdividing a protected species can nearly always be done through proper framing. Analogous to *Thomas v. Peterson*,¹⁶² FWS can always

Continental DPS). This possibility has found support in Montana’s Congressman. Jonathan Hettinger, *Gianforte Lobbies Interior to Delist Northern Continental Divide Grizzlies*, MONT. FREE PRESS (Oct. 8, 2019), <https://montanafreepress.org/2019/10/08/gianforte-lobbies-interior-department-to-delist-northern-continental-divide-grizzlies-amid-concerns-about-too-many-bears/>. Congressman Gianforte is clear on how he sees the Northern Continental’s status: “The [DPS] bear has recovered, and they need to be delisted.” *Id.*

158. Together, the GYE and Northern Continental populations total approximately 1,365 of the 1,500 grizzlies in the lower-48. These numbers come from FWS’s own data. See GRIZZLY BEAR RECOVERY OFFICE, *supra* note 55, at 24 (listing out grizzly populations in each Recovery Ecosystem).

159. Rob Chaney, *Montana Approves Management Plan if Grizzlies Lose Endangered Species Protection*, MISSOULIAN (Dec. 10, 2018), https://missoulain.com/news/local/montana-approves-management-plan-if-grizzlies-lose-endangered-species-protection/article_7cf345e6-312e-5c69-9e1e-0ab5447a5549.html.

160. GRIZZLY BEAR RECOVERY OFFICE, *supra* note 55, at 24.

161. *Crow Indian Tribe v. United States*, 343 F. Supp. 3d 999, 1012–13 (D. Mont. 2018) (internal citations omitted).

162. See generally *Thomas v. Peterson*, 753 F.2d 754 (9th Cir. 1985).

fragment protected species through subdividing carefully around the boundaries of healthy sub-populations. To not require FWS to consider the effects of delisting the GYE on the species as a whole would be analogous to the United States Forest Service analyzing the construction of a road without considering the effects of two resulting timber sales. Both the FWS and the Forest Service are clearly flouting the purposes of their respective environmental statutes through arbitrary fragmentation of analysis.¹⁶³ Much like the National Environmental Policy Act requires the consideration of cumulative actions together,¹⁶⁴ FWS must consider how weakening a DPS's protections will affect the species' overall health. Even if the delisting of the GYE was not expected to have a significant effect on the well-being of the grizzly population as a whole at this current moment in time, potential future delistings of remnant populations—combined with the GYE delisting— could have a substantial impact on the overall protection of the grizzly population. This leads one to wonder how the purpose of DPS can justify this newfound delisting approach that looks at each delisting in isolation.

Further, perhaps this lower-48 population as a whole is already a DPS which cannot be subdivided further. While the original listing for the lower-48 grizzly occurred in 1978, prior to the ESA's amendment instituting DPS language and the 1996 FWS guidance policy, it is the functional equivalent of a DPS.¹⁶⁵ WildEarth Guardians, one of the plaintiff-appellees, succinctly lays out in its brief why the lower-48 population is already a DPS: (a) the listing is already a subspecies because the grizzly is a subspecies of the brown bear and (b) it is already a population of the larger subspecies due to Alaska and Canada's exclusion from the list.¹⁶⁶ Because the ESA forbids the listing of a DPS from an already existing DPS,¹⁶⁷ the lower-48 grizzly appears to already be protected from further segmentation. FWS sought to dismiss this concern in their 2017 Final Rule; in it, the agency states that this action “does not create a DPS of a DPS”—a statement made with little legal support.¹⁶⁸ Interestingly, FWS itself classifies the lower-

163. *Id.* at 760–61.

164. 40 C.F.R. § 1508.25(a)(1) (2019); *see also Thomas v. Peterson*, 753 F.2d at 758–59 (explaining the regulation's 'connected action' requirements).

165. Answering Brief for Plaintiff WildEarth Guardians at 65, *Crow Indian Tribe v. United States*, No. 18-36030 (9th Cir. Aug. 5, 2018), 2019 WL 3816437, at *65.

