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The Sad Story of the Northern Rocky Mountain Gray Wolf Reintroduction Program

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ESSAYS

THE SAD STORY OF THE NORTHERN ROCKY MOUNTAIN GRAY WOLF REINTRODUCTION PROGRAM

A bloody dead calf is something more than a lost miscellaneous animal, or a monetary figure. The heart *hurts* in these cases . . . Why it's so hard to welcome an animal who is, yes, gorgeous, and wild, and part of the natural balance – yes, all those things – but also a creature that's going to break their heart a time or two.¹

*Hope M. Babcock**

INTRODUCTION

A reflection on the past, present and future of environmental law in this 20th Anniversary Edition offers an opportunity to revisit the Endangered Species Act, particularly the Northern Rocky Mountain States federal wolf reintroduction program. Environmental programs that depend on public support for their effectiveness are problematic when the government fails to understand and compensate for this fact. This essay explores the proposition that the federal

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1. Laura Pritchett, *Sight the Gun High*, 46 NAT. RESOURCES J. 1, 5 (2006) (emphasis in the original).

government's failure to anticipate and respond to the negative reaction of people adversely affected by proposed solutions to environmental problems is contributing to a lack of progress despite great strides in our scientific understanding. This problem is particularly apparent in the Northern Rocky Mountain States federal wolf reintroduction program under the Endangered Species Act (ESA).² Although wolves have thrived from a biological perspective as a result of the program, public resistance in the areas where wolves were released has not abated.³ That conflict may threaten to undermine the wolf's extraordinary recovery now that its protections have been lifted by the U.S. Department of the Interior.⁴

This essay assumes that the science of wolf recovery is sufficiently indeterminate that the wolf could be relisted, if the current federally allowed "take" under state management programs continues and other factors affecting the robustness of wolf populations simultaneously decline.⁵ Assuming that relisting is not a desired end result for the federal government, which has invested heavily in the Gray Wolf's recovery,⁶ the obvious question is: what went wrong with the Department of Interior's administration of the Northern

2. *See generally* 16 U.S.C. §§ 1531-1544 (2012).

3. Much less opposition greeted the reintroduction of wolves in the north Central Great Lakes states. *See* Paula Hartman, *Resolving Conflicts Between Endangered Species and Man: Case Study—The Reintroduction of Gray Wolves to Yellowstone National Park and Central Idaho*, 18 *ENVIRONS: ENVTL. L. & POL'Y J.* 88, 97 (1994-1995) ("[P]ublic education and outreach was a key component of restoring wolf populations in Wisconsin.").

4. *See* Designating the Northern Rocky Mountain Population of Gray Wolf as a Distinct Population Segment and Removing This Distinct Population Segment from the Federal List of Endangered and Threatened Wildlife, 72 *Fed. Reg.* 6106, 6109 (Feb. 8, 2007) (to be codified at 50 C.F.R. pt. 17).

5. An example of one such factor is global climate change. *See generally* Suzanne Goldenberg, *Climate Change Insight Gleaned from Yellowstone Wolves*, *THE GUARDIAN*, (Dec. 1, 2011), *available at* <http://www.guardian.co.uk/environment/2011/dec/01/climate-change-scientists-wolves> (highlighting research regarding the effects of climate change on Yellowstone wolves).

6. In 2011 alone, the cumulative cost of the reintroduction of the Gray Wolf approached nearly 5 million dollars. *See* U.S. FISH & WILDLIFE SERV., *FEDERAL AND STATE ENDANGERED AND THREATENED SPECIES EXPENDITURES, FISCAL YEAR 2011*, at 1, 9-10 (2011), *available at* <http://www.fws.gov/endangered/esa-library/pdf/2011.EXP.final.pdf>.

Rocky Mountain States wolf reintroduction program and the wolf's subsequent delisting?

On a macro level, the ESA has enabled species on the brink of extinction to recover sufficiently through captive breeding or translocation programs to be returned to the wild.⁷ But residents in recovery areas often see themselves as victims of these reintroduction programs and resist having their land and life styles conscripted for some zoological experiment.⁸ Opponents of the Gray Wolf Reintroduction Program have not accepted, let alone internalized the goals of laws like the ESA and appear not to accept basic environmental norms like species conservation or biodiversity.⁹ To these individuals, the broad scientific benefits of restoring wolves to the wild and the environmental norms espoused by the ESA directly contradict deeply held regional norms regarding predators. These

7. Examples of such species include the Mexican and Red Wolf, the Gray-footed Ferret, the Peregrine Falcon, and the California Condor. See e.g. James L. Noles, Jr., *Is "Recovered" Really Recovered?: "Recovered Species Under the Endangered Species Act*, 39 CUMB. L. REV. 387, 410 (2009) (discussing the recovery of the peregrine falcon). There are forty-nine Mexican Wolf captive breeding facilities, a mixture of zoos and wildlife centers, and three pre-release facilities where wolves scheduled for release are held to acclimatize to an area before being released; April Reese, *Captive Breeding Program Key to Mexican Wolf Recovery*, GREENWIRE (October 17, 2012), available at <http://0-www.eenews.net.gull.georgetown.edu/Greenwire/2012/10/17/archive/9?terms=Captive+breeding+program+key+to+Mexican+wolf+recovery>. Professor Holly Doremus has written a thought-provoking article criticizing the U.S. Fish & Wildlife Service for so micromanaging the release of large predators like the wolf as to negatively affect the ability of reintroduced species to "live as wild, natural creatures," reducing "the likelihood of wild recovery." See Holly Doremus, *Restoring Endangered Species: The Importance of Being Wild*, 23 HARV. ENVTL. L. REV. 1, 3 (1999).

8. See *Babbitt v. Sweet Home Chapter of Cmty for a Great Or.*, 515 U.S. 687, 714 (1995) (Scalia, J., dissenting) (referring to "the simplest farmer who finds his land "conscripted to national zoological use.").

9. See Hope M. Babcock, *Putting a Price on Whales to Save Them: The Moral Infirmities of a Market-Based Solution to a Regulatory Failure or What Do Morals Have to Do with It?* (forthcoming 2013) (unpublished manuscript) (on file with author) (discussing the widely held norms of protecting species from extinction and duty to maintain biodiversity) [hereinafter Babcock, *Putting a Price on Whales to Save Them*]; but see Katrina Miriam Wyman, *Rethinking the ESA to Reflect Human Dominion Over Nature*, 17 N.Y.U. ENVTL. L.J. 490, 492 (2008) (asserting that the low value people put on biodiversity means that they "do not want to invest much in saving species.").

strong negative feelings towards wolves are apparent in the enthusiasm with which residents of Wyoming, Montana, and Idaho are responding to their newfound ability to hunt and trap wolves again – each state rapidly reached its state wolf hunt quotas.¹⁰

The story might have been different if the U.S. Fish & Wildlife Service (FWS) had done a better job of understanding this regional hostility towards wolves and had factored it into its decision-making process as to whether, when, and where to release wolves. Instead, the FWS let science alone dictate those decisions. In addition, the federal government was not sufficiently proactive at disseminating commonly accepted environmental norms of species conservation and biodiversity to overcome countervailing regional beliefs and norms during any stage of the recovery effort. Perhaps if the FWS had implemented a robust public education or social marketing program to better inform the local population about how to coexist with wolves and the true benefits and costs of wolf reintroduction, both resistance to the release of wolves back into the wild and the fury that greeted them once their protections were lifted might have been reduced.

To develop these thoughts, Part I of this essay briefly introduces the ESA, with particular attention paid to the program to recover endangered species in the wild and the delisting process. The first part also identifies some of the uncertainties and problems with the recovery and delisting programs. Part II discusses the current status of gray wolves in the Northern Rocky Mountain States and the trajectory of the federal program to recover them in the wild. Part II additionally identifies structural compromises the government made in the Gray Wolf recovery program to overcome regional hostility to the wolf's reintroduction from the livestock and hunting industries.¹¹

10. See Ralph Maughan, *Wyoming's First Wolf Hunt Soon to Close (Update)*, THE WILDLIFE NEWS (Dec. 29, 2012), available at <http://www.thewildlifeneeds.com/2012/12/29/wyomings-first-wolf-hunt-soon-to-close/>; see also Ken Cole, *193 Idaho Wolves Killed Since April 1st*, THE WILDLIFE NEWS (Dec. 19, 2012), available at <http://www.thewildlifeneeds.com/2012/12/19/193-idaho-wolves-killed-since-april-1st/>; see also Jess Edberg, *Montana Wolf Hunt Report*, INTERNATIONAL WOLF CENTER, available at <http://www.wolf.org/wolves/news/iwmag/2012/spring/mtwolffhunt.pdf> (last visited Feb. 18, 2012).

11. For example, shortly before wolves were released, the Wyoming state legislature approved a \$1000 state-funded bounty on wolves that strayed from

The part then discusses how these initiatives failed and perhaps even sent an unintended signal to the broader public in the release states that wolves did not need the full protection of the ESA. Parts III and IV look at public attitudes toward wolves and steps the government might have taken to change those attitudes by focusing on the role of social norms to change behavior.

The essay concludes with the thought that, although the FWS may be effective in applying scientific knowledge to pull species back from the brink of extinction, the agency may be failing large predators, like wolves, whose survival depends on their return to the wild, because the agency has failed to effectively address negative regional attitudes about them and contrary norms.¹² The wolf story highlights the importance of the government as norm changer to smooth the introduction of such programs when they contradict well-established behavioral patterns and expectations. If these programs cannot be made to work, and the initial success of species reintroduction initiatives cannot be made permanent once the species is delisted, we may have to content ourselves with either observing

Yellowstone National Park and required the state to pay attorney's fees for anyone accused of killing a wolf in violation of the ESA. Hartman, *supra* note 3, at 99. The then Governor vetoed the bill because he believed it would not pass constitutional muster. *Id.*

12. An example of struggles with wolf recovery can be found in the saga of the reintroduction of the Mexican wolf in the American southwest. After nearly 12 years, the Mexican wolf struggled to reassert itself in the Blue Range Recovery Area due to a combination of factors. See April Reese, *A Decade On, Southwest Wolf Reintroduction Effort Faces Long Odds*, N.Y. TIMES (Mar. 11, 2010), available at <http://www.nytimes.com/gwire/2010/03/11/11greenwire-a-decade-on-southwest-wolf-reintroduction-effo-82925.html?pagewanted=all>. The Mexican Wolf story started with the release of 11 captive-bred Mexican Wolves into eastern Arizona. See *Mexican Wolf Natural History*, ARIZ. GAME & FISH DEP'T, available at http://www.azgfd.gov/w_c/wolf/naturalhistory.shtml (last visited Feb. 12, 2013). However, it took 14 years for the program to produce a wild born wolf. *Id.* A recent survey of Mexican wolves in the wild found seventy-five wolves – thirty-eight in New Mexico and thirty-seven in Arizona – the highest number to date, but still too few to establish a viable population. April Reese, *2012 Mexican Wolf Survey Finds 75 'Lobos' – Highest Number Ever*, GREENWIRE (Feb. 7, 2013), available at <http://0-www.eenews.net.gull.georgetown.edu/Greenwire/2013/02/07/archive/10?terms=2012+Mexican+wolf+survey+finds+75+%E2%80%98lobos%E2%80%99+%E2%80%93+highest+number+ever>. The FWS attribute program's success to cooperation among federal, state, and tribal agencies as well as several counties and a privately administered compensation fund for ranchers who lost cattle to wolf predation. *Id.*

large predators in zoos or enduring a repetitive, never-ending, and expensive cycle of species decline and federally subsidized recovery – certainly not what the drafters of the ESA intended.

I. THE ENDANGERED SPECIES ACT AND THE SPECIES REINTRODUCTION PROGRAM

One of the primary purposes of the ESA is “to provide a program for the conservation of” endangered and threatened species.¹³ The Act’s goals are to be achieved through a variety of programs, including a program to list endangered and threatened species¹⁴ and designate habitat that is critical to their survival.¹⁵ The ESA directs federal agencies to “utilize their authorities in furtherance” of the Act’s conservation purpose¹⁶ and forbids federal agencies from engaging in activities that might “jeopardize the continued existence” of listed species or “adversely modify” their critical habitat.¹⁷ The Act also prohibits anyone from taking or otherwise harming a listed species,¹⁸ except pursuant to what is referred to as an incidental take permit.¹⁹ These provisions make the ESA “the workhorse of species

13. 16 U.S.C. § 1531(b). An endangered species is any species that is “in danger of extinction throughout all or a significant portion of its range”; a threatened species is any species that is likely to become endangered within the foreseeable future.” 16 U.S.C. § 1532(6) and (20), respectively. Conservation is defined in the ESA not only as “ensuring the survival of species,” but also as bringing any listed species “to the point at which the measures provided [in the Act] are no longer necessary.” *Id.* §1532(3); Wyman, *supra* note 9, at 494.

