

May 2012

Gray Wolf Rising: Why the Clash Over Wolf Management in the Northern Rockies Calls for Congressional Action to Define "Recovery" Under the Endangered Species Act

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W. Ryan Stephens, *Gray Wolf Rising: Why the Clash Over Wolf Management in the Northern Rockies Calls for Congressional Action to Define "Recovery" Under the Endangered Species Act*, 36 Wm. & Mary Envtl L. & Pol'y Rev. 917 (2012), <https://scholarship.law.wm.edu/wmelpr/vol36/iss3/9>

GRAY WOLF RISING: WHY THE CLASH OVER WOLF MANAGEMENT IN THE NORTHERN ROCKIES CALLS FOR CONGRESSIONAL ACTION TO DEFINE “RECOVERY” UNDER THE ENDANGERED SPECIES ACT

W. RYAN STEPHENS*

*Only the mountain has lived long enough to listen
objectively to the howl of a wolf.¹*

INTRODUCTION	918
I. THE HISTORY OF WOLVES IN THE WEST	923
A. <i>Origin of the Clash: “Range Laws”</i>	923
B. <i>The Rebirth</i>	925
C. <i>Potential Inadequacy of Current Recovery Goals</i> . . .	927
D. <i>The Battle to Delist</i>	929
II. <i>DEFENDERS OF WILDLIFE V. SALAZAR AND THE</i> CONGRESSIONAL “SIDE-STEP”	930
A. <i>Judge Molloy’s Decision</i>	930
B. <i>ESA Listing Procedure</i>	933
III. “CULTURAL CLASH”	935
A. <i>Ranchers’ Concerns</i>	935
B. <i>Conservationists’ Rebuttal</i>	937
IV. THE AFTERMATH OF SALAZAR AND THE CONGRESSIONAL “SIDE-STEP”	939
A. <i>Federalism Issues Complicating the Wolf’s Future</i> . .	939
B. <i>The Meaning of “Recovery” Under the ESA</i>	940
V. THE IMPORTANCE OF WOLF MANAGEMENT	943
A. <i>Dueling Perspectives: The NRM Region’s Dependence on Wolf Proliferation Regardless of the Conservation Approach Taken</i>	943

* J.D. Candidate, William & Mary Law School 2012; Haverford College 2007, B.A., History. I would like to thank Mom, Dad, Scott, Dan, Amy, and Kim for your love and support throughout law school, but more importantly, life in general. To my newly arrived nieces, Katherine and Caroline, I hope we can sustain the gray wolf and other species, so that they may be around for your generation to marvel at and protect. I’d also like to thank the ELPR Editorial Board and staff for their hard work during the publication process of this Note. Finally, Dad, Wally Clark was spot on.

¹ ALDO LEOPOLD, A SAND COUNTY ALMANAC 129 (1949).

	<i>B. Duty to Future Generations</i>	946
VI.	PROPER "RECOVERY": POTENTIAL SOLUTIONS AND HOPEFUL OUTCOMES	947
	<i>A. The Need for Congressional Action</i>	947
	<i>B. What "Recovery" Should Entail</i>	950
	<i>C. Potential Solutions in the Northern Rocky Mountains</i>	951
	CONCLUSION	954

INTRODUCTION

Perhaps rooted in "an ancient dispute over territory and food between their clans and ours," wolves and humans have had a historically rocky relationship.² Since its first encounter with westward-moving Europeans, the North American gray wolf has been under constant assault from an ever-expanding human population.³ Since these first meetings, the notoriety of the species has continued to grow, leaving the wolf with as much "baggage" as any wild animal.⁴ Centuries of storytelling, perhaps accentuated by the wolf's propensity to avoid human contact, have portrayed a mythical beast, lurking in the dark, waiting to prey upon humans and their domesticated animals.⁵ Western culture demonized wolves long before the European migration to the Americas, as the Catholic Church claimed wolves were agents of the devil during the Middle Ages.⁶ The Puritans brought stories portraying the wolf in such a manner with the likes of "Little Red Riding Hood," and these tales continue today, notably in the January 2012 movie "The Grey," which depicts a wolf pack actively hunting a group of plane crash survivors.⁷ The myth surrounding the wolf is alive and well, despite a general consensus among the scientific community that wolves present little actual threat to humans and an arguably acceptable risk to domesticated animals.⁸

² Douglas H. Chadwick, *Wolf Wars*, NAT'L GEOGRAPHIC, Mar. 2010, at 34, 38.

³ See *infra* Part I.A.

⁴ See Matt Weiser, *Will Cry of the Wolf Return to California?*, SACRAMENTO BEE (Cal.), Dec. 12, 2011, <http://www.sacbee.com/2011/12/11/4114710/will-cry-of-the-wolf-return-to.html>.

⁵ See *id.*

⁶ James William Gibson, *Cry, Wolf: How a Campaign of Fear and Intimidation Led to the Gray Wolf's Removal from the Endangered Species List*, EARTH ISLAND J., Summer 2011, at 34, 36, available at http://www.earthisland.org/journal/index.php/eij/article/cry_wolf.

⁷ See *id.*; Weiser, *supra* note 4.

⁸ See Weiser, *supra* note 4; see also *infra* Part III.B.

Today the species is the epicenter of a power struggle in the Northern Rocky Mountain region (“NRM”) between conservationists seeking to maintain wolf protection under the Endangered Species Act (“ESA”), and local ranchers, communities, and politicians seeking to “delist” the animal.⁹ In an ironic twist of fate, the conservationists’ hope for the wolves’ continued success in the region may ultimately be connected to the ranchers’ success, as the alternative to ranching is likely subdivision for real estate development, which would significantly curtail suitable wolf habitat in the NRM.¹⁰

The August 2010 decision in *Defenders of Wildlife v. Salazar*¹¹ was initially considered a victory for wolves in this ongoing battle, which began with the reintroduction of wolves to Yellowstone National Park in 1995.¹² In *Salazar*, the District Court of Montana held that the U.S. Fish and Wildlife Service (“FWS”), one of two agencies in charge of implementing the ESA,¹³ while acting pursuant to a 2009 Rule had inappropriately removed the gray wolf from endangered species protection in Montana and Idaho while leaving the wolf protected in Wyoming.¹⁴ The ruling was grounded in the premise that “subdividing a wild population based on

⁹ See Jesse H. Alderman, Note, *Crying Wolf: The Unlawful Delisting of Northern Rocky Mountain Gray Wolves From Endangered Species Act Protections*, 50 B.C. L. REV. 1195, 1212–14 (2009) (“All three governors, and the state political apparatuses in Idaho, Montana, and Wyoming, have long been opposed to gray wolf reintroduction.”); see also *infra* Parts I.C–D.

¹⁰ Chadwick, *supra* note 2, at 42 (quoting stockman and veterinarian Ron Skinner: “[I]f ranchers can’t make a living . . . the alternative these days is usually subdivision for real estate.”).

¹¹ 729 F. Supp. 2d 1207 (D. Mont. 2010).

¹² Jenny K. Harbine, *Gray Wolves in the Northern Rockies Again Staring Down the Barrel at Hostile State Management*, 36 ECOLOGY L. CURRENTS 195, 196 (2009); see also Julie S. Thrower, *Ranching With Wolves: Reducing Conflicts Between Livestock and Wolves Through Integrated Grazing and Wolf Management Plans*, 29 J. LAND RESOURCES & ENVTL. L. 319, 319–20 (2009); *Northern Rockies Gray Wolf Delisting Challenge 2009*, DEFENDERS OF WILDLIFE, http://www.defenders.org/programs_and_policy/in_the_courts/legal_docket/northern_rockies_gray_wolf_delisting_challenge_2009.php (last visited Apr. 6, 2012).

¹³ *Summary of the Endangered Species Act*, U.S. ENVT’L PROT. AGENCY, <http://www.epa.gov/lawsregs/laws/esa.html> (last updated Feb. 24, 2012) (“The lead federal agencies for implementing [the] ESA are the U.S. Fish and Wildlife Service (FWS) and the U.S. National Oceanic and Atmospheric Administration (NOAA) Fisheries Service.”).

¹⁴ *Salazar*, 729 F. Supp. 2d at 1210–11; see also Sylvia Fallon, *The Heart of the Wolf Recovery Problem—Science*, SWITCHBOARD: NATURAL RES. DEF. COUNCIL STAFF BLOG (Aug. 16, 2010), http://switchboard.nrdc.org/blogs/sfallon/the_heart_of_the_wolf_recovery.html.

political boundaries rather than science violates the Endangered Species Act.”¹⁵ Judge Donald W. Molloy stated in his opinion that to leave wolves protected in Wyoming but not in Idaho or Montana “is like saying an orange is an orange only when it is hanging on a tree.”¹⁶ This ruling was rendered moot in April 2011 when in “an unprecedented action, Congress sidestepped” the ESA by removing the wolf from the endangered list by a legislative rider to the Federal Continuing Budget Resolution, ordering the FWS to reissue the 2009 rule, and exempting the rule from judicial review.¹⁷ The passage of this rider represented a “serious beating” to the ESA, as previously “no species [had] ever been delisted purely for political convenience.”¹⁸

Since the inception of the ESA in 1973, few species have caused such controversy.¹⁹ The wolf had been nearly eradicated throughout the lower forty-eight states by the 1930s and was left clinging to survival in northern Minnesota and Michigan’s Isle Royale National Park,²⁰ but the ESA represented hope for the species. “Wolves began to symbolize wild nature, a lost heritage, and were considered a keystone species—the missing link—to a functioning ecosystem.”²¹ However, not everyone was in favor of wolf reintroduction as the predator had become “a symbol for deep-rooted rural sentiment against issues over federal control of public land and how its use is prioritized.”²² Those opposed to wolf reintroduction often associate wolves with the federal government, a “common enemy” whose imposition of environmental laws and creation of national parks has violated their rights.²³

¹⁵ Press Release, Defenders of Wildlife, Federal Protections Restored for Northern Rockies’ Wolves (Aug. 5, 2010), *available at* http://www.defenders.org/newsroom/press_releases_folder/2010/08_05_2010_federal_protections_restored_for_northern_rockies_wolves.php [hereinafter Defenders’ Press Release].

¹⁶ *Salazar*, 729 F. Supp. 2d at 1219.

¹⁷ See Jeremy T. Bruskotter et al., *Rescuing Wolves from Politics: Wildlife as a Public Trust Resource*, SCI., Sept. 30, 2011, 1828, 1828.

¹⁸ Heidi Ridgley, *Budget Bill Leaves Wolves, ESA Vulnerable*, DEFENDERS MAG., Summer 2011, http://www.defenders.org/newsroom/defenders_magazine/summer_2011/budget_bill_leaves_wolves_esa_vulnerable.php.

¹⁹ See Thrower, *supra* note 12, at 319, 342.

²⁰ See *id.* at 319; Chadwick, *supra* note 2, at 38.

²¹ Thrower, *supra* note 12, at 319.

²² *Id.* at 319–20.

²³ Gibson, *supra* note 6, at 37.

The current saga has played out through court decisions²⁴ and the continual questioning of what constitutes “recovery” under the ESA.²⁵ Failing to clearly define the term, the ESA leaves interested parties to speculate about congressional intent.²⁶ Recovery could arguably be achieved by the mere presence of a zoo population, or at the other extreme, could require a population capable of sustaining environmental fluctuation, maintaining evolutionary potential, or even require the maximum possible population.²⁷ It is unclear whether the objective of the Act is to simply prevent extinction or to protect the natural balance of ecosystems.²⁸ This uncertainty is at the heart of the current controversy over the FWS’s recovery plan for wolves in the NRM.²⁹ FWS established the NRM wolf recovery plan in 1987 (“1987 Recovery Plan”), which was later boosted by a 1994 Environmental Impact Statement (“1994 EIS”), calling for the sustained population of thirty breeding pairs and three hundred wolves throughout the three states “in a meta-population with genetic exchange between the subpopulations.”³⁰

Conservationists have questioned the adequacy of current recovery goals, primarily due to a perceived lack of scientific support in the FWS report.³¹ Initially, the *Salazar* decision eased conservationists’ fears that delisting would result in the implementation of state policies designed to quickly limit populations to the legally required three hundred.³² Now, in

²⁴ Alderman, *supra* note 9, at 1198–1200; *see also* *Defenders of Wildlife v. Salazar*, 729 F. Supp. 2d 1207 (D. Mont. 2010); *Defenders of Wildlife v. Hall*, 565 F. Supp. 2d 1160 (D. Mont. 2008).