166. *Id.*

167. *Alesea Valley Alliance v. Evans*, 161 F. Supp. 2d 1154, 1162 (D. Or. 2001).

168. *Endangered and Threatened Wildlife and Plants; Removing the Greater Yellowstone Ecosystem Population of Grizzly Bears from the Federal List of Endangered and Threatened*

48 population as a DPS in its own regulations,¹⁶⁹ leading one to question the status of a de facto DPS listed before the ESA incorporated its DPS language. Within this subdividing of already divided populations, the agency should not lose touch with the dangers of ever-more subdivision: “Sometimes the total impact from a set of actions may be greater than the sum of the parts.”¹⁷⁰ This clearly is a concern when cherry-picking healthy population segments.

D. At a Minimum, Delisting a Protected DPS Mandates a Biological Opinion

Section 7 of the ESA requires an agency—here FWS—to determine if an action “may affect” a listed species.¹⁷¹ ‘May affect’ is a low bar, with the regulations stating that “[a]ny possible effect, whether beneficial, benign, adverse, or of an undetermined character” constitutes the triggering of a consultation with the relevant authorities at FWS.¹⁷² If FWS’s action to delist the GYE DPS was “likely to adversely affect” the population, then a BiOp would be necessary.¹⁷³ While the only party to make this argument was the intervenor WildEarth Guardians and not the principal parties or the *Humane Society* Court, if delisting a protected DPS would be permissible under the ESA, then, at a minimum, a BiOp would be necessary.¹⁷⁴

Here, because of the anticipated state hunting regimens and weakening of the possibility of connecting Recovery Ecosystem populations, FWS’s decision to delist the GYE DPS will adversely affect the species, thus warranting a BiOp.

Wildlife, 82 Fed. Reg. 30,502, 30,622 (June 30, 2017) (codified at 50 C.F.R. pt. 17). The full paragraph states “Our recognition of the GYE grizzly bear DPS does not create a DPS of a DPS. A population’s discreteness and significance determinations are based on its discreteness and significance to the taxon (species or subspecies) to which it belongs; in this case the taxon is the subspecies *Ursus arctos horribilis* (see DPS Analysis). Therefore, consistent with our 1996 DPS Policy, the GYE grizzly bear is a DPS of *Ursus arctos horribilis* and not of the lower-48 States listing.” *Id.*

169. 50 C.F.R. § 17.11 (2019).

170. *Klamath-Siskiyou Wildlands Ctr. v. Bureau of Land Mgmt.*, 387 F. 3d 989, 994 (9th Cir. 2004).

171. 50 C.F.R. § 402.14(b)(1) (2019).

172. *Id.*; see also *Native Ecosystems Council v. Marten*, 334 F. Supp. 3d 1124, 1131 (D. Mont. 2018) (quoting *Sw. Ctr. For Biological Diversity v. U.S. Forest Serv.*, 100 F.3d 1443, 1147–48 (9th Cir. 1996)) (explaining “‘may affect’ is a ‘relatively low threshold for triggering consultation’”).

173. 16 U.S.C. § 1536(b) (2018); 50 C.F.R. § 402.14(g)(4) (2019).

174. For an explanation of BiOps, see *supra* note 30 and accompanying text

First, because of the ESA's all-or-nothing framework for protection,¹⁷⁵ the GYE DPS will no longer find sanctuary in the federal government's protection. Because of this, the GYE population will face almost immediate threats of hunting from Wyoming and Idaho hunters.¹⁷⁶ This will have a direct impact on the overall number of grizzlies, constituting an adverse effect on the threatened species. Specifically, in Wyoming—where a majority of the GYE grizzlies reside—there is ample reason to believe the DPSs numbers would quickly decline. Despite ongoing federal protections of the entire lower-48 population, Wyoming Governor Mark Gordon signed into law legislation permitting a grizzly hunt in the GYE, highlighting the state's strong interest in delisting the GYE DPS in order to provide new hunting opportunities for residents.¹⁷⁷

Second, hunting of the GYE DPS would lower the likelihood of interconnectivity between Recovery Ecosystems, further weakening the chance that the lower-48 grizzly will recover beyond today's scattered populations.¹⁷⁸ WildEarth Guardians noted that FWS admitted to this, going so far as to acknowledge that this delisting decision “could impede recovery of other still-listed populations,” which “may preclude population expansion and connectivity with other ecosystems.”¹⁷⁹ Clearly, the lower-48 grizzly species as a whole would be adversely affected, requiring FWS to draft a BiOp.