14. *Id.* § 1533(1); *see also* Wyman, *supra* note 9, at 515 (“For biologists and many others the imperilment of a species is a singular event worth highlighting.”). *But see id.* at 523 (“I am betting that we would do better at protecting species generally by reducing the momentousness of the listing decision and, after listing, crafting legally tailored protections that actually could be enforced. The idea is that we should trade off the broad but under-enforced protections that listing currently affords, for more fine-grained but stronger protections that stand a better chance of being enforced and safeguarding species and ecosystem services.”).

15. 16 U.S.C. § 1533(a)(3)(A).

16. 16 U.S.C. § 1531(c); *see also id.* § 1536(a)(1) (containing a similar directive).

17. *Id.* § 1536(a)(2).

18. *Id.* § 1538.

19. *See id.* § 1536(b)(4) (regarding federal agency actions that might otherwise jeopardize any listed species); *id.* §1539 (regarding prohibited actions not subject to section 7). Professor Wyman notes that “holders of incidental take permits have

protection” with respect to human-induced threats directly connected to the decline of specific species.²⁰ They reflect congressional intent to tilt the balance in any dispute involving an endangered species towards species protection.²¹

However, many people, particularly those directly affected by the ESA, perceive the Act as essentially unfair because its burdens and benefits are unevenly distributed.²² This belief can perversely

considerable leeway not to comply with their habitat conservation plans because the FWS does not actively monitor compliance with those plans,” which serves as an indication that the costs that are actually imposed on land owners are considerably less than the statute’s critics claim. Wyman, *supra* note 9, at 503, 505-506.

20. J.B. Ruhl, *Keeping the Endangered Species Act Relevant*, 19 DUKE ENVTL. L. & POL’Y F. 275, 277 (2009). Many, not including Professor Ruhl, believe that the statute’s provisions need to be extended to address problems like climate change. *See, e.g.*, Blake Armstrong, *Maintaining the World’s Marine Biodiversity: Using the Endangered Species Act to Stop the Climate Change Induced Loss of Coral Reefs*, 18 HASTINGS W.-NW. J. ENVTL. L. & POL’Y 429 (2012); *see generally* Environmental Law Institute, § 23:62. *Potential Implications for ESA Application*, 3 L. OF ENVTL. PROT. § 23:62 (2012). On the effectiveness of sections 7 and 9 to protect listed species, *see* Wyman, *supra* note 9, at 504 (indicating that judicial deference, among other constraints, may explain why “both sections 7 and 9 are much less powerful in practice than they appear except in the sporadic cases in which they are enforced to the limit highlighted by the Act’s critics.”); *see also generally* Keran Suckling et al., *On Time, On Target: How the Endangered Species Act is Saving America’s Wildlife*, CENTER FOR BIOLOGICAL DIVERSITY (May 2012), http://www.esasuccess.org/pdfs/110_REPORT.pdf.

21. *See, e.g.*, *Tennessee Valley Auth. v. Hill*, 437 U.S. 153, 185 (1978) (“[T]he legislative history undergirding § 7 reveals an explicit congressional decision to require agencies to afford first priority to the declared national policy of saving endangered species.”). Andrea Olive and Leigh Raymond, *Reconciling Norm Conflict in Endangered Species Conservation on Private Land*, 50 NAT. RESOURCES J. 431, 441 (2010) (“[E]vidence for the influence of a Leopoldian norm against extinction is quite prevalent in the record of the ESA’s passage. What’s more, the apparent lack of serious opposition to the law is further evidence that it appealed to a powerful moral principle. What little concern was expressed about the law tended to focus on the balance of power between the states and the federal government in implementing the statute, rather than the ESA’s larger normative goals.”).

22. J.B. Ruhl, *The Endangered Species Act’s Fall from Grace in the Supreme Court*, 36 HARV. ENVTL. L. REV. 487, 529-30 (2012), *available at* http://ssrn.com/abstract_1853339 (“[T]o the extent we justify the ESA on the ground of the collective benefits species offer to humans (medicines, aesthetic pleasure, ecosystem functions, etc.), the costs of species protection tends to fall on

provoke contrary behavior in an attempt to avoid the Act's effect.²³ It can also provoke opposition to the listing and reintroduction of species, as well as pressure to delist recovered species like the Gray Wolf.

Fundamental conflicts regarding underlying norms reinforce the belief that the Act is unfair. The ESA embodies a norm of species preservation and with it the duty to protect the environment on which species depend. But, this norm conflicts with an equally strong normative belief in an individual's right to enjoy her property without government interference.²⁴ For example, the ESA is currently protecting wolves that compete with landowners over the use of their land and with hunters over access to shared prey.²⁵

In many ways, the ESA seeks to turn the clock back to an earlier era when nature was not so "domesticated," and large predators like wolves had not been eliminated in the interest of making ourselves

a much narrower subgroup of society than all those who derive the benefits."); *see also id.* at 519 (By the early 1990s, the ESA was about far more than stopping a federal project here and there – the 'one creek' had gone viral, the ESA had gone nationwide, and the regulatory burden had gone private). Indeed Jamison Coburn questions "We are placing too much confidence in a system . . . that lacked necessary social and political support when it was laid." Jamison E. Colburn, *Canis (Wolf) and Ursus (Grizzly): Taking the Measure of an Eroding Statute*, 22 NAT. RESOURCES & ENVT. 22, 25 (2007).

23. Wyman, *supra* note 9, at 506.

24. *See* Andrea Olive & Leigh Raymond, *Reconciling Norm Conflict in Endangered Species Conservation on Private Land*, 50 NAT. RESOURCES J. 431, 432 (2010) ("The political difficulties of renewing or even implementing the ESA stem from conflict between two deeply held normative beliefs: (1) a property owner's intrinsic right to control land with limited political interference, and (2) a duty to care for land responsibly and to avoid contributing to a species' extinction – which can also be framed as a species' intrinsic right to exist."); *see also* Wyman, *supra* note 9, at 507 (discussing how the ESA challenges the perception of human dominion over the earth because the law demands that people relinquish some control over their environment to accommodate protected wildlife); *but see* Ruhl, *supra* note 22, at 518, (arguing that the ESA's evolution "from a values statute to a legalistic regulatory regime" enabled the Supreme Court to treat it less like a novel environmental law and more like any other regulatory program entitled to no particular deference).

25. *See* Edward A. Fitzgerald, *Defenders of Wildlife v. Salazar: Delisting the Children of the Night in the Northern Rocky Mountains*, 31 PUB. LAND & RESOURCES L. REV. 1, 47-48 (2010).

and our lifestyles more secure.²⁶ This scrolling back of modernity to an earlier era can be jarring to individuals who are used to an environment shaped to suit human needs, particularly when they have helped shape that environment.²⁷

A. The Application of the ESA's Listing and Delisting Provisions to Wolves

Section 4(f) of the Act requires the Secretary “to develop and implement [recovery plans] for the conservation and survival of” listed species.²⁸ Recovery plans for listed species must include “site-specific management actions as may be necessary” for the species conservation and survival, and “objective, measurable criteria which when met, would” allow the species to be delisted.²⁹ Removal of a species from a list of endangered or threatened species must be based solely on “the best scientific and commercial data available.”³⁰ Under FWS regulations, delisting a species is only allowed if a review of

26. Wyman, *supra* note 9, at 490 (quoting Peter Kareiva et al., *Domesticated Nature: Shaping Landscapes and Ecosystems for Human Welfare*, 316 SCIENCE 1866, 1866 (2007)); *see also* Wyman, *supra* note 9, at 490 (quoting BILL MCKIBBEN, *THE END OF NATURE* 51 (2006)) (saying that “we live in a post natural world [where] the awesome power of man . . . has overpowered ‘Mother Nature.’”).

27. Professor Wyman argues that the “powerful reshaping of the landscape and its ecological, political, and economic consequences” is one reason that it has been so difficult fulfilling the ESA’s goals of “halting and reversing species extinction.” Wyman, *supra* note 9, at 492.

28. 16 U.S.C. § 1533(f). Professor Ruhl cites recovery plans as an example of his thesis that the ESA is not a “benefit-mandating law,” but is rather a “harm-preventing” one because the courts have interpreted recovery plans as having not mandatory effect on anyone, including federal agencies. Ruhl, *supra* note 20, at 288; *see also* Jenny K. Harbine, *Gray Wolves in the Northern Rockies Again Staring Down the Barrel at Hostile State Management*, 36 ECOLOGY L. CURRENTS 195, 198-99 (2009) (describing the listing process).

29. 16 U.S.C. § 1533(f)(1)(B)(i) and (ii), respectively.

30. *Id.* § 1533(b)(1)(A). The issue of whether the Gray Wolf’s delisting was supported by the best available science was the basis for the environmentalists’ challenge to the delisting action. *See* Plaintiffs’ Memorandum in Support of Motion for Summary Judgment, *Defenders of Wildlife v. Salazar*, 729 F. Supp. 2d 1207 (2010) (No. CV-09-77-M-DWM), 2009 WL 77653546; *see also* Harbine, *supra* note 28, at 199 (arguing that FWS did not employ the “‘best scientific . . . data available’ when it delisted gray wolves in the northern Rocky Mountains based upon inadequate recovery standards.”).

the species' status shows that it is no longer endangered or threatened within its range because it is either already extinct, has recovered, or the original information supporting classification was inaccurate.³¹ To make this determination, the FWS must define the species range.

The FWS had actually delisted very few species until 2012, when it recommended delisting 20 species,³² including two distinct population segments (DPSs) of gray wolves³³ – the Northern Rocky Mountain Population of Gray Wolves and the Western Great Lake Population of Gray Wolves.³⁴ In fact, from the ESA's enactment until 2002, only thirteen species had been delisted because their populations were deemed sufficiently recovered to no longer need the

31. Noles, *supra* note 7, at 393 (referencing and quoting FWS regulations 50 C.F.R. §424.11(d)(1)-(3)). FWS regulations define "recovery" as "improvement in the status of a listed species to the point at which listing is no longer appropriate under the criteria set out in section 4(a)(1) of the Act." 50 C.F.R. §402.02 (2009) (referencing 16 U.S.C. § 1533(a)(1)); *see also* Brandon T. Berrett, Casenote, *Is Defenders of Wildlife v. Salazar Correct that Successful State Management of Recovered Rocky Mountain Gray Wolves Is Not Compatible with the Endangered Species Act?*, 47 IDAHO L. REV. 595, 602 (2011) (stating that "delisting decisions are composed of both demographic and risk management elements.").

32. U.S. Fish and Wildlife Serv., Report to Congress on the Recovery of Threatened and Endangered Species: Fiscal Years 2009-2010, at 11 (2012), *available at* http://www.fws.gov/endangered/esa-library/pdf/Recovery_Report_2010.pdf.

33. The definition of species in the ESA includes "any distinct population segment [DPS] of any species of vertebrate fish or wildlife which interbreeds when mature." 16 U.S.C. § 1532(16). This enables the Secretary to list any DPS of a vertebrate species, even in circumstances when the species' population as a whole is not endangered or threatened. *See* Policy Regarding the Recognition of Distinct Vertebrate Population Segments Under the Endangered Species Act, 61 Fed. Reg. 4722, 4725 (Feb. 7, 1996).

34. Harbine, *supra* note 28, at 196-98 (discussing the delisting of wolves in the northern Rockies by both the Bush and Obama Administrations and intervening litigation). Prior to delisting, the two wolf populations were designated as DPSs. *See* Designating the Northern Rocky Mountain Population of Gray Wolf as a Distinct Population Segment, *supra* note 4. The Western Great Lakes Distinct Population Segment of Gray Wolves was also designated a DPS and delisted on the same day. 72 Fed. Reg. 6052 (Feb. 8, 2007). Jamison Colburn parallels the delisting of a DPS of grizzlies in the Greater Yellowstone area. *see* 72 Fed. Reg. 14,870 (Mar. 29, 2007), with that of wolves, noting just at the point at which the grizzly bear population was expanding beyond the boundaries of Yellowstone National Park, the FWS essentially threw up its hands and said it had done all it could to restore the species to long-term viability. Colburn, *supra* note 22, at 22.