²⁵ Dale D. Goble, *Recovery*, in AM. BAR ASS’N SECTION OF ENV’T, ENERGY, & RES., ENDANGERED SPECIES ACT: LAW, POLICY, AND PERSPECTIVES 70, 85–86 (Donald C. Baur & Wm. Robert Irvin eds., 2d ed. 2010).

²⁶ *See, e.g., id.* at 71–90.

²⁷ *Id.* at 86; *see also* Fallon, *The Heart of the Wolf Recovery Problem*, *supra* note 14.

²⁸ *See* Goble, *supra* note 25, at 86.

²⁹ *See* Fallon, *The Heart of the Wolf Recovery Problem*, *supra* note 14.

³⁰ Alderman, *supra* note 9, at 1206 (quoting U.S. DEP’T OF THE INTERIOR, FISH & WILDLIFE SERV., FINAL ENVIRONMENTAL IMPACT STATEMENT: THE REINTRODUCTION OF GRAY WOLVES TO YELLOWSTONE NATIONAL PARK AND CENTRAL IDAHO app. 9, at 42 (1994), available at http://www.fws.gov/mountain-prairie/species/mammals/wolf/EIS_1994.pdf [hereinafter 1994 EIS]). The 1994 EIS acknowledged the importance of movement between subpopulations to ensure proper genetic exchange. 1994 EIS app. 9, at 42.

³¹ *See, e.g.,* Fallon, *The Heart of the Wolf Recovery Problem*, *supra* note 14.

³² *See* Kari Lydersen, *Much Anger Over Gray Wolf’s Return to Endangered List*, WASH. POST, Aug. 9, 2010, at A5. Suzanne Stone, Northern Rockies representative for Defenders of Wildlife, believes that “[i]f the states were to take over and continue the recovery to a sustainable population, that would be fine. . . . But the way things are now, that won’t happen. They want to drive it down so the floor is also the ceiling.” *Id.*

the wake of the rider, the federal standards remain a “trigger” for potential future ESA protection.³³ However, this is a requirement that conservationists generally believe is inadequate to support a sustainable population.³⁴

This Note argues that the saga of the NRM gray wolf highlights the necessity for congressional action to define “recovery” under the ESA. Varying interpretations of “recovery” have led to a wide array of expectations for species conservation and have consequently limited the ultimate effectiveness of the ESA. Due to the wolf’s importance in maintaining a balanced ecosystem throughout the NRM³⁵ and its status as “charismatic megafauna,”³⁶ it provides the perfect forum for congressional action to firmly establish “recovery” and consequently improve regulatory schemes for other endangered or threatened species. This Note proposes a definition of recovery that ultimately supports a viable population capable of surviving environmental fluctuation, maintaining evolutionary potential, and fulfilling its ecological role. In implementing this new “recovery” standard in the NRM, an array of nonlethal methods have demonstrated potential in reducing conflicts over wolves and, through further development, may be invaluable for regulating and protecting the current wolf population while simultaneously protecting the interests of local ranchers.

Part I of this Note provides an overview of the history of the gray wolf in the western United States, leading up to the current “cultural clash”³⁷ between ranchers and conservationists. This overview will span the “range laws” and state and federal initiatives leading to the near eradication of wolves in the contiguous states, the species’ rebirth stemming from the 1973 ESA, scientific critiques of wolf recovery plans, and the current battle to remove ESA protection. Part II examines Judge Molloy’s decision in *Salazar*, the congressional “side-step,” and the ESA procedure for listing endangered or threatened species. Part III analyzes the “cultural clash”³⁸ by outlining ranchers’ concerns and conservationists’ responses.

³³ *Grey Wolves Lose Endangered Status, for Good?*, NAT’L PUB. RADIO, (May 7, 2011), <http://www.npr.org/2011/05/07/136084855/grey-wolves-lose-endangered-status-for-good>.

³⁴ See *id.*; Fallon, *The Heart of the Wolf Recovery Problem*, *supra* note 14 (explaining that a recent study concluded that thousands of individuals are required for a species to have an acceptable chance of survival while facing environmental fluctuation and potential catastrophic events).

³⁵ See *infra* Part V.A.

³⁶ See JAMES RASBAND ET AL., NATURAL RESOURCES LAW AND POLICY 349 (2d ed. 2009).

³⁷ Mara Grunbaum, *Wolves Still a Target, Even on Endangered List*, ONEARTH MAG., Aug. 19, 2010, <http://www.onearth.org/article/wolves-still-a-target-even-on-endangered-list>.

³⁸ *Id.*

Part IV looks at the state of NRM wolf recovery and the ESA in the aftermath of *Salazar* and the congressional rider, focusing on the continuing uncertainty of what “recovery” means. Part V examines the importance of wolf management in the NRM region, considering both the ecological importance of the wolf and an underlying theme of the environmental movement that humanity owes a duty to preserve the planet for future generations.³⁹ Finally, Part VI will argue that the current controversy over wolf management in the NRM stresses the need for congressional action to provide a clear definition of “recovery” under the ESA, and propose a definition of what proper recovery should entail. This portion will conclude with an analysis of the potential nonlethal solutions for limiting the current conflict between wolves and ranchers.

To be clear, this Note is not advocating wolf management at the ultimate expense of the ranchers and communities of the NRM region. Rather, it is supportive of multi-organizational cooperation, including the federal, state, and local levels, to provide for a wolf population capable of sustained existence while minimizing the effects on local businesses, and in the process ensuring the health of the NRM ecosystem and allowing for a more effective implementation of the ESA throughout the nation. A complete understanding of both sides’ arguments and concerns is essential to effectively address this issue and future ESA listing battles, as more are sure to occur in the presence of continued human development.

I. THE HISTORY OF WOLVES IN THE WEST

A. *Origin of the Clash: “Range Laws”*

As European and, ultimately, American settlers moved further west into the Great Plains, they stumbled upon a thriving ecosystem regulated by a population of more than two hundred thousand wolves sustained by an estimated six million bison.⁴⁰ Settlers implemented a dramatic shift toward “livestock culture,” resulting in the near eradication of bison and an explosion of livestock.⁴¹ Wildlife in general, but specifically predators, were deemed as pests and targeted for annihilation.⁴² Predators

³⁹ See Anthony D’Amato, *Do We Owe a Duty to Future Generations to Preserve the Global Environment?*, 84 AM. J. INT’L L. 190 (1990); Lothar Gündling, *Our Responsibility to Future Generations*, 84 AM. J. INT’L L. 207 (1990); Edith Brown Weiss, *Our Rights and Obligations to Future Generations for the Environment*, 84 AM. J. INT’L L. 198 (1990).

⁴⁰ See Thrower, *supra* note 12, at 319.

⁴¹ *Id.*

⁴² *Id.* at 333–34.

were initially killed in order to protect hunting interests, but later to make room for expansive ranches and a booming livestock industry.⁴³ To ensure its foothold in the West, the industry pushed for the systematic extermination of the wolf, a creature that had developed a reputation as a “ruthless killer” and “beast of waste and desolation.”⁴⁴

This late nineteenth- and early twentieth-century growth led to the rapid decline of native species, including sheep, bison, and elk, all critical elements of the wolves’ food supply.⁴⁵ Not surprisingly, the decline in natural prey led to increased predation on the continually increasing livestock population.⁴⁶ While greatly aiding the growth of the livestock industry, the booming railroad system contributed to increased predation as it shipped a predator-naïve food supply throughout the West.⁴⁷

To protect the growing industry, a variety of “range laws” were implemented to guard livestock interests and confront the growing issue of overgrazing.⁴⁸ These laws, including the first meaningful federal bill, the 1926 Taylor Grazing Act (“TGA”), were enforced primarily through local boards and political power.⁴⁹ Federal encouragement to graze public land freely led to the evolution of wolf eradication plans at the local level through private organizations, a derivative of ranchers’ belief that individualized wolf management accompanied their right to protect the land as they saw fit.⁵⁰ This belief may have led to the beginnings of a “warrior” mentality among many in the Rocky Mountain region who viewed state and local governance as the only legitimate source of political power.⁵¹

Eventually states became involved, but with little success as wolf populations continued to grow due to the introduction of easy prey⁵² and

⁴³ *Id.*

⁴⁴ *Id.* at 319 (quoting Jeremy Johnston, *Preserving the Beasts of Waste and Desolation: Theodore Roosevelt and Predator Control in Yellowstone National Park*, 15 *GEORGE WRIGHT F.*, no. 4, 1998, at 19).

⁴⁵ *See id.* at 333.

⁴⁶ *See* Thrower, *supra* note 12, at 333–34.

⁴⁷ *See id.* at 334 (explaining that the technological advances in railroad transportation, allowing for the shipping of cattle throughout the West, provided predators with a food supply of animals that were ill-equipped to defend themselves).

⁴⁸ *See id.* at 330 (commenting that “[o]vergrazing was incessant”).

⁴⁹ *See id.* at 331 (noting that the TGA’s purpose was to effectively manage land use by combating overgrazing and soil deterioration in the effort to “stabilize the livestock industry”).

⁵⁰ *See id.* at 334.

⁵¹ Gibson, *supra* note 6, at 34.

⁵² *See id.* at 36 (explaining livestock had not evolved with the same evasive capabilities and experience in warding off predator attacks); *supra* note 47 and accompanying text.

a series of harsh winters beginning in 1885.⁵³ These devastating winters decimated much of the livestock population, and as a result provided easy calories for the surging wolf populace.⁵⁴ Wolves finally met their match when the federal government became involved in 1905 through the Bureau of Biological Survey's new Predator and Rodent Control ("PARC") branch, a program that employed professional hunters rather than just offering bounties as had previously been used to promote wolf hunting.⁵⁵ The federal government's involvement turned the tide. In Montana alone, over eighty thousand wolves were killed between 1883 and 1918, and the last wolves in Yellowstone and Wyoming were killed in 1926 and 1940, respectively.⁵⁶

B. *The Rebirth*

Having been eradicated throughout the majority of the country by the 1930s, wolves were immediately targeted by conservationists after the adoption of the ESA in 1973.⁵⁷ The FWS endorsed a NRM gray wolf recovery plan in accordance with Section 4(f) of the ESA.⁵⁸ Despite this recovery plan, the movement lost momentum due to a 1987 revision of the recovery specifications by the FWS and mounting tension between ranchers and conservationists, bureaucratic sluggishness within the Department of the Interior, and hesitant state governments.⁵⁹

Wolves took matters into their own hands, or in this case paws. Beginning in the 1970s and continuing through the 1980s, wolves from a separate Canadian population began crossing the border into northern Montana.⁶⁰ By 1995 this Canadian migrant population had grown to

⁵³ See Thrower, *supra* note 12, at 334–35 (severe weather led to an abundance of deaths among livestock unadjusted to extreme weather and malnourished due to overgrazing).

⁵⁴ See *id.*

⁵⁵ Valerie Bittner, *Wolves in the Crosshairs: A Scientific Case Against the Final Rule of the U.S. Fish and Wildlife Service Removing Northern Rocky Mountain Gray Wolves from the Endangered Species List*, 15 HASTINGS W.-NW. J. ENVTL. L. & POL'Y 281, 288 (2009); Thrower, *supra* note 12, at 335.

⁵⁶ Thrower, *supra* note 12, at 335.

⁵⁷ Defenders' Press Release, *supra* note 15; see *supra* note 20 and accompanying text.

⁵⁸ Alderman, *supra* note 9, at 1205. Section 4(f) "requires the Service to develop and implement a recovery plan for the conservation and survival of ESA-listed species, unless such a plan will not promote the conservation of the species." *Endangered Species Act*, U.S. FISH & WILDLIFE SERVICE: MARINE MAMMALS MANAGEMENT, <http://alaska.fws.gov/fisheries/mmm/polarbear/esa.htm> (last updated Jan. 30, 2012).

⁵⁹ Alderman, *supra* note 9, at 1205.