While there is no guarantee that any BiOp for delisting the DPS of a protected species could ever conjure “reasonable and prudent alternatives”¹⁸⁰ to avoid the jeopardization of the recovery of a species, to not even craft a BiOp is likely in violation of the ESA. In addition to FWS's failure to provide a BiOp, the agency continues to litigate

175. Kass, *supra* note 36, at 54.

176. Robbins, *supra* note 83; Idaho Dep't Fish & Game, *supra* note 83.

177. Kamila Kudelska, *Groups Challenge New Wyoming Law that Could Allow Grizzly Bear Hunt*, WYO. PUB. MEDIA (Feb. 22, 2019), <https://www.wyomingpublicmedia.org/post/groups-challenge-new-wyoming-law-could-allow-grizzly-bear-hunt#stream/0>.

178. Interconnectivity leads to greater genetic diversity, which in turn “can contribute to [an exploited species'] long-term sustainability” through more resilient populations less susceptible to the spread of disease. Daniel E. Schindler et al., *Population Diversity and the Portfolio Effect in an Exploited Species*, 465 NATURE 609, 609 (2010); Kayla C. King & Curt M. Lively, *Does Genetic Diversity Limit Disease Spread in Natural Host Populations?*, 109 HEREDITY 199, 199–200 (2012).

179. Answering Brief for Plaintiff WildEarth Guardians, *supra* note 165, at 75 (quoting Endangered and Threatened Wildlife and Plants; Removing the Greater Yellowstone Ecosystem Population of Grizzly Bears from the Federal List of Endangered and Threatened Wildlife, 82 Fed. Reg. 30,502, 30,536 (June 30, 2017) (codified at 50 C.F.R. pt. 17)).

180. 16 U.S.C. § 1536(b); 50 C.F.R. § 402.14(g)(4) (2019).

what sort of requirements would constitute the district court's mandated 'comprehensive review' of the remnant population of lower-48 grizzlies.

VI. IF DELISTING A PROTECTED DPS DOES COMPORT WITH THE ESA, WHAT CONSIDERATIONS ARE AT PLAY?

While the preceding section explored why the delisting of a DPS from a protected species does not comport with the ESA, this section takes an alternative approach: if this practice is permissible under the statute, then what factors should be considered when delisting? Because the comprehensive review mandated by the U.S. District Court for the District of Montana's opinion in *Crow Indian Tribe* remains undefined, this section lays out possible factors that could be considered. This section will first delve into why the standard criteria for delisting a protected species cannot work within the grizzly debate, and second explore what factors should be considered in the comprehensive review's functional impact considerations.¹⁸¹ The other half of the court-mandated comprehensive review, assessing the difficulties concerning the legal impact of the DPS delisting decision, has already been explored in Part V. To date, FWS steadfastly refuses to draft guidance documents on what considerations are at play for delisting a protected DPS; this Note seeks to fill this gap left by the agency and the *Humane Society v. Zinke* and *Crow Indian Tribe* courts.

A. Standard Delisting Practice does not Work Within this Sphere

FWS has claimed on appeal that the district court held that the agency must perform the standard delisting five-factor analysis to satisfy the "comprehensive review," although the appellees disagree on this interpretation. In addition to FWS claiming this is what the district court held, this claim—which was made despite the agency's failure to ask the Court for clarification before appeal¹⁸²—the intervening state of Wyoming has also put forth the five-factor test as the appropriate analysis.¹⁸³ However, before a review of the remnant population could take place, it is clear that Wyoming provides ample concern about

181. *Crow Indian Tribe v. United States*, 343 F. Supp. 3d 999, 1014 (D. Mont. 2018), *appeal docketed*, No. 18-36030 (9th Cir. Dec. 11, 2018).