Act's protection³⁵ – that number exceeded only by four the number of species that were delisted because they were assumed to be extinct.³⁶

Critics of the delisting process may be right that it is driven more by politics than by law or science.³⁷ There are no FWS policies, manuals, or other forms of guidance on when the goals of a reintroduction program have been fulfilled – it is as though the agency knows it when it sees it.³⁸ The boundaries of a species' range, within which a determination is made that it is no longer in danger of extinction, appear to be a matter of “local cultural intolerance,” not

35. That number rose to seventeen from 2002 to 2007. Noles, *supra* note 7, at 397. Among the most recognizable of the delisted species are the American alligator, the American and Arctic peregrine falcon, and the Atlantic coast populations of the brown pelican. *Id.* The “most compelling” of the delistings was that of “the bald eagle . . . in the lower forty-eight states,” marking “the formal end of a thirty-four year span of protection” under the ESA. *Id.* at 388.

36. Wyman, *supra* note 9, at 495. Professor Wyman refers to these species as “conservation-reliant,” *i.e.*, they requiring continuing protection under the ESA so that they do not become extinct. *Id.*; *see also* Noles, *supra* note 7, at 395 (“As of [2008], nine species have been delisted due to extinction. Another sixteen species have been delisted due to erroneous data.”).

37. *See* Noles, *supra* note 7, at 435-436 (concluding after a review of the status of seven delisted species, that some should not have been listed in the first place, that for some of the delisted species the requisite monitoring period is too short to establish whether they have recovered or not, that the credit for what recovery has occurred for several species may be due to protections under other laws, finding no cases where a “‘recovered’ species has subsequently become imperiled); *see also* Justin A. Gude; Michael S. Mitchell, Robin E. Russell; Carolyn A. Sime; Edward E. Bangs; L. David Mech; Robert R. Ream, *Wolf Population Dynamics in the U.S. Northern Rocky Mountains Are Affected by Recruitment and Human-Caused Mortality*, 76 WILDLIFE MGMT. J. 108, 116 (August 2011) (acknowledging “considerable uncertainty remains regarding the impacts of human-caused mortality on wolf population growth,” making it difficult to document “whether NRM (northern Rocky Mountain) wolf populations remain at or above minimum recovery criteria.”). Colburn adds to his criticism of the delisting process his concern that “the delisting proceedings to date prove something very disconcerting about the ESA as a whole: it was not built to absorb the forces it is absorbing today.” Colburn, *supra* note 22, at 25.

38. Colburn, *supra* note 22, at 23 (since the listing process is driven by science, so should the delisting process). Indeed, the ESA is “silent on anything such as confidence levels for when listed taxa have recovered” sufficiently to no longer require the statute's protection. *Id.* at 24.

science.³⁹ In delineating the wolf's historic range, "[i]t is almost as though, the FWS . . . has determined that human violations of law are involuntary forces like disease or other natural threats to endangered species habitat."⁴⁰ Yet to determine that a DPS of a species, like the Northern Rocky Mountain Gray Wolf, has recovered enough within its range to allow its delisting, the FWS had to assume that human-caused mortality would be minimized and that the wolf's food source would remain stable.⁴¹ Both assumptions seem problematic given the open hostility of residents in the Northern Rocky Mountain States towards wolves.⁴² Humans have been, and still are, "the single most important limiter" of the wolves' survival both in terms of human caused mortality and decreasing supplies of food and habitat.⁴³ In

39. Colburn, *supra* note 22, at 23 (quoting the FWS); *see also id.* at 25 ("FWS seems to have hidden a deeply normative judgment about the geography of such predators as wolves . . . behind a mountain of bureaucratic constructions.").

40. Colburn, *supra* note 22, at 23.

41. Colburn, *supra* note 22, at 24.

42. Before delisting, Idaho sought federal approval to kill over 25 wolf packs, roughly 100-250 wolves because of alleged chronic livestock depredation and another 100 wolves in the state's upper Clearwater Basin in response to "perceived impacts on ungulate herds" (e.g., elk). Harbine, *supra* note 28, at 203. Idaho held a public wolf hunt in 2011 even though the state has not yet established a wolf mortality quota and has recently issued a bounty for the number of wolves killed. *See* Northwest Public Radio, *Idaho Allows Wolf Hunting Season With Traps, No Kill Quota*, OPB (July 28, 2011), available at <http://earthfix.opb.org/flora-and-fauna/article/idaho-allows-wolf-hunting-season-with-traps-no-kill/>; *see also* Earthjustice et al., *Northern Gray Wolf Delisting Fact Sheet: State Management Will Drive Wolf Numbers Down to a Bare Minimum*, DEFENDERS OF WILDLIFE, available at http://www.defenders.org/sites/default/files/publications/northern_rockies_wolves_delisting_fact_sheet.pdf (last visited Feb. 12, 2013). Reflecting Idaho's "open hostility toward wolves," then governor Butch Otter announced at a 2007 rally his support for a "gray wolf kill" that would remove all but 100 of Idaho's wolves after their delisting and crowed that he would be among the first to "bid" for a ticket to shoot a wolf. Harbine, *supra* note 28, at 203. Wyoming initially proposed to the FWS that it be allowed to eradicate all wolves outside national parks, "aiming essentially for functional (re-)extinction." Colburn, *supra* note 22, at 24. Wyoming went so far as to sue FWS when it rejected the state's proposed wolf management plan claiming a violation of the Tenth Amendment and the Guarantee Clause by not allowing the delisting. Colburn, *supra* note 22, at 24 (citing *Wyoming v. Dept. of Interior*, 360 F. Supp. 2d 1214 (D. Wyo. 2005), *aff'd*, 442 F.3d 1262 (10th Cir. 1262 2006)).

43. Colburn, *supra* note 22, at 23.

light of human hostility towards wolves, and because no other federal regulatory program is sufficiently tailored to meet the needs of wolves should ESA protection disappear, one obvious conclusion is that the only thing that had been protecting “recovered” species like wolves from returning to an endangered state was the ESA.⁴⁴

The FWS failed to consistently apply the “best science” in managing its wolf recovery program. Judging by the rate at which the released wolves multiplied when released back into the wild, it is clear that the FWS got the science right *initially*. Delisting the wolf, however, put a premium on the FWS also getting the science right at the conclusion of the process – where it was deciding whether the wolf population had sufficiently recovered enough to enable its delisting. Yet, neither the FWS’s recovery metric nor the kill quotas of the new state managers⁴⁵ appear to have anything to do with the robust reestablishment of the species; rather Congress intervened and directed the delisting of the Rocky Mountain Gray Wolf and pressured the FWS to accept the states’ wolf management proposals.⁴⁶ Implicit in a statutory requirement that the FWS together with the wildlife agencies of the release states monitor for five years the survival status of delisted species is that those states would control the threats that led to the released species prior jeopardy, *i.e.* human exploitation.⁴⁷ In the wolf’s case the opposite has been true. The Gray Wolf’s delisting has been greeted by state-authorized, federally approved relatively high quota wolf hunts and trapping, which some fear will drive the wolf back to its endangered status.⁴⁸

44. Examples of such federal programs that offer duplicative protection to listed endangered species are the Migratory Bird Treaty Act, 16 U.S.C. §§703-712, and the Marine Mammal Protection Act, 16 U.S.C. §§ 1361-1421h.

45. See *infra* 22-23 (describing the wolf management plans of the release states).

46. See *infra* n. 84. See also Edward A. Fitzgerald, *Delisting Wolves in the Northern Rocky Mountains: Congress Cries Wolf*, 41 ENVTL. L. REP. NEWS & ANALYSIS 10840, 10850 (2011) (arguing that, after a series of setbacks in the federal court system, Congress intervened with the intent to shift the balance of power in favor of the states).

47. A 1988 amendment to the ESA requires that the FWS together with the appropriate states monitor the status of species for five years after their delisting to determine their ability to survive without the statute’s protection. 16 U.S.C. §1533(g)(1).

48. Individual federal and state wildlife staff opposed the locations of some of these hunts. See Matthew Brown, *Gray Wolves Shot Near Yellowstone*, *Wildlife*

II. THE NORTHERN ROCKY MOUNTAIN GRAY WOLF RECOVERY PROGRAM

By the 1930s, wolves were nearly erased from the lower 48 States as the result of “one of the most effective eradication campaigns in modern history.”⁴⁹ As a result of that campaign’s success, in 1974,⁵⁰

Commissioners To Consider Hunting Restrictions, HUFFINGTON POST (Dec. 12, 2012), available at http://www.huffingtonpost.com/2012/12/10/gray-wolves-yellowstone-hunting-restrictions_n_2270706.html (Yellowstone Park scientists and officials, and Montana wildlife commissioners supporting closing buffer zones to hunting after collared Yellowstone gray wolves were shot and killed in a “buffer zone” near Yellowstone Park). While Section 4 requires the Secretary to retain the authority to intervene using his authorities under section 4(b)(7), 16 U.S.C. § 1533(g)(1) to take emergency action to protect a delisted species to prevent a significant risk to the recovered species’ “well-being,” 16 U.S.C. § 1533(g)(2), the Secretary has made no move to do this. See *infra* at 25 (discussing the adequacy of these quotas). But see *Endangered and Threatened Wildlife and Plants: Removal of the Gray Wolf in Wyoming from the Federal List of Endangered and Threatened Wildlife and Removal of the Wyoming Wolf Population’s Status as an Experimental Population: Final Rule*, 77 Fed. Reg. 55553, 55553 (Sept. 10, 2012) (discussing the delisting of gray wolves in Wyoming) (The best available information indicates that wolf populations have an ample natural resiliency to high levels of human-caused mortality, if population levels and controllable sources of mortality are adequately regulated as they will be in Wyoming. For example, from 1995 to 2008, the NRM wolf population grew by an average of about 20 percent annually, even in the face of an average annual human-caused mortality rate of 23 percent.”).

49. Harbine, *supra* note 28, at 195; see also Hartman, *supra*, note 3, at 91 (“As late as 1970, twenty states still had bounties on wolves even though the species had been virtually extinct in the forty-eight contiguous states for fifty years.”); Berrett, *supra* note 31, 598-599 (pointing out that “eradication of wolves was not only a personal matter, but was fueled by government-sponsored programs that provided bounties for dead wolves and encouraged indiscriminate use of poisons.”). For many residents of the states that have recently assumed primary management over the fate of wolves, any enthusiasm over the declaration of the Gray Wolf’s recovery may principally reflect a desire to return to that earlier policy of extermination. See Colburn, *supra* note 22, at 24 (stating that the governor of Idaho publicly vowed “to reduce wolves as aggressively as FWS would permit immediately upon delisting.”).

50. Both the timber wolf (*canis lupus lycaon*) and the red wolf (*canis niger*) were originally listed in 1996 joining other iconic and severely imperiled species many of whom remain imperiled, such as the Indiana bat, the Black footed ferret, the Florida panther, the California condor, and the Whooping crane. See 32 Fed. Reg. 4,001 (March 11, 1967), available at <http://www.libraryindex.com/pages/3028/Endangered-Species-Act-HISTORY->

the Gray Wolf was among the first species listed under the ESA.⁵¹ As required by the ESA,⁵² the FWS simultaneously convened a recovery team to consider reintroducing gray wolves to the wild to assist in their recovery.⁵³ Although the FWS completed an initial recovery plan in 1980 and a revised plan in 1987,⁵⁴ western politicians with livestock industry support blocked the completion of the requisite Environmental Impact Statement (EIS) on the release program. Nothing came of the recovery plan until Congress appropriated funds for completion of the EIS.⁵⁵ The final EIS was published in the

SPECIES-PROTECTION.html">The Endangered Species Act - History of Species Protection.

51. 74 Fed. Reg. 15,123, 15,124 (April 2, 2009) (citing 39 Fed. Reg. 1171 (Jan. 4, 1974)). The Northern Rocky Mountain wolf is only one of twenty-four subspecies of Gray Wolf in North America, which the Secretary of Interior listed as endangered as a single species, *Canis lupus*, in the forty-eight contiguous states, except for Minnesota where it was listed as threatened. Hartman, *supra* note 3, at 89-90. The Gray Wolf is also listed as an endangered species in Montana and Idaho; in Wyoming it is listed as a predator, which can be taken at any time without restriction. *Id.* at 90. Both Colorado and Minnesota are among states that have endangered species acts that prohibit any one from taking endangered or threatened species. See COLO. REV. STAT. §§33-2-105(3), (4) (2011); MINN. STAT. ANN. §84.0895 (2004). See also Harbine, *supra* note 28, at 196. *Id.* At the time of their listing, the Northern Rocky Mountain Gray Wolf, which had once been ubiquitous in Wyoming, Montana, Idaho, and parts of Washington, Oregon, and South Dakota, was assumed to be extinct as a subspecies. Hartman, *supra* note 3, at 89.