⁶⁰ Defenders' Press Release, *supra* note 15.

between sixty and seventy wolves.⁶¹ Finally, the FWS released the 1994 EIS supplementing the 1987 Recovery Plan, and implemented a scheme to release a “nonessential experimental population”⁶² of gray wolves into Idaho, Montana, and Wyoming in order to supplement the population of the Canadian migrants and speed up species recovery.⁶³ In accordance with this plan, the FWS captured sixty-six individual wolves in Canada and placed them in Yellowstone and central Idaho.⁶⁴ By 2009, the wolf population had exploded to roughly two thousand individuals in the NRM.⁶⁵

The 1987 Recovery Plan established the objective of “remov[ing] the Northern Rocky Mountain wolf from the endangered and threatened species list by securing and maintaining a minimum of ten breeding pairs in each of the three recovery areas for a minimum of three successive years.”⁶⁶ Because of the wolves’ social structure, generally only the alpha male and alpha female of the pack breed.⁶⁷ With the average pack size between six and ten individuals, the assurance of ten breeding pairs would require approximately one hundred individuals.⁶⁸ The designated recovery areas were northwest Montana, central Idaho, and the Greater Yellowstone Area.⁶⁹ The 1994 EIS confirmed these numerical goals in each of the three states, but mandated that proper genetic exchange between the subpopulations be ensured.⁷⁰

⁶¹ *Id.*

⁶² Alderman, *supra* note 9, at 1205. Under Section 10(j) of the Act, the FWS is granted greater management flexibility for handling “nonessential experimental populations,” which may be established by the FWS if it is determined that it will contribute to conservation of the listed species. Sam Kalen & Adam Pan, *Exceptions to the Take Prohibition, in* ENDANGERED SPECIES ACT, *supra* note 25, at 192, 196.

⁶³ See Alderman, *supra* note 9, at 1205; Defenders’ Press Release, *supra* note 15.

⁶⁴ Defenders’ Press Release, *supra* note 15.

⁶⁵ *Id.*

⁶⁶ U.S. FISH & WILDLIFE SERV., NORTHERN ROCKY MOUNTAIN WOLF RECOVERY PLAN 15 (1997), available at http://www.fws.gov/montanafieldoffice/Endangered_Species/Recovery_and_Mgmt_Plans/Northern_Rocky_Mountain_Gray_Wolf_Recovery_Plan.pdf [hereinafter 1987 RECOVERY PLAN].

⁶⁷ See Alderman, *supra* note 9, at 1196.

⁶⁸ See *id.* at 1196; Fallon, *The Heart of the Wolf Recovery Problem*, *supra* note 14.

⁶⁹ See 1987 RECOVERY PLAN, *supra* note 66, at v.

⁷⁰ Harbine, *supra* note 12, at 196; see 1994 EIS, *supra* note 30, app. 9 at 42 (“It is fairly clear that ten breeding pairs in isolation will not comprise a ‘viable’ population (i.e., have a high probability of survival for a long period without human intervention). Thirty or more breeding pairs comprising some 300+ wolves in a meta-population with genetic exchange between sub-populations should have a high probability of long-term persistence.”); *supra* note 30 and accompanying text.

C. *Potential Inadequacy of Current Recovery Goals*

While ultimately holding that the initial 1987 numerical recovery goals were adequate, when provided proper genetic exchange,⁷¹ the 1994 EIS concluded that “[t]he goal is somewhat conservative . . . and should be considered minimal.”⁷² A recent study supports the notion that the 1987 goals may be too low to maintain a sustainable population.⁷³ This study suggests that “thousands (not hundreds) of individuals are required” for a species to have an adequate chance at long-term survival, enabling them to survive environmental fluctuation.⁷⁴ Another “population viability analysis” of roughly three hundred wolves in Italy, the baseline population of the NRM mandated by the 1994 EIS, concluded that “populations of this size are vulnerable to extinction in 60 to 100 years if there is more than 10-percent change in the percentage of adult mortality.”⁷⁵ Similar research has hypothesized that populations of one hundred individuals are too small to ensure long term survival, one thousand individuals may maintain viability, and that ten thousand individuals will most likely ensure the “persistence of most birds and mammals.”⁷⁶ These studies suggest that a wolf population hovering around the EIS-mandated population of three hundred may be incapable of sustained viability. As a consequence of breeding habits,⁷⁷ a limited percentage of the overall

⁷¹ See 1994 EIS, *supra* note 30, app. 9 at 42.

⁷² *Id.*

⁷³ See Lochran W. Traill et al., *Pragmatic Population Viability Targets in a Rapidly Changing World*, 143 BIOLOGICAL CONSERVATION 28, 30, 32 (2010); Sylvia Fallon, *The Bell Curve Tolls for Wolves*, SWITCHBOARD: NATURAL RES. DEF. COUNCIL STAFF BLOG (Jan. 15, 2009), http://switchboard.nrdc.org/blogs/sfallon/the_bell_curve_tolls_for_wolves.html; Fallon, *The Heart of the Wolf Recovery Problem*, *supra* note 14.

⁷⁴ See Traill et al., *supra* note 73, at 28 (“To ensure both long-term persistence and evolutionary potential, the required number of individuals in a population often greatly exceeds the targets proposed by conservation management. . . . This literature collectively shows that thousands (not hundreds) of individuals are required for a population to have an acceptable probability of riding-out environmental fluctuation and catastrophic events, and ensuring the continuation of evolutionary processes. The evidence is clear, yet conservation policy does not appear to reflect these findings. . . . As such, we argue that conservation biology faces a dilemma akin to those working on the physical basis of climate change, where scientific recommendations on carbon emission reductions are compromised by policy makers.”); Fallon, *The Bell Curve Tolls for Wolves*, *supra* note 73; Fallon, *The Heart of the Wolf Recovery Problem*, *supra* note 14.

⁷⁵ Bittner, *supra* note 55, at 304.

⁷⁶ *Id.* (citing C. D. Thomas, Comment, *What Do Real Population Dynamics Tell Us About Minimum Viable Population Sizes?*, 4 CONSERVATION BIOLOGY 324, 324–27 (1990)).

⁷⁷ See *supra* note 68 and accompanying text.

population contributes to the genetic pool, leaving the gray wolf especially reliant on larger population numbers.⁷⁸ The discrepancy between the current recovery goals and these new scientific estimates are the basis of the gray wolf conflict, particularly in the wake of congressional delisting and ensuing wolf hunts under state management.⁷⁹

The states are not convinced by these scientific estimates and maintain that current recovery goals are adequate. Montana Congressman Denny Rehberg submitted draft legislation on September 16, 2010, initiating the process leading to the eventual April 2011 congressional rider.⁸⁰ Rehberg's legislation proposed turning wolf management over to state control in Montana and Idaho.⁸¹ Rehberg, like other proponents of delisting, pointed to science to justify his position, just as conservationists have. The proposed legislation called for Congress to amend the ESA to prohibit the listing of gray wolves as endangered or threatened species, as "[i]t's become clear the courts and the environmental extremists have abandoned the principle of sound science when determining the status of the gray wolf."⁸² Rehberg claimed "[y]ears of research, dedicated efforts by land owners and local officials, and the expert opinions of on-the-ground wildlife managers have been given a back seat to profit-motivated environmental groups."⁸³ After the delisting in May 2009, both Montana and Idaho quickly identified wolves as "game animals" and established wolf

⁷⁸ See Harbine, *supra* note 12, at 200.

⁷⁹ Fallon, *The Heart of the Wolf Recovery Problem*, *supra* note 14; see Bittner, *supra* note 55, at 285 ("[C]hallengers . . . assert that the USFWS has steadfastly refused to alter its long-held, scientifically unsound demographic recovery goal."); Perry Backus, *Declare Disaster Area Because of Wolves, Idaho County Says*, MISSOULIAN (Mont.) (Sept. 21, 2010, 6:15 AM), http://missoulian.com/news/local/article_5e750d0c-c535-11df-8bd2-001cc4c03286.html (Michael Leahy, Defenders of Wildlife Rocky Mountain Region director, stated: "The reality is that nobody has really done the science of what constitutes a recovered pool of wolves in the Northern Rockies.").

⁸⁰ See Eve Byron, *Rehberg Drafts Legislation for States to Manage Wolves*, MISSOULIAN (Mont.), (Sept. 17, 2010, 6:00 AM), http://missoulian.com/news/local/article_308622f6-c20a-11df-a44e-001cc4c002e0.html; Press Release, Congressman Denny Rehberg, Rehberg to Push Legislation Removing Gray Wolf from Consideration under Endangered Species Act (Aug. 11, 2010), *available at* <http://rehberg.house.gov/index.cfm?sectionid=26&itemid=1526> [hereinafter Rehberg Press Release].

⁸¹ See Byron, *supra* note 80; Rehberg Press Release, *supra* note 80.

⁸² Rehberg Press Release, *supra* note 80 ("The evidence of a recovery for the gray wolf is as plain as day, yet Montana stock-growers and wildlife managers have their hands tied when it comes to managing the predator. . . . Stock losses and big game depredation caused by an uncontrolled wolf population are a real concern in Montana, and the state's responsible management plan needs to be put in place.").

⁸³ *Id.*

hunt quotas,⁸⁴ so the states appear intent on limiting wolf numbers to the mandated minimum.

D. The Battle to Delist

In accordance with the Act itself, removal of ESA protection requires a showing by the best available science that the species is no longer endangered or threatened because: (1) the initial listing and classification was erroneous, (2) the species is extinct, or (3) the species has recovered.⁸⁵ On February 8, 2007, after eight consecutive years of exceeding recovery goals, the FWS sought to identify the NRM wolf population as a distinct population segment (“DPS”) and subsequently delist the species.⁸⁶ In a final rule issued on February 27, 2008 (“2008 Final Rule”), the FWS removed ESA protection for the NRM wolves, consequently leaving wolf management to the three states.⁸⁷ This delisting was immediately challenged by environmental groups, including Defenders of Wildlife (“Defenders”), in the District Court of Montana.⁸⁸ The case resulted in a preliminary injunction requiring the FWS to place the gray wolf back under protection of the ESA in all three states.⁸⁹ The court subsequently granted an FWS motion to vacate the decision and allow further consideration within the agency.⁹⁰

After further examining the situation, the FWS released another proposal in 2009, delisting wolves in Montana and Idaho but keeping them under protection in Wyoming due to an inadequate state management plan.⁹¹ This Final Rule (“2009 Final Rule”), issued on April 2, 2009, identified the NRM wolf as a DPS.⁹² The Rule determined that wolf

⁸⁴ Chadwick, *supra* note 2, at 40.

⁸⁵ Defenders of Wildlife v. Salazar, 729 F. Supp. 2d 1207, 1214 (D. Mont. 2010) (citing 50 C.F.R. § 424.11); Bittner, *supra* note 55, at 285 (citing 50 C.F.R. 424.11(d)).

⁸⁶ Salazar, 729 F. Supp. 2d at 1213.

⁸⁷ Alderman, *supra* note 9, at 1199; see Final Rule 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, 73 Fed. Reg. 10,514, 10,514–15 (Feb 27, 2008).

⁸⁸ See Defenders of Wildlife v. Hall, 565 F. Supp. 2d 1160, 1160–61 (D. Mont. 2008).

⁸⁹ Alderman, *supra* note 9, at 1199.

⁹⁰ *Id.*

⁹¹ *Id.* at 1200; see Lydersen, *supra* note 32, at A5 (Tom Strickland, Assistant Interior Secretary for Fish, Wildlife, and Parks, said: “Unfortunately, we’re not in a position to reward [Montana and Idaho] for their responsible behavior, because Wyoming is the outlier.”).