182. Opening Brief of Plaintiff-Appellees Northern Cheyenne Tribe et al., *supra* note 153, at 32–33.

183. Opening Brief for Appellant State of Wyoming, *supra* note 148, at 25.

whether or not the GYE DPS would survive a five-factor delisting analysis.

The GYE DPS would likely not warrant delisting under the standard five-factor test. The fourth factor—inadequate regulatory mechanism—would immediately warrant the GYE DPS to be re-listed. As soon as the GYE DPS would be free from federal protection there is ample concern about the willingness of Wyoming to perform necessary functions to ensure the grizzly is not subsequently reduced to numbers warranting a return to the threatened species listing. While there is no scientific consensus on whether the GYE grizzly has reached its carrying capacity to “ensure long-term viability,”¹⁸⁴ state monitoring of this potentially delisted DPS would be a clear necessity. However, the state has shown a keen unwillingness to invest in further wildlife management, with the legislature having cut the Game and Fish Department’s budget, while lawmakers claim the state agency “does not need new revenue sources” to supplement the lost income.¹⁸⁵

There is precedent for inadequate state regulatory mechanisms to warrant against delisting. A U.S. District Court held that Texas was unable to ensure the adequate protection of the Barton Springs Salamander because of insufficient assurances of long-term protection and absence of any legally enforceable commitment to ensure the population would be preserved.¹⁸⁶ The Barton Salamander decision is analogous to the GYE grizzly; Wyoming’s unwillingness to provide assurances of long-term protection—seen through further cutting of state wildlife management funds and recent legislation not comporting with the ESA—weighs against delisting. Furthermore, there is an absence of meaningful state commitments to ensure this population would be preserved.¹⁸⁷

Lastly, this is not the first time in recent memory that Wyoming has been deemed unwilling to adequately protect a delisted DPS of a protected species. In 2009, FWS determined that the northern Rocky

184. Joint Supplemental Excerpt of Record of Appellees Humane Society et al., Northern Cheyenne Tribe et al., and Wildearth Guardians: Volume I at 191, *Crow Indian Tribe v. United States*, No. 18-36030 (9th Cir. Aug. 16, 2019), ECF No. 95-1.

185. Kamila Kudelska, *Grizzly Debate Reignites Question of Game and Fish Revenue*, WYO. PUB. MEDIA (Oct. 26, 2018), <https://www.wyomingpublicmedia.org/post/grizzly-debate-reignites-question-game-and-fish-revenue#stream/0>.

186. Malaika M. Eaton, Note, *Of Salmon, Salamander, and Lizards: Can State and Local Conservation Plans “Preempt” The Endangered Species Act?* 87 CORNELL L. REV. 185, 211–13 (2001).

187. Kamila Kudelska, *Some Wonder if a New State Bill Authorizing Grizzly Hunting May Be Illegal?*, WYO. PUB. MEDIA (Mar. 1, 2019), <https://www.wyomingpublicmedia.org/post/some-wonder-if-new-state-bill-authorizing-grizzly-hunting-may-be-illegal#stream/0>.

Mountain gray wolf DPS warranted delisting throughout its range except in Wyoming, due to inadequate regulatory mechanisms to ensure the species' protection.¹⁸⁸ Ultimately, the U.S. District Court for the District of Montana struck down the gray wolf DPS delisting decision for the remainder of the proposed delisted population, due to the ESA not permitting DPSs to be subdivided; to do otherwise, according to the court, would be “to add a new categorical taxonomy to the statute.”¹⁸⁹ In practice, this would be that if one state is unwilling to protect the species, then FWS cannot delist the distinct population segment. Under a traditional five-factor analysis, the GYE Grizzly would not warrant delisting because of inadequate regulatory mechanisms on the part of Wyoming, regardless of adequate protections provided by Idaho and Montana because a DPS cannot be drafted around state borders.