52. 16 U.S.C. §1531(f).

53. Jennifer Li, Student, *The Wolves May Have Won the Battle, but not the War: How the West Was Won Under the Northern Rocky Mountain Wolf Recovery Plan*, 30 ENVTL. L. 677, 691 (2000).

54. *Id.* at 691. The 1987 plan had as a goal establishment and maintenance of three separate, self-sustaining populations of wolves in the northern Rocky Mountains, which could be met by securing and maintaining a minimum of ten breeding pairs in each recovery zone for a minimum three consecutive years. Berrett, *supra* note 31, at 603. The initial hope was that the maintenance of migration corridors and habitat for wolves coming down into the area from Canada would be sufficient to naturally recolonize the area, but that there was only a "remote possibility that wolves would naturally return to the Yellowstone area." *Id.* The EIS increased the number of breeding pairs to thirty in a "metapopulation" (*i.e.* one that consists of sets of partially isolated subpopulations) of more than 300 wolves. *Id.* at 604-05.

55. Li, *supra* note 53, at 692. Prior to congressional appropriation of funds to complete the EIS, a Wolf Management Committee, consisting of representatives from both federal and state agencies involved in wolf management, as well as members from conservation, hunting, and ranching groups, convened by the

summer of 1994,⁵⁶ and the FWS released wolves into Yellowstone National Park and central Idaho in the winter of 1994-1995.⁵⁷

The wolf population in the northern Rocky Mountains quickly resurged, increasing by 22% a year and reaching the FWS's meta-population goal of 30 breeding pairs and 300 wolves by 2000.⁵⁸ By December 10, 2010 when the FWS published a proposed rule to delist the Northern Rocky Mountain Gray Wolf, that population had met its "numerical recovery goal" for 11 years and was thought to consist of at least 1,651 wolves,⁵⁹ 244 packs, and 111 breeding pairs in a five state area.⁶⁰ Wolf predation on elk led to restoration of vegetation in overgrazed areas of Yellowstone National Park and the

Department of Interior made recommendations to Congress in 1991 about where wolves should be released and how they should be managed both on and off federal lands. *Id.* at 691. The Wolf Management Committee was established in response to The Northern Rocky Mountain Gray Wolf Restoration Act, S. 2674, 101st Cong. (1990), and was tasked with the job of developing a wolf reintroduction and management plan for Yellowstone National Park and central Idaho. Hartman, *supra* note 3, at 92. The Committee's ultimate recommendations to Congress "focused heavily on controlling wolves preying on livestock, working animals, or pets and on returning control to the states as early as possible," and allowed for sport harvest of wolves once they had sufficiently recovered. *Id.* at 93. The Committee's recommendations were rejected as many members felt that the recommendations exceeded the ESA's experimental population authority. *Id.*

56. Over 160,000 comments were received commenting on the EIS, which was, at that point, the largest public response ever received on an EIS. Hartman, *supra* note 3, at 88.

57. Li, *supra* note 53, at 692; *see also* Hartman, *supra* note 3, at 88 ("[H]uman reintroduction of the wolves is more symbolic than tangible because wolves have been busy reintroducing themselves... successfully reproducing in and immediately adjacent to Glacier National Park in northwestern Montana.").

58. Berrett, *supra* note 31, at 605.

59. Harbine, *supra* note 28, at 195. Harbine makes the point that even this number is well below the International Union for Conservation of Nature's threshold for designating a species or isolated population as vulnerable due to threats to its genetic diversity. *Id.* at 200. The FWS steadfastly stuck to its recovery criterion of 300 breeding individuals even when it acknowledged, in 1994, that 500 breeding pairs is required for the populations long-term survival. *Id.*; *see also* Berrett, *supra* note 31, at 599 (noting a recovered population of 1651 wolves in an area covering six states).

60. Berrett, *supra* note 31, at 605. Specifically at the end of 2010, Idaho had 705 wolves and 87 packs, Montana 566 wolves and 118 packs, Wyoming 343 wolves and 4 packs, Oregon 21 wolves and 2 packs, Washington 16 wolves and 2 packs, and Utah no wolves and no packs. *Id.* at 605-06 n.91.

reappearance of species dependent on that ecosystem.⁶¹ Despite or perhaps because of the biological success of the reintroduction program, negative regional attitudes towards wolves did not change, and most support for the program continued to come from people outside the immediate release areas.⁶² Almost overnight to area residents it must have seemed like “wolves had been reinvented as icons of romantic wilderness and ecological vibrancy”; the image of the wolf had “been inverted – the big bad wolf ha[d] become the angelic victim.”⁶³ Indeed residents of the Northern Rocky Mountain States attributed the return of the wolf to “some romantic nonsense that only rich urbanites could think up.”⁶⁴

As the next section shows, the FWS’s implementation of the Gray Wolf recovery program, however, reflected the reality that many of those directly affected did not subscribe to this romanticized view of wolves.

A. *The Fine Print of the Gray Wolf Recovery Program*

There were virtually no gray wolves in either Yellowstone or central Idaho⁶⁵ when wolves were reintroduced in the mid-1990s⁶⁶

61. Hartman, *supra* note 3, at 91 (noting that the presence of wolves can be beneficial to game and local ecosystems “by removing diseased animals, culling inferior animals, stimulating prey productivity, and controlling populations.”); *see also* (“Today biologists view [wolves] as ‘linchpins in a delicately balanced ecosystem’ that keep prey from overpopulating the land.”).

62. Berrett, *supra* note 31, at 604 (citing a 1996 poll by Colorado State University showing that while 75% to 82% of the general public favored reintroduction of wolves in the northern Rockies, the sides were more evenly divided in the area itself). According to Colburn, of the 160,000 comments submitted by the public “60,000 of them reportedly lambasted the idea, making clear that much of the interior West was bitterly opposed.” Coburn, *supra* note 22, at 25.

63. Karen R. Jones, Book Review, 92 *Am. Hist. J.* 954 (2005) (reviewing Jon T. Coleman, *Vicious: Wolves and Men in America* (2006)).

64. Laura Pritchett, *Sight the Gun High*, 46 *NAT. RESOURCES J.* 1, 2 (2006).

65. Harbine, *supra* note 28, at 196. Small populations of gray wolves were beginning to migrate back to their native habitats in Montana from Canada as a result of the ban on their unregulated killing where a small population had established itself. *Id.* A decision to have geographically separate release sites was to ensure to some extent that at least one population of wolves would survive if something catastrophic occurred to the other. Hartman, *supra* note 3, at 92.

66. The wolves were caught in Alberta and British Columbia. Hartman, *supra* note 3, at 93-94. The Yellowstone wolves were held in three one-acre pens for six

with the release of thirty captured Canadian gray wolves.⁶⁷ The only way that a separate population of gray wolves could be established in areas other than northern Montana – where they had reconstituted themselves naturally – was if they were specifically released in additional areas in the region.⁶⁸

In order to ease the wolves back into an environment that had not experienced wolves for decades, the FWS applied different rules to wolves in release areas than those applied to wolves that had naturally migrated into other areas of the northern Rockies. Most of these rules were specifically designed to appease the concerns of the livestock and hunting industries. For example, release sites for wolves were “carefully selected to minimize conflicts with [the] economic interests,” of these two industries,⁶⁹ and were designed in such a way as to create “a concentric, three-zone management scheme,” in which “protection for wolves decreased as the wolves moved outward from the core.”⁷⁰ To the extent the FWS designed the three-zone management approach to assuage economic opponents of

to eight weeks with the hope that breeding might occur making the wolves return to Canada less likely. *Id.* The actual release of wolves from their shipping kennels was blocked by a judge; once released into their acclimation pens they were “guarded 24 hours a day seven days a week because of the hostility toward their presence in the park.”). Berrett, *supra* note 31, at 605. Currently, nearly 100 wolves in 10 packs occupy Yellowstone National Park. Douglas Smith et al., National Park Service, *Yellowstone Wolf Project: Annual Report* (2011), available at http://www.nps.gov/yell/naturescience/upload/Wolf_AR_2011.pdf. The wolves released in central Idaho in the Frank Church River of No Return Wilderness Area were simply released at a remote site with the hope that they might join wolves that already might be in the area. *Id.*

67. Fourteen wolves were released in Yellowstone National Park in 1995, followed by seventeen more wolves in 1996. Berrett, *supra* note 31, at 605. Idaho was actually the first release site for gray wolves into the northern Rockies with the release in January 1995 of fifteen gray wolves; an additional twenty were released the next January. *Id.*

68. Li, *supra* note 53, at 691. Despite the fact that wolves are very active, are in motion for roughly eight hours a day, and can cover over 120 miles in a day, it was assumed that the separate naturally occurring packs would not repopulate Yellowstone National Park without the insertion of new packs into that locale. *See* Berrett, *supra* note 31, at 598 (describing some characteristics of wolves). Because they were released as experimental populations they had to be “wholly separate geographically from non-experimental populations” of wolves living in Canada or northern Montana. 16 U.S.C. §1539(j)(1).

69. Hartman, *supra* note 3, at 92.

70. *Id.*

wolf reintroduction, biology seemed to be only a secondary thought.⁷¹

The FWS further capitulated to ranching opponents of the wolf release program by releasing gray wolves as a *non-essential* experimental population in a further attempt to lessen opposition to the wolf's reintroduction.⁷² Federal agencies' duties toward non-essential experimental populations are significantly less stringent.⁷³ For example, nonessential experimental populations are treated as those they had simply been proposed for listing as opposed to having been listed and are not entitled to have their habitat designated as critical under section 4.⁷⁴

71. *Id.*

72. Doremus, *supra* note 8, at 38 (control measures such as declaring reintroduced species like wolves to be nonessential experimental populations were "adopted with the noble goal of increasing support for, and decreasing conflict over, implementation of the ESA."). A similar step has been proposed with regard to the listing of wolverines as a threatened nonessential experimental population in response to the appearance of the first wolverine in ninety years in Colorado as a way of reducing opposition to the species reintroduction in that state. Allison Winter, *Wandering wolverine sparks controversial bid to revive Colo. Population*, GREENWIRE (Feb. 12, 2013), <http://0-www.eenews.net.gull.georgetown.edu/Greenwire/2013/02/12/archive/4?terms=Wandering+wolverine+sparks+controversial+bid+to+revive+Colo.+Population>. As in the case of the Gray Wolf, the FWS designated existing wolverine populations in northern New Mexico and southern Wyoming as nonessential experimental populations. *Id.* at 2.

73. A member of an experimental population, whether classified as nonessential or not, can be taken "for scientific purposes or to enhance that propagation or survival" of the experimental population; a statutory exception to the prohibition against taking listed species. 16 U.S.C. §1539(a)(1)(A).

74. Experimental populations are not classified as endangered and the statute's take regulations do not apply to them. Hartman, *supra* note 3, at 94-95. Species that are designated experimental populations are treated as species that are proposed for listing rather than having been listed under section 7(a)(2), 16 U.S.C. §1536(a)(2), if the population is determined nonessential to its continued existence. 16 U.S.C. §1539(C)(i). Critical habitat shall not be designated for nonessential populations. *See id.* §1539(C)(ii). For reasons that appear to Hartman as blatantly political, the entire state of Wyoming received the non-essential experimental population designation. Hartman, *supra* note 3, at 95. FWS rules also allow for the removal of an entire population of non-essential experimental species, if their status is changed to essential. *See* Doremus, *supra* note 8, at 41 (citing Experimental Populations: Gray Wolf (*Canis lupus*), 50 C.F.R. §17.84(i)(10) (1998)). The same rule was published for the California Condor. *See* Experimental Populations: California Condor (*Gymnogyps californianus*), 50 C.F.R. § 17.84(j)(11)(i).