⁹² See Final Rule to Identify the Northern Rocky Mountain Population of Gray Wolf as a Distinct Population Segment and To Revise the List of Endangered and Threatened Wildlife, 74 Fed. Reg. 15,123 (Apr. 2, 2009) [hereinafter 2009 Final Rule]; see also Defenders of Wildlife v. Salazar, 729 F. Supp. 2d 1207, 1213 (D. Mont. 2010).

population numbers in the DPS met recovery goals and that genetic exchange within the three areas of the DPS was satisfactory.⁹³ FWS determined the wolf management plans in effect in both Idaho and Montana were sufficient to ensure the sustained recovery of wolves in the future and thus warranted the relinquishing of wolf management back to the states.⁹⁴ Conversely, the FWS determined that “Wyoming’s regulatory framework failed to meet the ESA’s requirements,”⁹⁵ and “remove[d] the Act’s protections throughout the NRM DPS except for Wyoming.”⁹⁶

Not surprisingly, the same environmental groups immediately challenged this proposal in the District Court of Montana, claiming that delisting was “premature and clearly inconsistent with the law,”⁹⁷ resulting in the *Salazar* decision.⁹⁸ Defenders did not challenge the designation of the NRM gray wolf as a DPS.⁹⁹ Defender’s challenge was with respect to the FWS’s application of ESA protections to only “one geographical area of the DPS” under the 2009 Final Rule.¹⁰⁰

II. *DEFENDERS OF WILDLIFE V. SALAZAR* AND THE CONGRESSIONAL “SIDE-STEP”

A. *Judge Molloy’s Decision*

In the aftermath of the 2009 Final Rule leaving wolf protection to the discretion of Montana and Idaho, the two states quickly authorized wolf hunts.¹⁰¹ Defenders, along with twelve other conservationist advocacy organizations, challenged the 2009 Final Rule in the District Court of Montana after the court’s August 2009 decision to deny a motion seeking restoration of ESA protection in Montana and Idaho.¹⁰² In denying

⁹³ 2009 Final Rule, 74 Fed. Reg. at 15,123; see *Salazar*, 729 F. Supp. 2d at 1213.

⁹⁴ 2009 Final Rule, 74 Fed. Reg. at 15,123; see *Salazar*, 729 F. Supp. 2d at 1213.

⁹⁵ *Salazar*, 729 F. Supp. 2d at 1213; see 2009 Final Rule, 74 Fed. Reg. at 15,125.

⁹⁶ 2009 Final Rule, 74 Fed. Reg. at 15,123; see *Salazar*, 729 F. Supp. 2d at 1213.

⁹⁷ Defenders’ Press Release, *supra* note 15 (statement by Rodger Schlickeisen, president of Defenders of Wildlife).

⁹⁸ See *Salazar*, 729 F. Supp. 2d at 1207; Alderman, *supra* note 9, at 1200.

⁹⁹ See *Salazar*, 729 F. Supp. 2d at 1216.

¹⁰⁰ See *id.*

¹⁰¹ *Salazar*, 729 F. Supp. 2d at 1213–14; see Brittany Baker, *Recent Developments in Environmental Law*, Defenders of Wildlife v. *Salazar*, Nos. CV 09-77-M-DNM, CV 09-82-M-DWM, 2010 WL 3084794 (*D. Mont.* Aug. 5, 2010), 24 TUL. ENVTL. L.J. 187, 189 (2010); *supra* note 84 and accompanying text.

¹⁰² See Baker, *supra* note 101, at 189.

this motion, the court reasoned that the wolf hunts authorized by the states would not cause “irreparable harm” to the wolf populations.¹⁰³

Under the Administrative Procedure Act (“APA”),¹⁰⁴ “[a]gency decisions can only be set aside . . . if they are ‘arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.’”¹⁰⁵ In *Salazar*, Defenders raised nine causes of action in their complaint; however, the court relied on only the first claim in invalidating the 2009 Final Rule.¹⁰⁶ In his decision, Judge Molloy addressed Defenders’ first claim that the Rule “violates the statute by partially protecting a listed species.”¹⁰⁷ He opened by delineating the congressional vision of the ESA as “an orderly process beginning with a determination of when a species is at risk of extinction and ending when that risk is reduced to an acceptable level.”¹⁰⁸

The decision established that listing part of a species divided by political lines, thus protecting only a portion of a DPS, is illegal under the ESA.¹⁰⁹ Molloy agreed with Defenders’ reasoning that the text of the ESA reflected congressional intent that the definition of “‘species’ excludes distinctions below that of a DPS.”¹¹⁰ The court rejected FWS’s arguments as to the statutory construction, holding that the agency’s interpretation would require multiple definitions of “species” throughout the ESA, consequently “turn[ing] the statute grammatically on its head.”¹¹¹

Accordingly, the FWS’s attempt to distinguish populations of gray wolves within the three states by removing ESA protection in Montana and Idaho, while leaving ESA protection in Wyoming, contravened the Act. The court refused to grant deference to the FWS under the precedent of *Chevron v. NRDC*,¹¹² because the terms of the statute were clear and unambiguous, and the FWS’s current interpretation was in direct contradiction with an earlier agency ruling without a necessary explanation as to the change in policy.¹¹³ Recognizing the solution as apparently “pragmatic,”

¹⁰³ *Id.* (citing *Salazar*, 729 F. Supp. 2d at 1214.).

¹⁰⁴ Pub L. No. 79-404, 60 Stat. 237 (codified as amended in scattered Sections of 5 U.S.C.).

¹⁰⁵ *Salazar*, 729 F. Supp. 2d at 1215 (citations omitted).

¹⁰⁶ *See id.* at 1211–12; Baker, *supra* note 101, at 189.

¹⁰⁷ *Salazar*, 729 F. Supp. 2d at 1211.

¹⁰⁸ *Id.* at 1209–10.

¹⁰⁹ *Id.* at 1221–22; Baker, *supra* note 101, at 187–88.

¹¹⁰ *Salazar*, 729 F. Supp. 2d at 1221 (citing 16 U.S.C. § 1532(16) (2006)).

¹¹¹ *Id.* at 1218; Baker, *supra* note 101, at 190–91.

¹¹² *Chevron, U.S.A., Inc. v. Natural Res. Def. Council, Inc.*, 467 U.S. 837, 842–43 (1984) (granting deference to EPA interpretations of statutes that fall “silent or ambiguous with respect to the specific issue”).

¹¹³ *Salazar*, 729 F. Supp. 2d at 1222–24.

the court still declined to validate the FWS decision to delist because "it is at its heart a political solution that does not comply with the ESA."¹¹⁴

As the court only addressed Defenders' first cause of action, and declined comment on the other eight, a concerted effort by Wyoming to construct an adequate wolf management plan would have allowed the FWS to delist the wolf throughout the NRM.¹¹⁵ Had Congress not stepped in with the legislative rider in April 2011, it is possible that under a significant amount of political pressure Wyoming would have acted to ensure ESA removal in order to place the wolf population under fire from hunters' rifles.¹¹⁶

The rider was attached to the "11th-hour budget compromise" that was necessary in order to avoid a government shutdown.¹¹⁷ As mentioned, this was the first time that a species had been removed from ESA protection by an act of Congress.¹¹⁸ The rider was in direct opposition to the *Salazar* decision and removed ESA protection from wolves in Wyoming and Idaho, placing wolf management in the hands of the states.¹¹⁹ Senator Jon Tester of Montana and Congressman Mike Simpson of Idaho were the main backers of the bill, which requires the FWS to adopt its 2009 rule, allowing hunting under state law.¹²⁰

Environmentalists contend that this rider constitutes a congressional shortcut, forgoing the statutorily proscribed steps by the FWS, and is a crushing blow to the ESA.¹²¹ Viewed as a case of local interests taking precedent over national policy, conservationists argue it sets a dangerous precedent: "[A]nytime anybody has an issue with an endangered species, they are going to run to Congress and try to get the same treatment the anti-wolf people have gotten."¹²² Defenders' President Rodger Schlickeisen commented that, since the inception of the ESA, Congress has properly interpreted the law through a scientific rather than political lens; however, "[b]y legislatively removing federal protection from wolves in the Northern Rockies, Congress shoved science aside and put politics

¹¹⁴ *Id.* at 1228.

¹¹⁵ See Baker, *supra* note 101, at 191.

¹¹⁶ See *id.*

¹¹⁷ Ridgley, *supra* note 18.

¹¹⁸ *Grey Wolves Lose Endangered Status, For Good?*, *supra* note 33.

¹¹⁹ See Ridgley, *supra* note 18.

¹²⁰ Felicity Barringer & John M. Broder, *Congress, in a First, Removes an Animal From the Endangered Species List*, N.Y. TIMES, Apr. 12, 2011 at A16.

¹²¹ *Grey Wolves Lose Endangered Status, For Good?*, *supra* note 33; Ridgley, *supra* note 18.

¹²² Barringer & Broder, *supra* note 120; see also Ridgley, *supra* note 18.

in the driver's seat."¹²³ Proponents of the rider argue that it was simply an efficient route to make the management of wolves easier by placing the power in the hands of the states.¹²⁴

Environmentalists challenged the legitimacy of the congressional rider, but the Ninth Circuit sided with the Obama Administration in claiming Congress had the power to make an exception to the ESA for a specific animal.¹²⁵ After this decision, conservationists then made a last-ditch effort in August 2011 to block wolf hunts after the rider.¹²⁶ However, the Ninth Circuit denied this request, citing the belief that wolf hunts would not jeopardize the animal's recovery.¹²⁷ Simultaneously, the FWS began drafting, and later published, a proposed rule removing the gray wolf from ESA protection in Wyoming.¹²⁸ The agency stated that the Wyoming wolf population was stable and that the state was expected to take all necessary steps to ensure future wolf populations within the next few months.¹²⁹ In the event the regulation is implemented, it would turn over all wolf management outside of National Parks and Wildlife Refuges to the state.¹³⁰ The proposal was open to public comment until January 13, 2012.¹³¹

B. *ESA Listing Procedure*

The FWS's 2008 attempt to delist represented the first time a species was removed from protection and delegated to a state-managed recovery program geared toward reducing population numbers.¹³² Idaho authorized the killing of 428 wolves, while Wyoming took it a step further and declared the wolf a predator.¹³³ Predator status allowed anyone

¹²³ See Ridgley, *supra* note 18. Schlickeisen further stated that "[i]f Congress is allowed to sidestep the country's bedrock laws, it is pretty clear that the current majority in Congress will destroy the ESA and any serious effort to save wildlife. . . . Sacrificing America's wildlife for short-term economic gain is a bad bargain because economic cycles come and go, but extinction is forever." *Id.*

¹²⁴ See *Grey Wolves Lose Endangered Status, For Good?*, *supra* note 33.

¹²⁵ See *No Halt for Wolf Hunts*, L.A. TIMES, Aug. 27, 2011, at A14.

¹²⁶ See *id.*

¹²⁷ See *id.*

¹²⁸ 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, 76 Fed. Reg. 61,782 (Oct. 5, 2011) (to be codified at 50 C.F.R. pt. 17).

¹²⁹ See *id.*

¹³⁰ See *id.*

¹³¹ See *id.*

¹³² Goble, *supra* note 25, at 85–86.

¹³³ *Id.* at 86.

to kill wolves, provided they did not use poisoning.¹³⁴ This is seemingly against the purpose of the ESA, which was enacted in order “to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, [and] to provide a program for the conservation of such endangered species and threatened species.”¹³⁵

Section 4 of the ESA provides the listing mechanism, which was a central aspect of *Salazar*.¹³⁶ This is a critical process as only species “listed” under the ESA are afforded its protection.¹³⁷ In order to be considered for listing, the species must be “endangered” or “threatened” as defined by the Act.¹³⁸ In determining whether the species meets any of these requirements, the Secretary of the Interior must consider five factors: “(A) the present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; or (E) other natural or manmade factors affecting its continued existence.”¹³⁹ Notably, listing decisions are based exclusively on the “best scientific and commercial data available,” and may not reflect cost or other economic impacts of listing the species.¹⁴⁰ Additionally, the decision to list or delist must be based strictly upon the best available science, and not “emotion or sentiment.”¹⁴¹ After a species is listed, the FWS is required to monitor the species and reclassify or delist when necessary.¹⁴² Some district courts have held that the FWS may consider state conservation plans already in place when determining whether listing is appropriate, while others have rejected this idea.¹⁴³ Under Section 7 of the ESA, all federal agencies are tasked with an

¹³⁴ *Id.*

¹³⁵ 16 U.S.C. § 1531(b) (2006).

¹³⁶ See 16 U.S.C. § 1533; *Defenders of Wildlife v. Salazar*, 729 F. Supp. 2d 1207, 1207 (D. Mont. 2010).