B. Comprehensive Review: The Functional Impact

Following *Humane Society*, the *Crow Indian Tribe* court required FWS to perform a “comprehensive review” which would take into account the “legal and functional” impact of the delisting on the remnant species.¹⁹⁰ Because the open legal questions concerning continued ESA protections have been previously discussed and remain largely unanswered,¹⁹¹ this section will tackle the functional impacts FWS should consider if these legal concerns could be assuaged.

To date, FWS has steadfastly refused to proffer guidance documents on what a comprehensive review would entail. This Note proposes what considerations should be tackled: those that ensure the continued existence and recovery of listed species. As discussed in the preceding paragraphs, FWS first should consider if the state regulatory mechanisms can assure that the species will not be hunted to numbers drastically below a population's generally agreed upon carrying capacity. Next, to achieve the purpose of the ESA, FWS must assess

188. Endangered and Threatened Wildlife and Plants; Final Rule to Identify the Northern Rocky Mountain Population of Gray Wolf as a Distinct Population Segment and To Revise the List of Endangered and Threatened Wildlife, 74 Fed. Reg. 15,123 (Apr. 2, 2009) (codified at 50 C.F.R. pt. 17).

189. *Defs. of Wildlife v. Salazar*, 729 F. Supp. 2d 1207, 1217 (D. Mont. 2010).

190. *Crow Indian Tribe v. United States*, 343 F. Supp. 3d 999, 1015 (D. Mont. 2018), *appeal docketed*, No. 18-36030 (9th Cir. Dec. 11, 2018).

191. *See supra* Part V (explaining ongoing legal questions on the status of the remaining lower-48 grizzly population).

the functional impact on the remnant population by asking: would the delisting help recover the imperiled species and further restore it to its historical range?

Because delisting decisions are fundamentally fact-based and reliant on species-specific science, there is no perfect formula for a DPS delisting protocol of a protected species. However, below are possible considerations that FWS could consider within the lower-48 grizzly context.

One approach that FWS could harness in delisting a DPS of a protected species' is to first ask whether or not the population in question has reached its carrying capacity in a specific habitat. If there is an excess number within the population—to the point where there is intense competition for finite food and resources—delisting may be warranted. However, this delisting decision should have further guarantees of advancing the ESA's mandate to recover an imperiled species. To do so, delisting could be ascertained when there are sufficient state assurances against over-hunting the soon-to-be delisted population while also moving some excess members of the species elsewhere within its historical range. In the grizzly context, this would translate to sufficient assurances from Wyoming, Idaho, and Montana of not over-hunting the GYE grizzly, and also FWS moving some grizzlies to other, less successful Recovery Ecosystems, such as the North Cascades or Bitterroot segments. In doing so, there would be greater connectivity between the ecosystems¹⁹² and the removal of ongoing isolation among populations. By providing these other Recovery Ecosystems more grizzlies, these other populations could potentially recover to the point where other segments may achieve long-sought connectivity in the decades to come. This is not the first time FWS has moved members of an endangered species into a new area to promote greater biodiversity. In 2018, the agency began transporting wolves into Michigan's Isle Royale National Park, where the endemic population was recently and drastically reduced in response to a sweeping reduction in the population from fifty to fourteen individuals by the spread of a virus (carried from the mainland by a hiker's canine companion) in addition to difficulties from continued inbreeding.¹⁹³

192. This provides valuable benefits to the species as a whole. See Schindler et al., *supra* note 178, at 609–12 (explaining benefits through greater species diversity and interaction); King & Lively, *supra* note 178, at 200 (explaining how genetic diversity leads to less risk of disease spread).