Another modification allowed the taking of a reintroduced wolf, if it was “caught in the act of killing, wounding or biting *livestock* on private lands.”⁷⁵ This exception broadened the sole statutory circumstance – the endangerment of human life – in which a member of an experimental population can be killed.⁷⁶ Additionally, wolves that left the boundaries of their release zones, and those that were having an unacceptable negative impact on local ungulate (elk) populations, could be relocated.⁷⁷ These changes also reflected a desire to please ranching and hunting interests.

Thus, reintroduced wolves in the northern Rockies received substantially less protection from the beginning to appease economic concerns than their brethren who had migrated from Canada into northern Montana and Idaho.⁷⁸ By allowing wolves to be killed for preying on livestock, the FWS recalibrated the balance Congress set in favor of endangered species protection to something substantially less favorable. The broadening of the statutory exception also undermined the moral and normative basis of the ESA by admitting that some wolves can be killed for others to survive.⁷⁹ The relaxed

75. Li, *supra* note 53, at 692 (emphasis added).

76. See Doremus, *supra* note 8, at 47 (citing 16 U.S.C. §§1540(a)(3), (b)(3)). Doremus notes that allowing wolves to be killed to protect livestock or pets goes beyond the ESA’s allowance for the killing of a listed species in defense of human life.

77. Li, *supra* note 53, at 692. See also April Reese, *First Mexican wolf released in 4 years recaptured after 3 weeks*, GREENWIRE (Feb. 5, 2013), available at <http://0-www.eenews.net.gull.georgetown.edu/Greenwire/2013/02/05/archive/9?terms=First+Mexican+wolf+released+in+4+years+recaptured+after+3+weeks> (reporting on the wolf’s recapture because he had ventured beyond the boundaries of the Blue Range Wolf Recovery Area).

78. Hartman, *supra* note 3, at 95 (reintroduced wolves who were found wandering or who lived beyond the boundaries of Yellowstone National Park received no protection under the ESA’s most protective provisions, sections 7 and 9).

79. See Babcock, *Putting a Price on Whales to Save Them*, *supra* note 10 (critiquing on ethical grounds a proposed trading program on whale shares premised on killing one member of a species to save another). This article does not yet address, although well it might, the stewardship responsibilities that remain at the heart of the ESA that might counsel against killing any creatures that are part of God’s creation. See Bruce Babbitt, *Between the Flood and the Rainbow: Our Covenant to Protect the Whole of Creation*, 2 ANIMAL L. 1 (1996) (stating that there may be a higher purpose inherent in creation that demands a respect and stewardship that satisfies a moral and spiritual imperative); see also Wyman, *supra*

rules and lowered level of protection indicated to even a neutral, let alone hostile observer, ambivalence on the part of the federal government towards the wolf's recovery.⁸⁰ This perceived ambivalence undercut the strong preservationist norms in the ESA.

B. *Delisting the Gray Wolf*

Efforts to delist the Gray Wolf began in 2000 as an “exploratory proposal to delist.”⁸¹ The early delisting efforts culminated in proposed rules that environmentalists successfully challenged.⁸² A 2009 delisting rule was also successfully challenged and subsequently vacated by the District Court for Montana.⁸³ At which

note 9, at 493 (“There are economic reasons for preserving some species because humans currently, or could in the future, use species in medicines and build businesses such as eco-tourism around them. But more often, the idea that humans should preserve other species reflects non-economic considerations. These include ethical beliefs that species have intrinsic value or that humans should not be “playing God,” aesthetic values, and preferences for living in a world characterized by variety rather than homogeneity.”).

80. Doremus, *supra* note 8, at 42 (noting a symbolic cost to considering an experimental population as nonessential “[i]t communicates that recovery in the wild has no special value.”).

81. Colburn, *supra* note 22, at 22; *see also* 65 Fed. Reg. 43,450 (July 13, 2000) (to be codified at 50 C.F.R. pt. 17). That is where matters rested until the northern Rockies and Great Lake populations of gray wolves were delisted on February 8, 2007, as noted earlier.

82. The first delisting rule was issued in April 2003, but was invalidated by various U.S. District Courts. *See, e.g.,* Defenders of Wildlife v. U.S. Dept. of Interior, 354 F. Supp. 2d 1156, 1172-73 (D. Ore. 2005); Nat'l Wildlife Fed. v. Norton, 386 F. Supp. 2d 553, 565 (D. Vt. 2005).

83. Defenders of Wildlife v. Salazar, 729 F. Supp. 2d 1207 (D. Mont. 2010). Early efforts to stop wolf hunts, which were scheduled to take place in Idaho and Montana, failed because plaintiffs were unable to show that the hunts would cause irreparable harm. *Id.* at 1213-14; *see also* Berrett, *supra* note 31, at 608. These hunts resulted in 134 wolves being killed in Idaho and 72 in Montana. *Id.* at 608. In addition to the 206 wolves that were shot by hunters, 272 were killed by “agency control” and “an estimated” 108 wolves were killed by other known causes. Such as illegal take, accidental killing, and natural causes. *Id.* at 628. However, this number does not include mortality among young wolf pups, which when combined with the uncertainties associated with estimated mortality from causes other than hunting or regulated takes, which are under-reported, means the number of wolf deaths post-delisting may be significantly higher than reported. *Id.* at 628-29 (“public hunting of wolves accounted for only about a third of known wolf deaths while the animals were managed under state control, and even when combined with

point, Congress stepped in and ordered the delisting of wolves in the northern Rockies in an appropriations bill rider.⁸⁴

As part of the delisting process, Montana, Idaho, and Wyoming submitted plans to FWS for managing the delisted wolves. The FWS accepted Idaho and Montana's plans, but found Wyoming's insufficient as it classified most of the state's wolves as predators.⁸⁵ This meant that wolves could be taken by any Wyoming resident, at any time, without limit and by nearly any method.⁸⁶ The Wyoming plan that the FWS eventually accepted committed the state to managing only seven breeding pairs outside of the Park's boundaries and still classified the wolf as a predator in almost ninety percent of the state.⁸⁷ Idaho and Montana's laws, approved by FWS, committed

the other causes of mortality did not prevent the DPS from increasing in population," noting that the northern Rockies DPS population increased approximately four percent and overall distribution of wolf packs increased as well).

84. Department of Defense and Full-Year Continuing Appropriations Act, 2011, H.R.J. Res. 1473, 112th Cong., 125 Stat. 38 (2011) (enacted) (authorizing the Secretary of Interior to reissue the 2009 final rule delisting the wolf in the northern Rockies and removing the Secretary's actions from judicial review). The bill was passed by both houses and signed by President Obama on April 15, 2011. Berrett, *supra* note 31, at 637.

85. Designating the Northern Rocky Mountain Population of Gray Wolf as a Distinct Population Segment and Removing This Distinct Population Segment from the Federal List of Endangered and Threatened Wildlife, 72 Fed. Reg. 6,106, 6,129 (Feb. 8, 2007) (to be codified at 50 C.F.R. part 17). The FWS has since delisted the gray wolves of Wyoming in the fall of 2012. U.S. Fish and Wildlife Serv., *Service Declares Wyoming Gray Wolf Recovered Under the Endangered Species Act and Returns Management Authority to the State*, U.S. FISH & WILDLIFE SERVICE (Aug. 31, 2012), available at http://www.fws.gov/mountain-prairie/pressrel/2012/08312012_Wyoming_Wolf.html. See also Colburn, *supra* note 22, at 24 ("Wyoming initially proposed eradication of the wolves outside the national parks there, aiming essentially for functional (re-) extinction.").

86. Berrett, *supra* note 31, at 606. A U.S. District Court opinion found this action by the FWS and its decision not to delist the wolf in Wyoming arbitrary and capricious. *Wyoming v. U.S. Dep't of Interior*, Nos. 09-CV-118J, 2010 WL 4814950 at 45 (D. Wyo, Nov. 18, 2010), cited in Berrett, *supra* note 31, at 635.

87. *Id.* at 606. That number was eventually raised to 15. *Id.* A coalition of eight environmental groups led by WildEarth Guardians filed suit in U.S. District Court for the District of Columbia challenging the delisting of gray wolves in Wyoming, particularly the part of the plan that zones the state into two parts, allowing wolves to be killed without a license in the much larger area. Scott Streater, *Enviros file 2nd lawsuit challenging federal delisting plan in Wyo.*, GREENWIRE (Nov. 28, 2012), available at <http://0->

to maintaining only 100–150 wolves per state.⁸⁸ Many believe that these numbers, lower than the metric the FWS used in its recovery plan for the Northern Rocky Mountain Gray Wolf, threaten the species continuing survival.⁸⁹ Critics also contend that the regulatory mechanisms to protect delisted wolves in the three states are inadequate, that the recovery goal of 300 wolves is not based on the best science available, and that there is insufficient genetic connectivity between the wolves in the Northern Rocky Mountain DPS to assure their survival.⁹⁰

www.eenews.net/gull.georgetown.edu/Greenwire/2012/11/28/archive/9?terms=Scott+Streater+wyoming+wolves.

88. Harbine, *supra* note 28, at 195. Critics believe that FWS only approved these plans in response to considerable political pressure. *See* Colburn, *supra* note 22, at 25 (referring to the wolf recovery program in general and saying, “Especially when one recalls that the wolves of the Rocky Mountain DPS are largely the product of ‘experimental’ populations the government itself cultivated, this all seems rather divorced from any coherent predator ecology or other biological practice and much more like a function of the basest of political motivations.”); *see also* Hartman, *supra* note 3, at 88 (quoting Christopher Smith, *At the Door, Animals’ Foes May Huff and Puff, But Wolves Soon Will Be Released*, SALT LAKE TRIB., Feb. 27, 1995, at A1) (“Wolves have become the rope in a political and environmental war.”).

89. The FWS in 1994 established recovery criteria for northern Rocky Mountain gray wolves of thirty or more breeding pairs totaling 300 wolves in their overall population with “genetic exchange between subpopulations.” Harbine, *supra* note 28, at 196; *see also id.* at 199 (challenging the adequacy of this recovery standard for ensuring the long-term population viability of the northern Rockies Gray Wolf positing instead that the total population count of around 500 individuals would be more likely to ensure the species viability); *but see* Li, *supra* note 53, at 692 (saying that the final recovery plan for the Northern Rocky Mountain Gray Wolf “defined ‘recovery’ as a population of ‘at least ten breeding pairs of wolves in each of the targeted recovery areas for three successive years.’”).

90. *Defenders of Wildlife*, 729 F. Supp. 2d at 1211; Berrett, *supra* note 31, at 634. The plaintiffs in the Montana District Court case additionally argued that the decision to delist wolves is flawed because the FWS did not consider loss of the wolves’ historic range when determining that the wolves were recovered and that it impermissibly designates wolves in Wyoming as a non-essential experimental population.” *Id.* at 634 n.297. A companion lawsuit was filed in U.S. District Court for the District of Columbia alleging that the FWS erroneously concluded that the Gray Wolf populations in the northern Rockies was sufficiently healthy and that Wyoming’s plan in particular will not sustain the wolf’s recovery. Streater, *supra* note 90.

Rocky Mountain States⁹¹ have responded to the delisting of wolves with enthusiasm; just not of the kind and magnitude the FWS probably had expected.⁹² In a year, Idaho reduced its wolf population by forty percent, to 600 wolves, perhaps fewer.⁹³ Montana has killed as much as a third of its wolf population with hunters reporting approximately 260 wolves killed.⁹⁴ In Wyoming's first full season of hunting, its hunters killed approximately 66 wolves.⁹⁵

In Montana, this killing frenzy led to the death of one of the most photographed wolves in history in an area adjacent to Yellowstone National Park.⁹⁶ As a result of her death and the killing of other

91. Not just the Rocky Mountain States. Michigan, Wisconsin, and Minnesota have all approved wolf hunts. See *Legislature Approves Wolf Hunts*, GREENWIRE (Dec. 14, 2012), available at <http://0-www.eenews.net.gull.georgetown.edu/Greenwire/2012/12/14/archive/18?terms=Legislature+approves+wolf+hunt>.

92. Jamie Rappaport Clark, President of Defenders of Wildlife and former Director of the FWS, commented that the states were "treating wolves like vermin instead of managing them like valuable native wildlife. That's not how these states manage other species like black bears and mountain lions, and it's not a responsible way to manage wolves either." *No Reprieve in the Rockies*, DEFENDERS OF WILDLIFE, available at <http://www.defenders.org/magazine/summer-2012/no-reprieve-rockies> (last visited Feb. 20, 2013). According to the most recent FWS estimates, in a year, Idaho reduced its wolf population by thirty percent, killing 329 wolves. *But see* U.S. FISH & WILDLIFE SERV., NORTHERN ROCKY MOUNTAIN WOLF RECOVERY PROGRAM 2012 INTERAGENCY ANNUAL REPORT, at 1 (2012), available at http://www.fws.gov/mountain-prairie/species/mammals/wolf/annualrpt12/FINAL_NRM-Summary_2012.pdf.