¹³⁷ RASBAND ET AL., *supra* note 36, at 349.

¹³⁸ See 16 U.S.C. §§ 1531(b), 1532(6), 1532(20) (defining endangered as “in danger of extinction throughout all or a significant portion of its range” and defining threatened as “likely to become an endangered species within the foreseeable future”).

¹³⁹ 16 U.S.C. § 1533(a)(1); see also *Salazar*, 729 F. Supp. 2d at 1214.

¹⁴⁰ *Salazar*, 729 F. Supp. 2d at 1214 (citing 16 U.S.C. § 1533(b)(1)(A); 50 C.F.R. § 424.11(b); 50 C.F.R. § 424.13).

¹⁴¹ *Id.*

¹⁴² *Id.* (citing 16 U.S.C. § 1533(c)). As previously discussed, delisting may occur when one of three conditions are shown by the best available science. See *supra* note 84 and accompanying text.

¹⁴³ J.B. Ruhl, *Listing Endangered and Threatened Species*, in *ENDANGERED SPECIES ACT*, *supra* note 25, at 16, 25.

affirmative duty to protect listed species and those proposed for listing under the Act.¹⁴⁴

III. “CULTURAL CLASH”

A. *Ranchers’ Concerns*

“Shoot, shovel, and shut up” has been a recognized approach of NRM landowners taking wolf management into their own hands.¹⁴⁵ In the face of extended ESA protection after the *Salazar* decision, Idaho County commissioners “asked Gov[ernor] Butch Otter to declare the county a disaster area because of its large population of wolves.”¹⁴⁶ A disaster area designation would have allowed for the elimination of wolves in the county by “any means necessary” if the wolves “threaten livestock, people or big-game populations.”¹⁴⁷ Skip Brandt, the chairman of the Idaho County Commission, seemingly lost hope, stating he is not sure how the county “will ever be able to manage those damn things. . . . It’s like we have a virus and we’re not permitted to take any antibiotics.”¹⁴⁸ Carl Ellsworth, a rancher and president of the Idaho Cattle Association, said that “[i]t’s a real slap in the face for those states who have worked hard to not only meet but exceed the goals” of the recovery plan.¹⁴⁹ These fears were largely alleviated by the congressional rider; however, many feel that the mere presence of any wolves impinges upon their freedom and safety.¹⁵⁰

Wolf reintroduction has had very real consequences for the cattle industry. Federal data attributes 4588 cattle and sheep deaths to wolf predation between 1995 and 2010 in the NRM.¹⁵¹ During 2008 alone, there were 569 confirmed sheep and cattle deaths in the West as a result of wolves.¹⁵² In reality, these deaths accounted for less than one percent

¹⁴⁴ Patrick W. Ryan and Erika E. Malmen, *Interagency Consultation Under Section 7, in* ENDANGERED SPECIES ACT, *supra* note 25, at 104, 105.

¹⁴⁵ Kim Murphy, *Taking Aim at the Endangered Species Act*, WASH. POST, Nov. 14, 2010, at A3 (reporting that Congressman Denny Rehberg remarked that landowners viewed this as the best way to confront ESA-protected species).

¹⁴⁶ Backus, *supra* note 79.

¹⁴⁷ *Id.*

¹⁴⁸ *Id.*

¹⁴⁹ Lydersen, *supra* note 32, at A5.

¹⁵⁰ Gibson, *supra* note 6, at 37 (quoting Suzy Foss, a Montana rancher, stating the presence of wolves in her state is due to “monkeys in some government agency in a Washington high-rise think[ing] they’re good for us. They will destroy our society.”).

¹⁵¹ Weiser, *supra* note 4.

¹⁵² Chadwick, *supra* note 2, at 38.

of total livestock deaths in the region over that year, but to ranchers it is just “one more blow.”¹⁵³ Perhaps the most devastating effect on cattle is not actual predation, but the stress that wolf harassment causes.¹⁵⁴ Wolf-induced stress can cause cattle to lose between thirty and fifty pounds, and has resulted in increasing amounts of aborted pregnancies due to hormonal side effects.¹⁵⁵ Those cattle that are lucky enough to have survived an encounter with wolves may become unmarketable due to leg injuries, wounds, or infections resulting from the chase or attack.¹⁵⁶ Battle-tested cattle become increasingly difficult to round up, particularly if the ranchers are accustomed to using dogs, making life that much more difficult.¹⁵⁷

In a sputtering economy, and in an industry where every animal is important to the ultimate success of the business, ranchers resent the reintroduction of wolves.¹⁵⁸ Former National Park Service director William Penn Mott realized the basis of this conflict and believed that “[t]he single most important action conservation groups could take to advance Yellowstone wolf restoration would be to start a compensation fund. It’s economics that makes the ranchers hate wolves. Pay them for their losses and the controversy will subside.”¹⁵⁹ Defenders has done just that, with the establishment of the Defenders of Wildlife Wolf Compensation Trust (“Defenders’ Fund”).¹⁶⁰ The Defenders’ Fund provides one hundred percent reimbursement of market value for confirmed wolf kills, and fifty percent compensation for probable kills.¹⁶¹ However, only about one-eighth of all wolf kills are confirmed and compensated, as the confirmation process is hindered by the difficulty of locating carcasses and proving wolf predation.¹⁶² Confirmation requires FWS or U.S. Department of Agriculture officials to perform an investigation.¹⁶³ Unfortunately, cattle carcasses are

¹⁵³ *Id.* at 38, 42.

¹⁵⁴ *See id.* at 40.

¹⁵⁵ *Id.*

¹⁵⁶ *Id.*

¹⁵⁷ *Id.*

¹⁵⁸ *See* Thrower, *supra* note 12, at 347 (explaining that the economic loss from wolf kills is what makes ranchers dislike them, as ranchers are often content as long as they are reimbursed).

¹⁵⁹ *Id.*

¹⁶⁰ *Id.*; *see* *Defenders of Wildlife Wolf Compensation Trust*, DEFENDERS OF WILDLIFE, http://www.defenders.org/programs_and_policy/wildlife_conservation/solutions/wolf_compensation_trust (last visited Apr. 6, 2012).

¹⁶¹ Thrower, *supra* note 12, at 347.

¹⁶² *Id.*; *see* Chadwick, *supra* note 2, at 40.

¹⁶³ Thrower, *supra* note 12, at 347.

often dragged away by scavengers or picked clean of evidence before ranchers discover the bodies.¹⁶⁴

In addition to the risk to livestock, some members of the NRM community feel personally threatened by the presence of wolves: “[S]ome folks say they no longer feel as safe taking their families into the woods.”¹⁶⁵ In a region where hunting is often engrained in the culture, hunters classify wolves as “land piranhas,” fearing they will devastate local game populations and deprive them of prized animals such as elk.¹⁶⁶ Many of these fears are rooted in the historical notoriety of the gray wolf. They are based upon wolves in general and those specific to the NRM.¹⁶⁷ Some believe that the Canadian wolves reintroduced into the NRM are a different subspecies and that these “foreign wolves” are giant in comparison to native wolves and carry a variety of diseases, specifically tapeworm.¹⁶⁸ Others argue that as the population of wolves grows, it is only a matter of time until humans are targeted as prey.¹⁶⁹

B. *Conservationists’ Rebuttal*

From a sheer numbers standpoint, wolf reintroduction has not significantly increased cattle fatalities.¹⁷⁰ Conservationists point to the minimal percentage of cattle fatalities linked to wolves, less than one percent, and highlight that the majority of deaths are caused by other predators such as coyotes, or disease, extreme weather, and birthing problems.¹⁷¹ Since reintroduction, wolves have decreased the population density of coyotes by fifty percent, and as much as ninety percent in certain wolf-dense areas,¹⁷² leaving coyotes living in groups with “shrunk territories or as vagabond ‘floaters.’”¹⁷³ As a result, the average size of the

¹⁶⁴ Chadwick, *supra* note 2, at 40.

¹⁶⁵ *Id.* at 39.

¹⁶⁶ *See id.*

¹⁶⁷ *See* Gibson, *supra* note 6, at 34–35.

¹⁶⁸ *See id.* at 36–38.

¹⁶⁹ *See id.* at 36.

¹⁷⁰ *See id.* at 38; Douglas W. Smith et al., *Yellowstone After Wolves*, 53 *BIOSCIENCE* 330, 335 (2003) (explaining wolf presence in Yellowstone has altered coyote predation).

¹⁷¹ DEFENDERS OF WILDLIFE, *FACT OR FICTION?: DEBUNKING COMMON MYTHS ABOUT WOLVES 2* (2010), available at http://www.defenders.org/resources/publications/newsroom/wolf_media_kit/wolves_fact_or_fiction.pdf [hereinafter DEFENDERS’ FACT OR FICTION].

¹⁷² Smith et al., *supra* note 170, at 335; *see* Thrower, *supra* note 12, at 326; Chadwick, *supra* note 2, at 54.

¹⁷³ Chadwick, *supra* note 2, at 54.

coyote packs in the region has shrunk from a pre-wolf average of six individuals to less than four per pack.¹⁷⁴

This is significant for two reasons. First, this reduction in the average pack size has affected the type of food that coyotes hunt for, with smaller packs or individuals focusing on smaller prey as opposed to the larger prey, like livestock, that coyotes are capable of hunting in greater numbers.¹⁷⁵ Second, based on 2008 statistics of sheep loss reported by ranchers in all three states, wolves accounted for less than one percent (1300 sheep) of the more than 125,000 fatalities.¹⁷⁶ Coyotes accounted for over twenty-five percent (31,600) of the fatalities.¹⁷⁷ From these statistics it seems that coyotes present a greater problem to ranchers, at least with respect to sheep. The reduction of coyote numbers and pack size since the reintroduction should theoretically have reduced the number of coyote-related deaths. A separate study, conducted during the 1999–2000 season on the effects of wolves on the survival and movement of livestock calves in central Idaho concluded that the overall impact on calf survival or behavior was insignificant.¹⁷⁸ Additionally, in areas where there is an adequate natural food supply, wolves are even less of a threat to livestock, as evolution has geared their taste buds for natural prey.¹⁷⁹

Additionally, conservationists point to potential nonlethal methods of preventing livestock attacks and human conflict, some of which have had success.¹⁸⁰ Unfortunately, many of these methods are expensive, and the federal government has allocated only a limited amount of funds to

¹⁷⁴ Smith et al., *supra* note 170, at 335.

¹⁷⁵ See Thrower, *supra* note 12, at 326 (citing Smith et al., *supra* note 170, at 335).

¹⁷⁶ Chadwick, *supra* note 2, at 42. It is interesting to note from these statistics that dogs accounted for more sheep kills (1.1% or 1400) than wolves did. *Id.* Other predators, including dogs, coyotes, bears, and cougars accounted for over one-third (36.1%) of sheep deaths, while weather, disease, and other non-predator related deaths accounted for the remaining deaths. *See id.* While this study is based only on sheep, it seems to indicate that the wolves' overall impact on livestock is limited.

¹⁷⁷ *Id.*

¹⁷⁸ See John K. Oakleaf et al., *Effects of Wolves on Livestock Calf Survival and Movements in Central Idaho*, 67 J. WILDLIFE MGMT. 299 *passim* (2003).

¹⁷⁹ See Chadwick, *supra* note 2, at 40–42 (Peter Brown, a “range rider,” claims that “we have good populations of natural prey here. I’ve seen wolves walk right through cattle herds to stalk deer.”).

¹⁸⁰ See *id.*; DEFENDERS OF WILDLIFE, LIVESTOCK AND WOLVES: A GUIDE TO NONLETHAL TOOLS AND METHODS TO REDUCE CONFLICTS (2008), available at http://www.defenders.org/resources/publications/programs_and_policy/wildlife_conservation/solutions/livestock_and_wolves.pdf [hereinafter DEFENDERS’ LIVESTOCK GUIDE].

help ranchers in this arena.¹⁸¹ These methods, along with their documented success and shortcomings, will be addressed in Part VI of this Note.