193. *Victory: Wolves at Isle Royale*, NAT'L PARKS CONSERVATION ASS'N,

From transporting excess GYE grizzlies to other Recovery Ecosystems, to achieving greater potential for future connectivity and strengthening biodiversity among populations, FWS has many considerations that can factor into the “functional impact” component of a comprehensive review. To comport with the intent of the ESA, future guidance documents on delisting DPSs of listed species should tackle how delisting these population segments can strengthen the remnant populations by reconnecting scattered population segments after centuries of isolation. This could be implemented alongside permissive state hunting regimes. What *Humane Society v. Zinke* and *Crow Indian Tribe* have made clear is that the lack of any FWS guidance on delisting DPSs from listed species fails to provide needed agency clarity in the midst of a deeply contentious debate.

VII. CONCLUSION

The GYE grizzly litigation poses an unsettled legal question: can FWS designate a DPS from a listed species, and ultimately delist the segment from federal protection under the ESA? The *Crow Indian Tribe* Court has followed the D.C. Circuit’s *Humane Society* opinion, but the Ninth Circuit may chart its own path within this deeply contentious debate between environmental groups, state governments, native tribes, hunting organizations, and FWS.

This Note laid out the starting point for this necessary and worthwhile debate. Future discussion is needed on the appropriateness of delisting DPSs of protected species, and how such a process would even commence. What is clear is that FWS has failed to provide the regulatory framework to lay out a standard practice, and until they do

<https://www.npca.org/advocacy/37-wolves-at-isle-royale> (last visited May 14, 2020). For FWS’ Record of Decision, see *Record of Decision, Final Environmental Impact Statement to Address the Presence of Wolves at Isle Royale National Park* (2018), https://www.nps.gov/isro/learn/management/uploads/ISRO_Web_Accessible_2018_06_07_Wolf_Record_of_Decision_FINAL_Signed.pdf. For an update on how the new wolf population is faring in the park, see News Release, Nat’l Park Serv., Group Formation of New Isle Royale Wolves Leads to Territorial Aggression (Dec. 20, 2019), <https://www.nps.gov/isro/learn/news/group-formation-of-new-isle-royale-wolves-leads-to-territorial-aggression.htm>. While it is too early for definitive results, the twelve introduced wolves from across Minnesota and Canada have begun to interact and form “loose associations with one another.” *Id.* For an overview of the Isle Royale wolf population’s harm from continued inbreeding, see Jacqueline A. Robinson et al., *Genomic Signatures of Extensive Inbreeding in Isle Royale Wolves, a Population on the Threshold of Extinction*, 5 SCI. ADVANCES 1, 8–9 (2019), <https://advances.sciencemag.org/content/advances/5/5/eaau0757.full.pdf>.

so the agency will likely fail in future litigation concerning further species' delisting. This future framework must address how this newfound practice comports with the ESA's definition of what constitutes a species and provide further information on the functional impact of delisting on the remnant population. If the agency can find a legitimate legal basis for DPS delisting for listed species, then its species-specific comprehensive review should be required to include further assistance to other, less-healthy remnant populations, alongside decreased protections for healthy segments in order to advance the ESA's statutory purpose of recovering imperiled species.

The ESA was drafted with the lower-48 grizzly in mind.¹⁹⁴ Any federal action that weakens this species warrants serious discussion. To do otherwise would risk the loss of a species from the lower-48 that has been ingrained into American culture since Lewis and Clark, relegating it to the confines of Alaska. As the noted writer Aldo Leopold so aptly put it: to consign the "grizzl[y] to Alaska is about like relegating happiness to heaven; one may never get there."¹⁹⁵ Over the coming months the fate of the grizzly and DPS delisting will fundamentally change as the Ninth Circuit writes the next chapter of this ongoing debate.

194. *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 183–84 (1978) (“[T]he continental population of grizzly bears which may or may not be endangered, but which is surely threatened Once this bill is enacted, the appropriate Secretary . . . *will have to take action* to see . . . that these bears are not driven to extinction. . . . [T]he agencies of Government can no longer plead that they can do nothing about it. *They can, and they must. The law is clear.*” (quoting 119 CONG. REC. 42,913 (1973))).

195. ALDO LEOPOLD, SAND COUNTY ALMANAC 458 (1949).