93. *No Reprieve in the Rockies*, *supra* note 97.

94. *Id.* *But see* U.S. Fish & Wildlife Serv., Northern Rocky Mountain Wolf Recovery Program 2012 Interagency Annual Report, at 1 (stating that 175 wolves were killed in Montana during their legal harvest).

95. U.S. FISH & WILDLIFE SERV., NORTHERN ROCKY MOUNTAIN WOLF RECOVERY PROGRAM 2012 INTERAGENCY ANNUAL REPORT, at 1 (2012), available at http://www.fws.gov/mountain-prairie/species/mammals/wolf/annualrpt12/FINAL_NRM-Summary_2012.pdf.

96. Wolf 832F was killed in early December just outside the boundaries of Yellowstone National Park in Wyoming. Her killing caused dismay among not only wolf advocates, but also scientists who depend on data from wolves like her to understand wolf habitat, population spread, and threats to their survival. Nate Schweber, *Famous Wolf Killed Outside Yellowstone*, N.Y. TIMES (Dec. 10, 2012), available at http://www.nytimes.com/2012/12/09/science/earth/famous-wolf-is-killed-outside-yellowstone.html?_r=0. Two additional radio-collared wolves were killed near Grand Teton National Park bringing to 10 the number of radio collared wolves shot near Wyoming's two national parks in December. Associated Press, 2

wolves being tracked by the FWS for scientific purposes,⁹⁷ state and federal wildlife officials closed the area to hunting and trapping.⁹⁸ Hunting interest groups and state lawmakers promptly sued, arguing that the closure was unnecessary.⁹⁹ A Montana state judge agreed and ordered the area reopened, and the state has since abandoned an appeal.¹⁰⁰ The Montana state legislature recently approved a proposal to extend the end date of the state's first wolf hunt by two months, into the wolf-breeding season, and to increase the number of wolves a hunter can kill.¹⁰¹ The pending legislation also prohibits the state agency from trying to ban wolf hunts in areas near national parks.¹⁰² The governor indicated he would sign the bill.¹⁰³

While it is true that “wolves are resilient animals that do not need the ESA holding their paws for the rest of their existence,”¹⁰⁴ the

Radio-Collared Wolves Killed in Grand Teton National Park, BILLINGS GAZETTE, (December 12, 2012), available at http://billingsgazette.com/news/state-and-regional/wyoming/radio-collared-wolves-killed-in-grand-teton-national-park/article_72d6ad6f-90ce-5e17-867d-ad88ddc39818.html.

97. At least nine collared wolves had been shot, including five from Yellowstone. Associated Press, *Judge Allows Wolf Hunt Near Yellowstone to Continue*, BILLINGS GAZETTE (January 3, 2012), available at http://billingsgazette.com/news/state-and-regional/montana/judge-lets-wolf-season-resume-near-yellowstone/article_7ad60c84-3900-572c-9be8-20fdc7810153.html.

98. See Associated Press, *Mont. Shuts down wolf hunt near Yellowstone*, THE OREGONIAN (Dec. 10, 2012), available at http://www.oregonlive.com/environment/index.ssf/2012/12/montana_closes_wolf_harvest_in.html.

99. A wildlife advocate described the hunters and trappers who brought the suit as demonstrating an “‘irrational hatred’ of wolves . . . You have 145,000 square miles in Montana, and they’re fighting over a measly 60 square miles of land that is critical habitat for these animals . . . To me, ‘it’s very vindictive.’” Associated Press, *Judge Allows Wolf Hunt Near Yellowstone to Continue*, BILLINGS GAZETTE (January 3, 2012), available at http://billingsgazette.com/news/state-and-regional/montana/judge-lets-wolf-season-resume-near-yellowstone/article_7ad60c84-3900-572c-9be8-20fdc7810153.html.

100. Associated Press, *Mont. Abandons Plan to Halt Wolf Hunt Outside Yellowstone* (January 29, 2013), RED LODGE CLEARING HOUSE, available at <http://rlch.org/news/mont-abandons-plan-halt-wolf-hunt-outside-yellowstone>.

101. *No Reprieve in the Rockies*, <http://www.defenders.org/magazine/summer-2012/no-reprieve-rockies> (last visited Feb. 20, 2013).

102. *Id.*

103. *Legislature Approves Proposal to Expand Wolf Hunt* (February 8, 2013), GREENWIRE, available at <http://www.eenews.net/Greenwire/print/2013/02/08/31>.

104. See Berrett, *supra* note 31, at 629.

savagery that greeted gray wolves after their delisting reveals a fatal flaw in the FWS's program that threatens to undercut the wolf's recovery¹⁰⁵ – and that is, the complete failure of the agency to appreciate the depth of broad public opposition to wolves in the region before their release and the strength of widespread countervailing regional norms. Targeting its appeasement efforts toward the livestock and hunting industries did nothing to change this broader public hostility.¹⁰⁶

III. HOW NEGATIVE ATTITUDES TOWARD WOLVES IN THE NORTHERN ROCKIES HAVE DOOMED CHANCES FOR THEIR LONG-TERM RECOVERY

People have long feared and hated wolves¹⁰⁷ even though contacts with humans are rare and extremely unlikely to result in human harm.¹⁰⁸ The FWS should have known this and should not have been so ignorant about how descendants of those who helped the federal government exterminate wolves would react to suddenly having to cohabit with them again.¹⁰⁹

105. The FWS has admitted that wolf populations in Yellowstone National Park have recently declined and that maintaining wolf populations safely above recovery levels will depend on wolf packs living outside the Park. *See* 77 Fed. Reg. *supra* note 48, at 55543.

106. Another part of the Northern Rocky Mountain Gray Wolf story is the role of Congress in forcing the wolf's delisting, which has created a dangerous political precedent, in which the majority party determines the recovered status of an endangered species purely in response to political pressure. *See* Berrett, *supra* note 31, at 637. *See* Sommerset Perry, *The Gray Wolf Delisting Rider and State Management Under the Endangered Species Act*, 39 *ECOLOGY L.Q.* 439, 447-49 (2012) (briefly recounting the ebb and flow of the livestock industry's opposition to reintroduction of the Gray Wolf).

107. Karen R. Jones, Book Review, 92 *AM. HIST. J.* 954 (2005) (reviewing JON T. COLEMAN, *VICIOUS: WOLVES AND MEN IN AMERICA* (2006)) (“In Coleman’s analysis, the brutal destruction of America’s wolves can be attributed to biological, historical, and folkloric factors. As apex predators, humans and wolves naturally competed for food and territory. Overlaying this Darwinian struggle existed a veil of justifications centered on religion and mythology as well as motives of betterment, capitalism, and Manifest Destiny.”).

108. Berrett, *supra* note 31, at 598.

109. *See generally* Peter M. Zmyi, ‘A Fight to the Finish’: *The Extermination of the Gray Wolf in Wyoming, 1890-1930*, *MONTANA: THE MAGAZINE OF WESTERN HISTORY*, Spring 1996, at 14 (chronicling the concerted efforts to exterminate the gray wolf at local, state, and federal levels of government in Wyoming); Valerie M.

A study of Wisconsin residents who live in areas populated by wolves affirmed that wolves arouse strong negative emotions among people with whom they coexist¹¹⁰ and that these feelings hardened, regardless of any negative encounters with them.¹¹¹ In fact, the study showed that the attitudes of people who had low exposure to wolves and suffered substantially less direct effects from them began to converge with those whose experiences were the reverse.¹¹² Contrary to perceived wisdom that people's opinions about predators like wolves improve over time as they become more familiar with them and learn there is nothing to fear, the Wisconsin study learned that quite the opposite occurred.¹¹³ Indeed, familiarity not only did not increase tolerance of wolves, it actually reduced any aesthetic appreciation of them.¹¹⁴ Even though there have been no documented

Fogleman, *American Attitudes Towards Wolves: A History of Misperception*, 13 ENVIRONMENTAL REVIEW: ER 63, 63-94 (1989) (reviewing the historical treatment of wolves in the United States).

110. Berrett, *supra* note 31, at 598.

111. Adrian Treves, et al., *Longitudinal Analysis of Attitudes Toward Wolves*, CONSERV. BIO. 1 (2013). The authors of the study surveyed Wisconsin residents who lived in areas populated by wolves twice in 2001 or 2004 and again in 2009 in an attempt to document changes in attitudes towards wolves and found an increase in respondents' fear of wolves, an increased willingness to illegally kill wolves, and support for their lethal control without necessarily experiencing a negative interaction with them. *Id.* But see Hartman, *supra* note 3, at 90-91 ("The true magnitude of the threat to Northern Rockies livestock from wolves is not fully known," as the federal government "had never attempted to keep records of such damage," noting that studies of wolf predation on dairy cows in Minnesota "show that very few domestic animals are killed by wolves . . . one loss per 10,000 cows). The EIS predicted the loss of 10 cows and fifty-seven sheep per 100 wolves." *Id.* at 91. Hostility toward wolves may lead not only to increased poaching of them, support for their lethal removal, and hostility towards efforts to conserve them, but also to loss of interest in their keystone place in the surrounding ecosystem. Treves et al., *supra* note 114, at 2. Hence public appeals to support wolf conservation because of their ecological role are probably falling on deaf ears.

112. Treves et al., *supra* note 114, at 6.

113. Treves et al., *supra* note 114, at 6 ("The strongest correlation with increased inclination to poach wolves was competition over deer, . . . not fear or lost domestic animals."). But see Berrett, *supra* note 31, at 631 ("The climate surrounding the wolf is not the same as it was in the early 1900s – people and states appear to be more tolerant (although not fully accepting) of wolves.").

114. Treves et al., *supra* note 114, at 7 (noting that the attitude of survey participants who had actually seen or heard wolves in the wild "shifted significantly toward disagreement" with a statement to that having that experience

reports of wolves attacking people – unlike grizzly bears – survey respondents in the Wisconsin study expressed fear of wolves and were disconcerted at having to share land with them.¹¹⁵ The determinative factor seemed to be an increase in the number of wolves in the immediate area,¹¹⁶ which is exactly what is happening in the northern Rockies. The Wisconsin study finding that attitudes towards wolves harden even in the absence of negative experiences with them may explain the continuing regional opposition to wolves even though instances of wolf predation have not been high and most have been compensated.¹¹⁷

“would be one of the greatest outdoor experiences of my life.”). The fact that the shift in attitude due to fear and hunting competition had little to do with personal experience “casts doubt” on the value of personal experience in changing attitudes and raises questions about the value of educational programs, like evening howls with wolves as having any effect on people who share the landscape with wolves.

115. Treves et al., *supra* note 114, at 7 (recounting another strong shift in attitudes towards wolves was belief that a growing wolf population threatened deer hunting opportunities even though, as with increased fear of wolves, this change in attitude had nothing to do with personal experience).

116. Treves et al., *supra* note 114, at 6; *see also* Houston, M. J., J. T. Bruskotter, D. P. Fan, *Attitudes Toward Wolves in the United States and Canada: A Content Analysis of the Print News Media, 1999-2008*, 15 HUMAN DIMENSIONS OF WILDLIFE 15, 389, 389-403 (2010) (“[Nationally,] results show an increase in the percentage of discourse about wolves that is negative. Additionally, discourse varied by exposure to wolves: states with new wolf populations had significantly more negative expressions per article than states and provinces with permanent wolf populations, and states in federal recovery zones that lacked wolves had more negative expressions than states outside of recovery zones.”).

117. *See Defender of Wildlife Wolf Compensation Trust*, DEFENDERS OF WILDLIFE, *available at* http://www.defenders.org/sites/default/files/publications/statistics_on_payments_from_the_defenders_wildlife_foundation_wolf_compensation_trust.pdf (recording total payments of \$1,368,043 from 1987 to 2009 in response to killings of 1,306 cattle, 2,421 sheep, and 105 other animals, including, horse, mules, goats, llamas, donkey, pigs, chickens, geese, turkeys, herding and livestock guarding dogs, most of which occurred in the three states of concern) (last visited Feb. 20, 2013). While praised by ranchers who benefit from the payments, critics argue that they amount to a subsidy to ranching interests for doing business in that part of the country, that the payments shift the costs of livestock production onto the public, and that wolf kills are no different than any other type of loss from a wide variety of natural hazards. *See* Hartman, *supra* note 3, at 99.