The presence of predators has made some people uneasy about their own safety. In actuality, wolves have been linked to only two human deaths in North America over the past one hundred years.¹⁸² A substantially greater number of people have been killed by bears, bees, mountain lions, road collisions with large animals, and even pet dogs than wolves.¹⁸³ Wolves' innate fear of humans causes them to generally avoid areas with a strong human presence.¹⁸⁴ Wolf biologist Jay Mallone of Montana commented that he wished wolves in the wild would more readily approach humans, as "[i]t would make studying wild wolves a lot easier."¹⁸⁵ Conservationists similarly quell hunters' concerns, as elk and deer populations are currently at or exceeding management targets.¹⁸⁶

IV. THE AFTERMATH OF *SALAZAR* AND THE CONGRESSIONAL "SIDE-STEP"

A. *Federalism Issues Complicating the Wolf's Future*

While wolves have often been heralded as the prime example of an ESA success story, to some they have simultaneously represented an over-extension of federal control into the management of public lands.¹⁸⁷ Due to this successful recovery, the main question confronting the future of wolf management centers on the adequacy of state management plans no longer subject to the ESA and potential FWS regulatory crackdowns.¹⁸⁸ Wolves, as well as other "wide-ranging" predators such as grizzly bears, provide

¹⁸¹ See Grunbaum, *supra* note 37.

¹⁸² DEFENDERS' FACT OR FICTION, *supra* note 171, at 2.

¹⁸³ *Id.*

¹⁸⁴ *Id.*

¹⁸⁵ See Gibson, *supra* note 6, at 38.

¹⁸⁶ DEFENDERS' FACT OR FICTION, *supra* note 171, at 1.

¹⁸⁷ See Thrower, *supra* note 12, at 319–20; Chadwick, *supra* note 2, at 40. To many in the region, "wolf reintroduction became a galvanizing symbol of perceived assaults on their personal freedom." Gibson, *supra* note 6, at 34.

¹⁸⁸ See Lara D. Guercio & Timothy P. Duane, *Grizzly Bears, Gray Wolves, and Federalism, Oh My! The Role of the Endangered Species Act in De Facto Ecosystem-Based Management in the Greater Glacier Region of Northwest Montana*, 24 J. ENVTL. L. & LITIG. 285, 316 (2009). In 2005 the FWS ceded responsibility of wolf management to Montana and Idaho state wildlife officials. See *id.* at 310. FWS regulations allow for this transfer of power to states with approved species management plans. *Id.*

a unique challenge for regulation as they ignore political boundaries.¹⁸⁹ Regulation is further complicated as the “once Wild West is now legally divided and includes intermixed ownership and management by private property owners as well as a dizzying array of local, state, federal, and tribal regulatory actors.”¹⁹⁰ It is this balance of federal, state, and local regulatory agencies and actors that will ultimately determine the fate of the NRM wolf population, as humans currently pose the most significant threat to the species.¹⁹¹ The myriad of federalism issues involved in wolf management, and species management in general, will be of great importance to the future of wolves in the NRM and the implementation of the ESA on the whole. The expanse of these federalism issues falls outside the scope of this Note.

B. The Meaning of “Recovery” Under the ESA

Salazar temporarily ensured ESA protection for the gray wolf. The congressional rider has drastically changed the path of gray wolf recovery, and the potential for delisting in Wyoming and other states will put the species to the test. Irrespective of the current listing status, “[t]he checkered history of wolf recovery in the Northern Rocky Mountains raises fundamental questions of the purpose of the ESA: what *is* recovery?”¹⁹²

The ESA fails to explicitly define “recovery,” but it may be implicitly defined as “no longer sufficiently at risk of extinction to be listed as endangered or threatened.”¹⁹³ The FWS has effectively defined “recovery” in its 1990 guidelines regarding recovery plans:

[T]he process by which the decline of an endangered or threatened species is arrested or reversed, and threats to its survival are neutralized, so that its long-term survival in nature can be ensured. The goal of this process is the maintenance of secure, self-sustaining wild populations of species.¹⁹⁴

¹⁸⁹ See *id.* at 287.

¹⁹⁰ *Id.*

¹⁹¹ *Id.* at 316.

¹⁹² Goble, *supra* note 25, at 86.

¹⁹³ *Id.* at 71–72.

¹⁹⁴ *Id.* at 72 (citing U.S. FISH & WILDLIFE SERV., POLICY AND GUIDELINES FOR PLANNING AND COORDINATING RECOVERY OF ENDANGERED AND THREATENED SPECIES 1 (1990)). The FWS provided this definition of “recovery” in the agency’s 1990 guidelines for recovery plans. *Id.* Along with the National Oceanic and Atmospheric Administration-Fisheries,

Essentially, the FWS implementation of the ESA equates “recovery” to mean when a species is “no longer in need of the Act’s protection.”¹⁹⁵

Stemming from a 2004 Ninth Circuit decision,¹⁹⁶ Dale Goble outlines two necessary components of the risk assessment calculus in determining if a species has “recovered,” thus warranting delisting:¹⁹⁷ (1) biological recovery of the species, whether the population and distribution has improved significantly to “the point at which it is no longer unacceptably at risk of extinction,”¹⁹⁸ in short, the population has reached the “appropriate viability threshold,”¹⁹⁹ and (2) the sufficiency of regulatory schemes in place to ensure “that any remaining threats will be managed so that the species will not fall back below the viability threshold that led to its delisting.”²⁰⁰ These decisions must be made with the understanding that the ESA is capable of providing protection that is “all but irreplaceable,” as few federal or state laws are capable of providing the same level of protection for species.²⁰¹ Consequently, the delisting of a species may result in eventual relisting in the near future.²⁰²

The varying interpretations of “recovery,” grounded in the two operational requirements referenced above, are at the foundation of the current NRM wolf debate.²⁰³ Currently, all three states have met the biological requirement established by the FWS recovery plan,²⁰⁴ and Montana and Idaho have established legally sufficient recovery plans.²⁰⁵ However, it is unclear whether population goals under current recovery plans, which still mandate a minimum population despite the rider, truly

the other agency responsible for administering the ESA, the FWS has implemented this definition in regulatory practice. *Id.*

¹⁹⁵ *Id.* at 72.

¹⁹⁶ See Goble, *supra* note 25, at 71 (citing *Gifford Pinchot Task Force v. U.S. Fish & Wildlife Serv.*, 378 F.3d 1059, 1070 (9th Cir. 2004)).

¹⁹⁷ *Id.* at 75.

¹⁹⁸ *Id.* at 71.

¹⁹⁹ *Id.* at 71, 85–86.

²⁰⁰ *Id.* at 75, 85.

²⁰¹ *Id.* at 75 (explaining that “the very strength of the ESA in preventing extinction becomes a deterrent to delisting a species because to do so will frequently remove the protection needed to conserve it and thus lead to a downward spiral that would necessitate relisting. This is the irony of the ESA: it is a powerful statute that can bring species back from the brink of extinction, but its intensely focused power itself can make the statute all but irreplaceable since few federal or state laws provide similarly focused protection against threats such as habitat degradation and nonnative species.”).

²⁰² See Goble, *supra* note 25, at 75.

²⁰³ See *id.* at 85.

²⁰⁴ See *supra* note 87 and accompanying text.

²⁰⁵ See *supra* notes 91, 96, and accompanying text.

conform to the meaning of “recovery.”²⁰⁶ This is in large part due to the uncertainty of what “recovery” entails. Is the ESA simply a mechanism to prevent extinction, preserve a zoo population or a population capable of maintaining its ecological function, or rekindle a species to the point where evolutionary potential is sustained?²⁰⁷ Congressional silence on what constitutes “recovery” is further confused by the numerous interpretations of population viability, as some conservationists have identified eighteen separate interpretations, including:

[M]inimally viable populations, . . . populations sufficient to maintain evolutionary potential (i.e., sufficient numbers of individuals and populations to adapt to perturbations and trends such as global climate change), ecological function, social dynamics (e.g., sufficient numbers to maintain breeding, migration, and other social life cycles), historical baseline, maximum population, and the status quo.²⁰⁸

The questions surrounding recovery, derivative of this confusion, are only beginning to be addressed despite the fact that the Act is nearly forty years old.²⁰⁹

Holly Doremus suggests that gearing species management simply toward reproduction misses the true purpose of the ESA.²¹⁰ Regulatory schemes that subject animals to “human control and manipulation move those populations toward domestication, changing them from wild animals to human creations designed to serve human needs,” thus robbing these “wild creatures of their aura, their magic, the essence for which we should be protecting them.”²¹¹ Doremus further suggests that the text of the ESA explicitly states that animals are to be “protected as wild creatures, rather than merely as biological entities.”²¹² It appears that congressional intent was to reinvigorate species past the point of a captive and overly controlled population to one that exists in a natural state for the benefit of future generations.²¹³ This is supported by statutory language

²⁰⁶ See *supra* Part I.C.

²⁰⁷ See Goble, *supra* note 25, at 86.

²⁰⁸ See *id.*

²⁰⁹ See *id.* at 90, 91 n.11 (noting the Act dates from 1973).

²¹⁰ See Holly Doremus, *Restoring Endangered Species: The Importance of Being Wild*, 23 HARV. ENVTL. L. REV. 1, 2–3 (1999).

²¹¹ *Id.* at 3.

²¹² *Id.* at 10.

²¹³ See *id.* at 12.

asserting that endangered species “are of esthetic, ecological, educational, historical, recreational, and scientific value to the Nation and its people.”²¹⁴

In a similar vein, Goble suggests that ecological viability, “conservation of a species’ functional role in the ecosystem it occupies,” is supported by the Act’s language and legislative history.²¹⁵ These views seem to be supported by previously mentioned studies,²¹⁶ concluding that a species’ population must be maintained in the thousands or it will likely be incapable of “riding-out environmental fluctuation and catastrophic events, and ensuring the continuation of evolutionary processes.”²¹⁷ Setting the recovery bar below a viable population level will not only place the species at risk, and consequently fail to fulfill the objective of the ESA: it will limit the ecological benefits of the species. It also sets the stage for a potential bureaucratic nightmare, as species may be delisted and relisted, leading to countless judicial challenges and legislative improvisations such as the congressional rider. Regardless of the interpretation, a sound definition of “recovery” is ultimately important to the development of recovery plans in the future, an area that is just beginning to be examined through litigation.²¹⁸

V. THE IMPORTANCE OF WOLF MANAGEMENT

A. *Dueling Perspectives: The NRM Region’s Dependence on Wolf Proliferation Regardless of the Conservation Approach Taken*

Along the spectrum of natural resource management and species preservation regulation, biocentrism and anthropocentrism sit at opposite extremes.²¹⁹ While each view encompasses a variety of interpretations, they are at their core fairly simple approaches to conservation.²²⁰ A biocentric interpretation envisions a natural equality among all species, and often views humans as the stewards of the world’s life.²²¹ In short, the concept is that humanity has an inherent duty to protect the living beings we share the planet with, and this duty should be accounted for when

²¹⁴ 16 U.S.C. § 1531(a)(3) (2006); see Doremus, *supra* note 210, at 12.

²¹⁵ See Goble, *supra* note 25, at 86–87.

²¹⁶ See *supra* notes 73–76 and accompanying text.

²¹⁷ Traill et al., *supra* note 73, at 28.

²¹⁸ See Goble, *supra* note 25, at 81.

²¹⁹ See RASBAND ET AL., *supra* note 36, at 13, 16.

²²⁰ See *id.* at 12.

²²¹ See *id.* at 13–14.

planning environmental regulation.²²² The anthropocentric approach is most commonly a utilitarian argument, making conservation and preservation decisions on the basis of social welfare in the hope of “provid[ing] the greatest good to the greatest number of people.”²²³ The utilitarian argument is explained well by William Baxter: “reject[ing] the proposition that we *ought* to respect ‘the balance of nature’ or to ‘preserve the environment’ unless the reason for doing so, express or implied, is the benefit of man.”²²⁴

As a keystone species, a healthy wolf population is critical to ensuring the balance of the NRM ecosystem.²²⁵ Top predators keep the populations of large herbivores at bay, preventing overgrazing and allowing the plant life necessary to sustain smaller organisms’ growth.²²⁶ Since their reintroduction into Yellowstone and the surrounding area, wolf predation has cut the elk population in half, leading to “a rebalancing effect [that] ripples all the way to microbes in the soil,” known as a trophic cascade.²²⁷ In the absence of wolves, elk and other ungulates grazed uncontrollably, leaving the NRM stale, simplifying ecosystems and significantly limiting biodiversity.²²⁸

Additionally, wolf predation may ultimately lead to the strengthening of prey populations by selecting and eliminating the weaker individuals, decreasing the chance of those animals reproducing.²²⁹ In Yellowstone, “[f]rom elk to grizzly bears to rodents to raptors, the presence of wolves is reshuffling the ecological deck in the park, altering relationships between species, having myriad unanticipated secondary and tertiary effects, and increasing species richness.”²³⁰ Initial reports show that wolves have provided a “buffer” for the impact of global warming, highlighting “the

²²² See *id.* at 15.