One take away point from the Wisconsin study is the importance of beliefs and emotions as predictors of human behavior.¹¹⁸ Had the FWS understood individual attitudes and regional norms regarding wolves in the release states and then factored those understandings into the Gray Wolf recovery program before wolves were released into Yellowstone National Park and central Idaho, the wolf's delisting might have provoked a more subdued response by the release state residents. But the FWS did little; indeed, the FWS assumed that regional attitudes towards wolves would pose no threat to the continued recovery of the species once delisted.¹¹⁹ The agency clung to this belief despite the fact that during the comment process for the EIS, many residents and organizations in the release states expressed serious doubts about wolf reintroduction.¹²⁰

Despite the steps the FWS took to cabin the effects of wolves on the region's two most important industries – livestock and hunting – hatred of wolves did not diminish. Given this persistent negative attitude towards wolves and the findings of the Wisconsin study, it is

118. Treves et al., *supra* note 114, at 2; see also Leroy C. Paddock, *Beyond Deterrence: Compliance and Enforcement in the Context of Sustainable Development*, 42 ENVTL. L. REP. NEWS & ANALYSIS 10622, 10627 (2012) (discussing the interplay of values, beliefs and norms, and how norms then influence behavior). See also J. T. Buskrotter, et al., *Social and Cognitive Correlates of Utah Residents' Acceptance of the Lethal Control of Wolves*, 14 HUM. DIMENSIONS OF WILDLIFE 119, 119 (2009) (perceived impacts associated with wolves and general attitudes towards wolves were stronger indicators for predicting a region's acceptability of lethal wolf control than even stakeholder group identification).

119. Final Rule Revising the Listing of the Gray Wolf (*Canis Lupus*) in the Western Great Lakes, 78 Fed. Reg. 81666, 81720 (2011) ([W]e expect that when allowed to adequately manage wolf-human conflicts, public attitudes are likely to support wolf restoration. . . . [W]e do not believe the effects of public attitudes on wolves will be a significant threat to the species, as the status and management of the wolf evolves."). In February 2013, a coalition of animal welfare groups, led by the Humane Society, sued the FWS to restore protection for gray wolves in the Great Lakes region of the country, calling the delisting decision "biologically reckless." *Groups Sue FWS, Interior for Gray Wolf Protections*, GREENWIRE, Feb. 13, 2013, available at <http://www.eenews.net/Greenwire/print/2013/02/13/13>. Since protections were lifted this winter, 530 wolves have been killed in Minnesota and Wisconsin. *Id.*

120. See Ed Bangs, U.S. Fish and Wildlife Serv., Final Environmental Impact Statement, *The Reintroduction of Gray Wolves to Yellowstone National Park and Central Idaho*, at 53, 54, 57 (1994), available at http://www.fws.gov/mountain-prairie/species/mammals/wolf/EIS_1994.pdf.

not hard to understand the ferocity that greeted the wolf's return and the improbability of the FWS's conclusion that wolves would be welcome once federal protection from them was removed. The FWS's initial misstep in failing to understand this resistance and implement sufficient advance work to change the hearts and minds of the wolves' immediate human neighbors, as the Wisconsin study recommended,¹²¹ may have doomed the Rocky Mountain Wolf Reintroduction Program in the long run and many gray wolves in the short run.

IV. WHAT FWS MIGHT HAVE DONE TO LESSEN OPPOSITION TO THE GRAY WOLF'S REINTRODUCTION

Compliance with norms legitimizes an actor in her community, imparting credibility and status.¹²² In the Northern Rocky Mountain States, the accepted regional norm is to kill, not conserve wolves; those who kill wolves are considered to be acting out of self-interest as well as concern for others and are considered good citizens by their peers and neighbors.¹²³ Since norms are "social rules" or

121. Treves et al., *supra* note 114, at 1 (predicting an increase in killing of wolves, "unless interventions are implemented to improve attitudes and behavior towards wolves."). Pritchett's less formal study of attitudes towards wolves among ranchers in northern Colorado confirms this conclusion where reasons for opposing the return of wolves were that people worked too hard to extirpate them for good reason, the state is too populated, wolves "roam and kill too much," they are unnecessary and it's too late to bring them back anyway. *See* Pritchett, *supra* note 52, at 2.

122. *See* Gerry J. Nagtzaam, *The International Whaling Commission and the Elusive Great White Whale of Preservationism*, 33 WM. & MARY ENVTL. L. & POL'Y REV. 375, 378 (2008-2009) ("[T]he benefits that accrue from normative compliance may not necessarily be material, but may include the need for legitimacy, credibility, status, or a concern to be perceived as a good global citizen."); *see also id.* at 377 ("[Norms] can provide a basis for shaming or pressuring actors, or they can provide the basis of social learning of appropriate or moral behavior and become internalized by agents and guide actions."); Babcock, *supra* note 137, at 134 ("Norms are informal obligations or social rules that are not dependent on government either for their creation or enforcement."). An individual will engage in environmentally preferable behavior when doing so activates a moral obligation, but any sense of moral obligation depends on an individual's values "because the norm of moral obligation is shaped by values." Paddock, *supra* note 118, at 10627.

123. *See* Paddock, *supra* note 118, at 10627-28 (discussing the importance of value orientation for triggering a sense of moral obligation and discussing three

“informal obligations”¹²⁴ “constructed through shared understandings”¹²⁵ about appropriate behavior,¹²⁶ if people in the release area were to accept a wolf conservation norm, “a new social meaning” about acceptable behavior towards wolves had to be created prior to their reintroduction.¹²⁷ However, the FWS made little effort in this regard at the outset of the Wolf Reintroduction Program.¹²⁸ This failure was critical because changing norms is particularly difficult when it requires the abandonment of previously acceptable behavior – here killing wolves – that has been practiced so long it has become a norm itself.¹²⁹

Diffusion of a wolf preservation norm depends on the cultural characteristics of the target society and the extent to which the new

types of value orientation – egocentric, altruism towards others, and altruism towards species and the biosphere).

124. Michael P. Vandenberg, *The Social Meaning of Environmental Command and Control*, 20 VA. ENVTL. L.J. 191, 200 (2001).

125. Jaye Ellis, *Fisheries Conservation in an Anarchical System: A Comparison of Rational Choice and Constructivist Perspectives*, 3 J. INT’L L & INT’L REL. 1, 14 (2007) (discussing how categories of ocean spaces “are social constructions, created through densely layered shared understandings and subject to change as those shared understanding begin to shift.”).

126. See Nagtzaam, *supra* note 125, at 378 (“Norms can be defined . . . as ‘shared expectations about appropriate behavior held by a collectivity of actors.’”); see generally Hope M. Babcock, *Assuming Personal Responsibility for Improving the Environment: Moving Toward a New Environmental Norm*, 33 HARV. ENVTL. L. REV. 117, 134-42 (2009) (discussing how norms arise, the difference between personal or individual norms and social norms as well as abstract and concrete norms, and their various uses in suggesting the right behavior) [hereinafter Babcock, *Moving Toward a New Environmental Norm*].

127. Babcock, *supra* note 137, at 146.

128. See Hartman, *supra* note 3, at 97 (chronicling the cancellation of an education campaign by the FWS in 1987).

129. See Holly Doremus, *Constitutive Law and Environmental Policy*, 22 STAN. ENVTL. L.J. 295, 314 (2003) (“It seems likely that true value-forcing would work only incrementally; the mere enactment of a law is unlikely to undermine strongly held core values or to deter behavior that provides a strong financial or other benefit.”) [hereinafter *Constitutive Law and Environmental Policy*]. Another impediment to the creation of a wolf conservation norm is that it had no particular salience in the Rocky Mountain region despite the fact that the norm was perceived of as legitimate and widely held by nonresidents. See Babcock, *supra* note 137, at 152 (discussing what makes a norm salient).

norm resonates with local social values.¹³⁰ However, a norm of wolf conservation did not resonate at all with the values of the residents of the three affected Rocky Mountain States. Quite the contrary, killing wolves is consistent with the importance residents place on frontier values, like extirpating predators and resisting federal mandates.¹³¹

Furthermore, residents in the wolf recovery zone who oppose the reintroduction of wolves and want them exterminated again probably believe that their way of life is in danger.¹³² They likely feel that the federal government is pressuring them to accept the cost of wolves without any perceived benefit. This feeling can trigger the countervailing autonomy norm and strengthen opposition to whatever the government is proposing.¹³³

Regional population changes¹³⁴ might one day enable a wolf conservation norm to emerge without external assistance as the economic importance of tourism¹³⁵ and conservation begin to eclipse traditional uses of the land, like ranching.¹³⁶ However, these demographic changes, while underway at the time of wolf

130. See *Constitutive Law and Environmental Policy*, *supra* note 144, at 315 (“Values are at least as likely to be molded by the characteristics of the physical, institutional, and social world that law creates as they are to be determined by law’s messages.”).

131. Valerie Hickey, *Reauthorizing the Endangered Species Act in Favor of Wildlife and Wild Lands: An Inevitable Result of Narrative Changes in Twenty-First Century America?*, 24 *J. ENVTL. L. & LITIG.* 423, 433 (2009); Doremus, *supra* note 8, at 37.

132. Pritchett, *supra* note 52, at 5.

133. See Michael P. Vandenberg, *Beyond Elegance: A Testable Typology of Social Norms in Corporate Compliance*, 22 *STAN. ENVTL. L. J.* 55, 99–101 (2003) (noting according to the autonomy norm, individuals should be free from government intervention, unless circumstances indicate that they have done, or will do, a blameworthy activity). See also Babcock, *Moving Toward a New Environmental Norm*, *supra* note 137, at 152 (discussing the autonomy norm).

134. See *The Demography of the Changing West*, MONTANA FISH, WILDLIFE & PARKS (2004), available at <http://fwp.mt.gov/doingBusiness/reference/montanaChallenge/reports/demographics.html>.

135. See *Gibbs v. Babbitt*, 214 F.3d 483, 493 (4th Cir. 2000) (pointing out the contribution of red wolves to North Carolina’s wildlife-related recreation industry).

136. See also Pritchett, *supra* note 52, at 1-2 (recounting her conversations with ranchers in northern Colorado where it is anticipated that wolves might migrate, explaining why the mantra “shoot, shovel, and shut up” still holds so much sway in an area where cattle hold such economic and cultural importance, and her hope that if the right steps are taken these attitudes might change).

delisting,¹³⁷ had not reached a tipping point, and certainly had not done so at the point of wolf reintroduction.¹³⁸ Therefore, for regional norms about wolves to change the FWS had to be proactive.¹³⁹

For example, the FWS could have used public education to change social norms and the attitudes of residents of the three Rocky Mountain States before the wolves were released and during the entire time they were under federal management.¹⁴⁰ Public education and outreach programs in the Great Lakes states helped considerably to ease the negative attitudes of residents towards wolves and aided in their restoration.¹⁴¹ Instead, the FWS allowed ranchers, hunters,

137. See Hartman, *supra* note 3, at 89 (traditional ranching and farming operations accounted for less than 10% personal income in the mid-1990s, while tourism supported 35% of the regional economy).

138. See Doremus, *supra* note 144, at 307 (“Preferences and values are known to be malleable. They can be shaped deliberately, through advertising or similar techniques.”).

139. There are many successful examples of the government acting as norm entrepreneur to overcome bad behavior, such as getting people to use seatbelts, stop smoking, and recycle household waste. See Babcock *supra* note 137, at 148-49 (discussing the different ways law can influence the social meaning of actions and can influence what people think others might do.”). *But see* Babcock, *supra* note 9, at 30-32 (arguing that international environmental nongovernmental organizations are in the best position to secure norm change in whaling countries). I have also advocated that non-governmental organizations are ideal norm entrepreneurs because they have the tools, knowledge, and commitment necessary to change norms. See, e.g., Babcock, *Global Climate Change: A Civic Republican Moment for Achieving Broader Changes in Environmental Behavior*, 26 PACE ENVTL. L. REV. 1, 17 (2009). Perhaps the most beneficial policy would be an informal partnership between the government and non-governmental organizations.

140. See Babcock, *supra* note 137, at 165-70; see also Richard H. McAdams, *The Origin, Development, and Regulation of Norms*, 96 MICH. L. REV. 338, 402 n.213 (1997). The agency might also have offered technical assistance to ranchers to enable them to coexist with wolves better. See Defenders of Wildlife, *2011 Annual Report*, DEFENDERS OF WILDLIFE 10 (2011), available at <http://www.defenders.org/sites/default/files/publications/defenders-annual-report-2011.pdf> (discussing the program Defenders of Wildlife has to provide technical support for ranchers to help curtail wolf predation). On the value of technical assistance to help companies understand their adverse environmental impacts and implement process and product changes to reduce them, see Paddock, *supra* note 126, at 10629.

141. Hartman, *supra* note 3, at 97. *But see* Edna Sussman, *Climate Change Framing and Social Marketing: The Influences That Persuade*, 27 PACE ENVTL. L. REV. 313, 321 (2010) (“Educational campaigns, either alone or coupled with a demonstration of cost savings, have been found to be inadequate in actually

and property owners to bully it into cancelling a 1987 wolf education program, which had started shortly after approval of the agency's wolf recovery plan.¹⁴² The government did not try again. Private groups like the Wolf Education and Research Center in Ketchum, Idaho and Defenders of Wildlife stepped into the void left by the FWS, and assumed that role.¹⁴³ However, these groups lacked the resources to mount a sufficiently robust public education campaign to facilitate the creation of a wolf conservation norm on their own.

The FWS could also have tried using social marketing techniques.¹⁴⁴ Social marketing is "a process that applies marketing principles and techniques to create, communicate, and deliver value in order to influence target audience behavior that benefits society as well as the target audience."¹⁴⁵ What distinguishes social marketing from traditional marketing is that "the competition, in the social marketing context, is not a competing brand, but rather the current behavior of the target audience."¹⁴⁶ But, the use of social marketing to raise public awareness of an environmental problem and frame solutions to those problems requires activating commonly held values and norms. Here, the failure of the FWS to create a new explanatory narrative about the value and importance of wolf conservation, means that any attempt at social marketing would have probably failed.¹⁴⁷

Finally, had the agency engaged in a more interactive collaborative process with residents in the release states prior to the wolves' reintroduction and during their post-reintroduction management the

changing behavior."). *See also supra* at 28-30. (discussing the findings of the Treves study which show that an increase in the number of wolves may make local acceptance less enduring).

142. Hartman, *supra* note 3, at 97.

143. *Id.*

144. *See* Sussman, *supra* note 153, at 320-24 (discussing the use of social marketing techniques by the United Nations Environmental Program to change attitudes and norms about climate change). *See also* Paddock, *supra* note 126, at 10633-65 (discussing the positive and negative features of social marketing as a tool to reinforce environmental values).

145. Paddock, *supra* note 118, at 10632-33.

146. *Id.* at 10633.

147. *See* Paddock, *supra* note 126, at 10633 (discussing how social marketing can be used to influence positive environmental behavior). *See also Id.* ("Absent the proper values-framing, the message will fall on deaf ears.").

story of the Gray Wolf might have been different.¹⁴⁸ Instead, the agency limited its collaboration to passively collecting comments and holding public hearings on the release program during preparation of the EIS.¹⁴⁹

Had the agency not closed down its public outreach program before the wolves were released and had it especially appealed to new residents with values more sympathetic with conserving wolves, the FWS might have been able at least to create a fissure in the regional stranglehold of the wolf extirpation norm. With active collaboration and the use of social media techniques, the crack might have widened as new residents became more numerous throughout the region. Even established residents might have begun to accept a new norm and change their behavior, if they perceived that the release program was not a one-way ratchet against their interests.

148. See Paddock, *supra* note 126, at 10635 (noting how collaborative problem solving can, among other things, “create an atmosphere in which new statutory authority and new regulations can be enacted without intense opposition.”). However, the success of these initiatives like other ones discussed in the text, depends on “value-based behavioral drivers” that align with governmental management goals. *Id.* at 10636. Paddock reports that collaboration appears to be better with respect to the reintroduction of the Mexican Wolf. *See id.* at 10632 (discussing management of Mexican Wolf).

149. This essay does not discuss the use of economic and non-economic incentives to change negative behavior. For a discussion of both types of incentives and the positive and negative features of each type, see Hope M. Babcock, *Responsible Environmental Behavior, Energy Conservation, and Compact Fluorescent Bulbs: You can Lead a Horse to Water, But Can you Make it Drink?*, 37 HOFSTRA L. REV. 943, 968-72 (2009). In that article, I propose that there needs to be structural changes to the product before motivational tools like public education and social marketing can make a difference. *Id.* at 972-74.

While the wolf cannot be redesigned like a compact fluorescent bulb, to reduce its predation instincts, reducing the opportunities for predation might be possible. For example, Defenders of Wildlife occasionally uses its wolf compensation fund to help prevent wolf predation by installing electric fences. Hartman, *supra* note 3, at 99. Defenders of Wildlife also has a program to pay landowners in the northern Rockies \$5,000 if they allow wolves onto their property to reproduce and raise their progeny to adulthood. *Id.*; see also Pritchett, *supra* note 52, at 8 (suggesting ranchers might be able to take more proactive steps to protect their livestock from wolves, such as moving herds around more, using guard dogs and hazing devices, “even tak[ing] shots ‘across the bow,’” as a way to avoid wolf-cattle confrontations). Pritchett also suggests the idea of “wolf friendly beef,” like dolphin-safe tuna, where ranchers who allow wolves on their property get a certificate encouraging consumers “to demand, buy, and pay more for it.” *Id.*

Had any of this happened, a shift in regional preferences might have begun to occur.

When support for a preference weakens because it is less deeply and broadly felt,¹⁵⁰ circumstances are created in which a different preference might emerge¹⁵¹ – here a preference in favor of wolf conservation. If such a change had begun in one of the three release states, it might have created a cascade of changed behavior in that state, even in neighboring states, as more and more people abandoned the wolf-hunting norm and adopted a new wolf conservation norm.¹⁵² However, the FWS did nothing, and wolves are being slaughtered as though it was the early twentieth century, and the regional goal remains their extermination.

CONCLUSION

Proponents of programs that unsettle expectations, like those that promote reintroduction of endangered species, need to think critically about the problem of social acceptance simultaneously with the science of what they are proposing. In the case of the reintroduction of the Northern Rocky Mountain Gray Wolf, failing to do this has undermined the FWS's restoration goals for the species. The bloodlust of residents in wolf recovery areas once federal protections for wolves were lifted is indicative of the failure of the initial reintroduction program to factor in public resistance to the restoration of the Gray Wolf being played out in people's back yards.¹⁵³ As a

150. See David A. Dana, *Existence Value and Federal Preservation Regulation*, 28 HARV. ENVTL. L. REV. 343, 366, 372 (2004) (“[T]he weight of a set of preferences held by a group is a function of breadth – how many people hold particular preferences – and depth – the intensity with which the preferences are held.”).

151. See Dana, *supra* note 161, at 374 (“[T]he emergence of a political outcome supporting preservation of a natural resource despite the transaction costs and political structures impediments strongly suggests that the preferences in support of preservation clearly outweigh the preferences in opposition to preservation.”).

152. See Babcock, *supra* note 137, at 145 (discussing how a “norm cascade” changes majority preferences, eliminating any need for external pressure to adopt the norm).

153. Indeed, one historian wonders why, after early settlers killed wolves with such “sadism,” the federal government actively supported the restoration of “such a villainous creature.” See Karen R. Jones, Book Review, 92 AM. HIST. J. 954 (2005) (reviewing JON T. COLEMAN, *VICIOUS: WOLVES AND MEN IN AMERICA* (2006)).

result, the spectacular biological success story of the Gray Wolf's recovery is in danger of failing equally spectacularly to assure that wolves will remain off the endangered species list permanently as states resume slaughtering them under questionable recovery standards.¹⁵⁴

Another sad lesson of the Northern Rocky Mountain Gray Wolf recovery story may be that human interference is a bad thing; the wolf would have done better and its chances of survival might have been higher, if the natural restocking had been allowed to continue, even though the restocking pace was slower than the FWS wanted and did not meet the FWS's desire for genetic diversity, because at least the Act's protections for them would have remained in place. Indeed, the hunting frenzy that greeted the wolves' delisting begs the question why wolves were reintroduced into Yellowstone National Park and central Idaho when new, fully protected populations of wolves were slowly, but assuredly reestablishing themselves in Montana and northern Idaho, and the reintroduction of translocated wolves would lead to reduced protection for returning wolves.¹⁵⁵

The FWS's failure to apprehend the region's history with wolves and the past's tenacious hold on the present is one of the things that makes the Northern Rocky Mountain Gray Wolf story so interesting and deeply disturbing.¹⁵⁶ Rather than advancing the cause of species

154. This is not to say that problem wolves should not be removed or that wolf populations should not be controlled to avoid over-population in certain wolf habitats, which might lead to reduction in sustainable levels of game and habitat. But, killing to protect livestock and hunting interests and not the welfare of wolves contradicts the basic norms and intent of the ESA.

155. See *Wyoming Farm Bureau Fed'n v. Babbitt*, 199 F.3d 1224, 1237 (10th Cir. 2000); Doremus, *supra* note 8, at 3 ("Interior has consistently refused to afford reintroduced animals the full protection of the ESA."). Doremus discusses in particular the designation of reintroduced animals as "nonessential" experimental populations, which lessens the animals protection under section 7 of the ESA, allowing incidental and deliberate take of animals, especially predators, in situations not involving threats to human life under 16 U.S.C. §§ 1540(a)(3) and (b)(3), and restricting their release to federal lands. *Id.* at 38-48; see also Colburn, *supra* note 22, at 23 (citing 68 Fed. Reg. at 15,850) (reporting that the FWS has consistently maintained throughout the wolf recovery program that "preserving the right to kill can be instrumental in keeping public attitudes favorable" toward the survival of large predators).

156. Professor Ruhl might find in the denouement of the wolf story proof of his maxim that the ESA "does nothing to make anyone do good." See Ruhl, *supra* note 20, at 289.

recovery under the ESA, the reintroduction of a large predator like the Gray Wolf into a hostile human environment to demonstrate the law's success¹⁵⁷ may actually have set the species' recovery back, if relisting is required, and undermined the law's reintroduction program. After all, why should taxpayers invest in an endangered species recovery program, if, in the end, the species is going to return to the edge of extinction and be in need of recovery again?¹⁵⁸ It may be too late to save the Northern Rocky Mountain Gray Wolf unless federal controls are reinstated, which appears unlikely. However, if the suggestions set out in this essay are heeded, there may still be time to manage the release of other endangered animals, including wolves in other areas of the country, in a way that enhances their survival both as a listed species and later as a delisted one.

157. Salazar Announces Recovery of Gray Wolves in the Western Great Lakes, Removal from Threatened and Endangered Species List, DESERTUSA (Dec. 21 2011), available at <http://www.desertusa.com/dusablog/salazar-announces-recovery-of-gray-wolves-in-the-western-great-lakes-removal-from-threatened-and-endangered-species-list.html> (Secretary Salazar stating that “[o]nce again, the Endangered Species Act has proved to be an effective tool for bringing species back from the brink of extinction.”). Indeed, one might question whether wolves were sacrificed in order to demonstrate the ESA's success and thus lessen political opposition to it. See Somerset Perry, Note, *The Gray Wolf Delisting Rider and State Management Under the Endangered Species Act*, 39 Ecology L. Quarterly 439, 473 (2012); see also Christopher Ketcham, *Wolves to the Slaughter*, THE AMERICAN PROSPECT 2 (March 13, 2012), available at <http://prospect.org/article/wolves-slaughter> (asserting that the gray wolves were delisted in an elaborate attempt to keep Senator Jon Tester in office).

158. The costs of these efforts were not inconsiderable. In FY (fiscal year) 2009, the federal government spent \$3,763,000 on wolf management just in the NRM DPS, including \$1,100,000 to investigate wolf damage reports and to control problem wolves, while private and state compensation funds paid \$457,785 to compensate livestock owners for wolf predation; in FY2010, federal agencies spent \$4,566,000 on wolf management in the NRM DPS, including more than \$1.1 million to investigate reports of wolf damage and control problem wolves, while private and state spent \$453,741 compensating livestock owners for damage caused by wolves. See Berrett, *supra* note 31, at 629-30. At the same time, Montana and Idaho realized \$749,196 from the sale of hunting tags. *Id.* at 630.