²²³ See *id.* at 16.

²²⁴ *Id.* at 17 (citing WILLIAM BAXTER, PEOPLE OR PENGUINS: THE CASE FOR OPTIMAL POLLUTION 4–9, 12 (1974)).

²²⁵ See Goble, *supra* note 25, at 87 (explaining the variety of ecological changes in Yellowstone National Park since reintroduction); see also Bittner, *supra* note 55, at 287; Chadwick, *supra* note 2, at 39.

²²⁶ See Bittner, *supra* note 55, at 287–88.

²²⁷ Chadwick, *supra* note 2, at 42, 54.

²²⁸ Bittner, *supra* note 55, at 288.

²²⁹ See *id.* (explaining that the method wolves use to hunt, a “coursing” technique in which they separate the slower and weaker individuals, has a positive effect on the gene pools of prey species).

²³⁰ *Id.* at 319 (quoting Jim Robbins, *Weaving a New Web: Wolves Change an Ecosystem*, SMITHSONIAN ZOOGOER, May/June 1998).

importance of restoring and maintaining intact food chains in the face of large-scale environmental perturbations such as climate change.”²³¹

The benefits associated with a healthy wolf population fulfill both ends of the species management spectrum, and every interpretation in between. Clearly, those in favor of a biocentric approach to conservation management favor wolf preservation. Due to their importance for the balance and health of ecosystems in the NRM, proper wolf conservation is important from an anthropocentric approach as well. Fully functioning ecosystems are critical to humanity, as the “ecosystem services”²³² they provide, such as air and water filtration, decomposition of waste, pollination, ensuring soil fertility, regulating climate, and alleviating the severity of droughts and floods, are services that humans are incapable of providing for themselves on such a large scale.²³³

Large predators, such as wolves in the NRM and lions throughout much of Africa, are critical to the health of ecosystems.²³⁴ In their absence, “we can anticipate eventual collapse of whole environments, right down to the water systems, as prey shifts or migrations stop, and species overgraze and destroy the integrity of important vegetation . . . erosion follows, rivers silt up, and fish die.”²³⁵

Similar to the economic boost provided by lions in Africa through ecotourism,²³⁶ wolves add an estimated thirty-five million dollars to the Yellowstone region’s economy from the tens of thousands of tourists who come to watch them each year.²³⁷ A sustained wolf presence in the area

²³¹ Goble, *supra* note 25, at 87 (quoting Christopher C. Wilmers & Wayne M. Getz, *Gray Wolves as Climate Change Buffers in Yellowstone*, 3 PLOS BIOLOGY 0571, 0571 (2005), available at <http://www.plosbiology.org/article/info%3Adoi%2F10.1371%2Fjournal.pbio.0030092>).

²³² See James Salzman et al., *Protecting Ecosystem Services: Science, Economics, and Law*, 20 STAN. ENVTL. L.J. 309, 310–312 (2001), reprinted in RASBAND ET AL., *supra* note 36, at 18.

²³³ See *id.*

²³⁴ Dereck Joubert, *Are We Seeing the Last Lions?*, CNN (Jan. 23, 2011, 10:08 AM), <http://www.cnn.com/2011/OPINION/01/23/joubert.last.lions/index.html?iref=allsearch>.

²³⁵ Joubert, *supra* note 234. Dereck Joubert, a five-time Emmy award winner and National Geographic explorer based out of Botswana, has filmed wildlife for over twenty-five years. *Dereck and Beverly Joubert: Filmmakers/Conservationists*, NAT’L GEOGRAPHIC, <http://www.nationalgeographic.com/explorers/bios/jouberts/> (last visited Apr. 6, 2012). Along with his wife Beverly, Joubert specializes in studying large predators, most notably lions. *Id.*

²³⁶ See Joubert, *supra* note 234 (explaining that the lion is a critical cog in the \$80 billion a year ecotourism business in Africa, which in turn helps parks, airlines, and local businesses).

²³⁷ Chadwick, *supra* note 2, at 39.

could conceivably lead to increasing ecotourism profits for the entire NRM region. The preservation of wolves even satisfies Baxter's requirement that it benefit man.²³⁸

B. Duty to Future Generations

The majority of environmental literature seems to share a common thread: the idea that "the present generation owes a duty to generations yet unborn to preserve the diversity and quality of our planet's life-sustaining environmental resources."²³⁹ This concept, that modern humanity holds the world in trust for future generations, is described by Edith Brown Weiss as "intergenerational equity."²⁴⁰ This encompasses the belief that the primary goal and duty of human society is to ensure the welfare of generations to come by maintaining and conserving the "life-support systems of the planet, the ecological processes and the environmental conditions necessary for a healthy and decent human environment."²⁴¹

Humanity, the *homo sapiens* species, is a partnership between all generations past and present, to ensure our continued survival we have an obligation to preserve the world and its ecological functions so as to be capable of maintaining life in the future.²⁴² The wolf is an important cog in the biological puzzle and is critical to the preservation of the planet for future generations. The wolf's importance to the ecological health of the NRM region, as well as the esthetic, educational, historical, recreational, and scientific benefits it provides, mandate that the species be fiercely protected.²⁴³ The wolf's rebirth throughout the Northwest is perhaps the species' last stand and, as a result, proper procedure must be followed. It is essential in determining the regulatory and policy decisions encompassing wolf and species management in general that our duty to preserve the earth for future generations be considered. To ensure that the ESA can protect the NRM gray wolf and other species in peril, it is necessary for Congress to prescribe a definition of "recovery" under the ESA.

²³⁸ See *supra* note 224 and accompanying text.

²³⁹ D'Amato, *supra* note 39, at 190.

²⁴⁰ Brown Weiss, *supra* note 39, at 199.

²⁴¹ *Id.* at 200.

²⁴² See *id.* at 199–200.

²⁴³ See 16 U.S.C. § 1532(3) (2006) (explaining the array of benefits the ESA seeks to protect).

VI. PROPER “RECOVERY”: POTENTIAL SOLUTIONS AND HOPEFUL OUTCOMES

A. *The Need for Congressional Action*

Soon after *Salazar*, a group of congressmen introduced bills seeking to remove the wolf from ESA protection, eventually leading to congressional action.²⁴⁴ Congressman Rehberg explained his support: “It’s not that we want to gut the Endangered Species Act. It’s not that we want to destroy a species. . . . We met the threshold, and now the courts have changed the goal lines. That’s the problem.”²⁴⁵ Conservationists see it differently. Andrew Wetzler of the Natural Resources Defense Council believed proposed legislation would do exactly that: “If passed, any of these bills will rip the heart out of the Endangered Species Act and set a terrible precedent for wildlife management generally.”²⁴⁶ Many argue that the congressional rider has done just that.²⁴⁷ The “goal line” confusion of what constitutes success is largely a product of an amorphous definition of “recovery.”

Widely regarded as the “pit bull” of environmental law and recognized by the Supreme Court as “the most comprehensive legislation for the preservation of endangered species ever enacted by any nation,”²⁴⁸ the ESA has been an effective legislative response to diminishing biodiversity.²⁴⁹ The Act is solely responsible for the resurgence of the NRM gray wolf and other species including the bald eagle, whooping crane, gray whale, and grizzly bear.²⁵⁰ In doing so, the ESA has been largely successful in accomplishing its congressionally mandated goal to “provide a means

²⁴⁴ Murphy, *supra* note 145, at A3.

²⁴⁵ *Id.* (Congressman Rehberg along with other members of the House introduced bills to Congress in late 2010 seeking to remove the gray wolf from ESA protection. Congressman Chet Edwards proposed a bill prohibiting any listing of the gray wolf.).

²⁴⁶ *Id.* Doug Honnold of Earthjustice commented that “there’s been fairly strong bipartisan support of the sort of Noah’s Ark notion that if we’re serious about our moral commitment to share the planet with our fellow inhabitants, we don’t start throwing identified species off the ark.” *Id.*

²⁴⁷ See *supra* notes 120–23 and accompanying text.

²⁴⁸ See Elizabeth A. Schulte, *From Downlisting to Delisting: Anticipating Legal Actions if Gray Wolves are Delisted From the Endangered Species Act*, 24 J. LAND RESOURCES & ENVTL. L. 537, 538 (2004) (citing *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 180 (1978)).

²⁴⁹ See *id.* at 539.

²⁵⁰ *The Road to Recovery: 100 Success Stories for Endangered Species Day 2007*, CTR. FOR BIOLOGICAL DIVERSITY, <http://www.esasuccess.org/reports/> (last visited Apr. 6, 2012).

whereby the ecosystems upon which endangered species and threatened species depend may be conserved, [and] to provide a program for the conservation of such endangered species and threatened species.”²⁵¹ The Act’s success has been based upon a two-tiered process: (1) prevent extinction and (2) promote recovery.²⁵²

As previously discussed, the Act implicitly defines “recovery” as when the species no longer requires ESA protection.²⁵³ Despite this succinctly stated definition and the FWS-prescribed definition,²⁵⁴ both supporters and opponents of the Act are left without a clear picture of what “recovery” involves. The ESA does provide some guidance, as the definition of “recovery” is necessarily intertwined with the meaning of “endangered” and “threatened.”²⁵⁵ Despite these guideposts with which to interpret when a species has recovered, uncertainty and speculation remain.²⁵⁶

As long as the meaning of “recovery” is unclear, the Act lacks the strength required to ensure species’ continued survival well into the future. If the ultimate recovery of a species is constantly up for speculation, as with the NRM gray wolf, then the ESA’s capacity to preserve a species is severely impeded. Debate over “recovery” and the adequacy of recovery goals is rooted in this wide array of interpretations.²⁵⁷ Having met and exceeded the 1994 EIS requirements for eight consecutive years, opponents of continued ESA protection claim that the wolves have “recovered” according to the regulatory scheme in place.²⁵⁸ While the three states have admirably made the necessary adjustments and regulatory implementations to ensure that the wolf population has met these standards, the best available science²⁵⁹ seems to show that the minimum required goals would fail to provide a viable population.²⁶⁰

As a multitude of studies suggest, the current recovery requirements in place fall well short of the necessary numbers for the “minimum population viability” (“MPV”) necessary for the species to overcome

²⁵¹ 16 U.S.C. § 1531(b) (2006).

²⁵² See Goble, *supra* note 25, at 71.

²⁵³ *Id.* at 72.

²⁵⁴ See *supra* note 194 and accompanying text.

²⁵⁵ Goble, *supra* note 25, at 72.

²⁵⁶ See *supra* Part IV.B.

²⁵⁷ See *supra* notes 26–29 and accompanying text.

²⁵⁸ See *supra* notes 86, 147–48, and accompanying text.

²⁵⁹ Goble, *supra* note 25, at 88 (stating that a recovery plan “is a statement of the best available science on the conservation management actions needed to protect and recover a listed species”).

²⁶⁰ See *supra* Part I.C.

environmental fluctuation.²⁶¹ While current wolf populations in the NRM region hover around 1600 or 1700 individuals,²⁶² well over the subscribed recovery goal of 300, studies suggesting that a MPV requires 2000 to 10,000 individuals hint that even current populations are at risk.²⁶³

With ESA protection removed, there is a possibility the states will allow wolf numbers to plummet to the bare minimum.²⁶⁴ If population numbers were to be taken to these levels and held static through regulated wolf hunts, wolf populations would lack the necessary genetic exchange and consequently be highly susceptible to disease and other factors.²⁶⁵ If the current recovery goal leaves the species susceptible to again becoming “endangered” or “threatened” and requiring protection under the Act, it seems the purpose of the ESA is not being achieved. This would be in direct violation of Goble’s prescribed second step to ESA protection: ensuring species management will prevent populations from “fall[ing] back below the viability threshold that led to its delisting.”²⁶⁶ There is little point to the ESA if species will continually drift in and out of protection. It will fail to adequately protect species and lead to judicial and legislative backlog.

As the agency responsible for the implementation of recovery plans, the FWS must achieve recovery.²⁶⁷ However, for the FWS to effectively perform its duty, Congress must act to provide a clear picture of what “recovery” entails. The lack of a clear definition has led to a recovery system rife with controversy and uncertainty, as witnessed with the NRM gray wolf.²⁶⁸ A clearer definition of recovery will allow a more effective implementation of the ESA, enabling the Act to better fulfill its

²⁶¹ See Traill, *supra* note 73, at 28, 30, 32; Fallon, *The Heart of the Wolf Recovery Problem*, *supra* note 14; Andrew Wetzler, *Bush Administration Ignores Wolf Recovery Science—Again*, SWITCHBOARD: NATURAL RESOURCES DEFENSE COUNCIL STAFF BLOG (Jan. 14, 2009), http://switchboard.nrdc.org/blogs/awetzler/bush_administration_ignores_wo.html.

²⁶² See Chadwick, *supra* note 2, at 39; Fallon, *The Heart of the Wolf Recovery Problem*, *supra* note 14.

²⁶³ See Wetzler, *supra* note 261 (highlighting an array of studies all suggesting that a MVP for wolves must number in the thousands).

²⁶⁴ See Fallon, *The Heart of the Wolf Recovery Problem*, *supra* note 14. *But see Grey Wolves Lose Endangered Status, For Good?*, *supra* note 33 (“But I don’t think that anyone is going to go out and start just shooting wolves. There are still federal standards that these states have to reach. . . . [N]o state wants to go down as the state that lost the wolf, and so both these states—Idaho and Montana—are pretty careful in their management of wildlife.”).

²⁶⁵ See Wetzler, *supra* note 261.

²⁶⁶ See *supra* note 200 and accompanying text (quoting Goble, *supra* note 25, at 85.).

²⁶⁷ See Fallon, *The Heart of the Wolf Recovery Problem*, *supra* note 14.

²⁶⁸ See *supra* Part IV.B.

objective. Due to the “uncertainties and the necessarily iterative learning process inherent in conservation biology,”²⁶⁹ species preservation does not lend itself to strict numerical regulations as do some environmental initiatives, such as water and air pollution.²⁷⁰ However, a useful definition of recovery does not require mechanical regulations.

B. What “Recovery” Should Entail

When introducing the bill that would ultimately become the ESA, Congressman John D. Dingell envisioned it “as one of the most important pieces of legislation needed if we were to conserve, protect, and propagate our threatened . . . wildlife resources.”²⁷¹ The Act has proven to be successful in many ways, but for it to ultimately be the “crown jewel of the nation’s environmental laws,”²⁷² the purpose of the Act, “recovery,” must be clearly defined by Congress. While enacting Section 10(j) of the ESA, Congress commented that “individual species should not be viewed in isolation, but must be viewed in terms of their relationship to the ecosystem of which they form a constituent [sic] element.”²⁷³

This window into congressional intent demonstrates that recovery must mean more than simply preventing extinction in the form of a zoo population or minimally viable wild population.²⁷⁴ The ESA is premised on the belief that these species “are of esthetic, ecological, educational, historical, recreational, and scientific value to the Nation and its people,”²⁷⁵ and their survival is necessary to protect our nation’s genetic heritage, something valued as “quite literally, incalculable.”²⁷⁶ Minimally viable wild populations are incapable of fulfilling these values. The purpose of the ESA is not to create a nether region for endangered species

²⁶⁹ Goble, *supra* note 25, at 90.

²⁷⁰ See Clean Air Act (“CAA”), 42 U.S.C. §§ 7401–7671 (2006); Clean Water Act (“CWA”), Pub. L. No. 92-500, 86 Stat. 816 (codified as amended in scattered sections of 33 U.S.C.). The CAA provides numerical thresholds for “air pollutants” as defined by the Act. See 42 U.S.C. § 7409.

²⁷¹ ENDANGERED SPECIES ACT, *supra* note 25, at back cover.

²⁷² See Schulte, *supra* note 248, at 538 (quoting *Endangered Species Act Amendments of 1993: Hearings on S. 921 Before Subcomm. on Clean Water, Fisheries, & Wildlife of the Senate Comm. on Env’t. and Pub. Works*, 103d Cong. 2 (1994) (statement of Sen. Graham)).

²⁷³ *U.S. v. McKittrick*, 142 F.3d 1170, 1174 (9th Cir. 1998) (quoting H.R. REP. NO. 97-835, at 30 (1982) (Conf. Rep.), *reprinted in* 1982 U.S.C.C.A.N. 2860, 2871).

²⁷⁴ See Goble, *supra* note 25, at 86.

²⁷⁵ 16 U.S.C. § 1531(a)(3).

²⁷⁶ RASBAND ET AL., *supra* note 36, at 349 (quoting the House Committee Report of the ESA (1973)).

where they balance on the brink of endangerment, but rather a self-sustaining population capable of surviving environmental fluctuation and maintaining its role in the ecosystems necessary for humanity's ultimate survival. With the benefit of nearly four decades of scientific advancements since the ESA's inception, congressional action clearly defining "recovery" would raise the bar for future ESA success. "Recovery" should entail the capability of long-term survival in the face of natural variances, evolutionary potential which will help ensure survival, and the sustained role of the species in its ecological function. This definition would ensure that the NRM wolf population, and subsequent endangered species, are not vulnerable due to inadequate recovery plans.

C. *Potential Solutions in the Northern Rocky Mountains*

"You don't sleep well anymore, because you don't know when you wake up if you're going to have all live animals."²⁷⁷ This is how local rancher Ed Jonas expressed his concerns at a meeting convened by Congressman Rehberg, one of many in the months after the *Salazar* decision.²⁷⁸ There is no doubt that wolves have an effect on the livestock of local ranchers through predation as well as stress-induced illness and weight loss.²⁷⁹ They make life a little more difficult for the ranchers who depend upon livestock for their livelihood. If the current population is sustained, or augmented as this Note suggests it should be, there will continue to be conflict in the region. There are, however, nonlethal methods that have been shown to be effective in deterring wolf attacks.

Depending upon a variety of factors, including the (1) number, age, and type of livestock needing protection, (2) season, (3) location and accessibility of the site, (4) size of the grazing area, and (5) how often people directly supervise the livestock,²⁸⁰ there are at least six proven methods to reducing wolf conflicts.²⁸¹

Perhaps the most effective, and ultimately the most intuitive, is to reduce the number of attractions for the wolves.²⁸² Quick and effective handling of dead, diseased, or dying livestock and the management of

²⁷⁷ Murphy, *supra* note 145, at A3.

²⁷⁸ *Id.*

²⁷⁹ See *supra* notes 152–56 and accompanying text.

²⁸⁰ See DEFENDERS' LIVESTOCK GUIDE, *supra* note 180, at 3.

²⁸¹ See *id.*

²⁸² See *id.* at 3–5; Grunbaum, *supra* note 37 (quoting Carolyn Sime, the state wolf coordinator for Montana Fish, Wildlife, and Parks: "Carnivores have an amazing capacity to learn. . . . They remember where their food sources are.").

calving, which are all enticing to predators, can significantly reduce the chance of attracting wolves.²⁸³ The use of guard dogs has also been shown to be an effective measure in preventing wolf predation as the canine presence may act as a deterrence, and dogs can be effective in alerting humans when predators enter the area.²⁸⁴

The use of barriers such as permanent or portable fencing and fladry, the hanging of red or orange cloth flags at eighteen-inch intervals along a thin rope, have proven effective under a variety of circumstances.²⁸⁵ As futile as it sounds, when used in accordance with other methods, fladry has been successful as a short-term deterrent.²⁸⁶ "Turbo-fladry," the use of an electric current through the line, is estimated to be significantly more effective.²⁸⁷

Some ranchers, such as the Blackfoot Challenge Ranchers, a cooperative in west-central Montana's Blackfoot River watershed, have employed the help of "range riders."²⁸⁸ Range riders patrol livestock herds, keeping track of their location with respect to the area wolf packs, and taking proactive measures such as removing carcasses quickly.²⁸⁹ Their presence is generally effective in deterring wolves from entering the area, as wolves actively avoid humans.²⁹⁰ Secondary benefits of range riders include the ability to quickly identify sick or injured animals and to preserve evidence of any potential wolf kills for possible reimbursement.²⁹¹

Scare tactics such as radio-activated alarms and the use of non-lethal ammunition can intimidate wolves and prevent their entrance into contained areas.²⁹² Relocation of ranching sites and perhaps the permanent retirement of the most troublesome sites, often those near wolf dens,

²⁸³ See DEFENDERS' LIVESTOCK GUIDE, *supra* note 180, at 5 (explaining proper disposal of dead livestock entails the use of a "carcass pit" and frequent burying and burning of the carcasses).

²⁸⁴ See *id.* at 6.

²⁸⁵ See *id.* at 9; Grunbaum, *supra* note 37.

²⁸⁶ See DEFENDERS' LIVESTOCK GUIDE, *supra* note 180, at 9–10.

²⁸⁷ See *id.*

²⁸⁸ Chadwick, *supra* note 2, at 40.

²⁸⁹ See *id.* at 40–42; DEFENDERS' LIVESTOCK GUIDE, *supra* note 180, at 11–12; Grunbaum, *supra* note 37.

²⁹⁰ See Chadwick, *supra* note 2, at 40–42 (Peter Brown, a range rider for the Blackfoot Challenge cooperative believes "that just by moving around the area, [his] presence deters wolves from killing livestock. . . . Now we collect carcasses right away and compost them at a distant site. It's one of the simplest and most effective ways to reduce conflicts with both bears and wolves."); see also DEFENDERS' LIVESTOCK GUIDE, *supra* note 180, at 11; Grunbaum, *supra* note 37.

²⁹¹ See DEFENDERS' LIVESTOCK GUIDE, *supra* note 180, at 11.

²⁹² See *id.* at 13–15.

have also been shown to greatly reduce the potential for wolf conflict.²⁹³ Other potential methods, though largely scientifically untested, include using aggressive livestock breeds and “mountain-savvy” cows who are accustomed to the mountainous landscapes in the NRM, and providing for a condensed calving season.²⁹⁴

These nonlethal methods carry a price tag, and while they can be quite effective when properly used, they are not infallible.²⁹⁵ It is often difficult to locate dead animals quickly enough to avoid attraction.²⁹⁶ While range riders can facilitate this process, it is difficult to find experienced riders as the pay is low and generally involves nighttime surveillance along with camping among the herd.²⁹⁷ Guard dogs require extensive training, management, and the proper breeding.²⁹⁸ Fencing must be continually maintained to ensure no gaps have occurred that could allow predator access, and fladry and scare tactics are generally only effective over short durations as wolves will ultimately become accustomed to them.²⁹⁹

Although these methods are not one hundred percent effective, they have all shown potential to alleviate conflict. While ranchers are often incapable of affording the entire cost, in April 2010 the federal government showed initiative by allocating one million dollars to ten states with wolf populations in order to assist in compensation for wolf kills and spur the use of nonlethal methods.³⁰⁰ Needless to say, one million dollars does not go very far. Many states, including Montana, had to spend these funds exclusively on compensation.³⁰¹

Despite the inadequacy of these funds, larger allocations in the future could spur the development of nonlethal technologies. The increased use and development of nonlethal programs, accompanied by proactive measures, will greatly reduce wolf predation on livestock. Proactive

²⁹³ See Thrower, *supra* note 12, at 357–58; DEFENDERS’ LIVESTOCK GUIDE, *supra* note 180, at 16.

²⁹⁴ See DEFENDERS’ LIVESTOCK GUIDE, *supra* note 180, at 17–18.

²⁹⁵ See Grunbaum, *supra* note 37; *see also* DEFENDERS’ LIVESTOCK GUIDE, *supra* note 180, at 13–17.

²⁹⁶ See DEFENDERS’ LIVESTOCK GUIDE, *supra* note 180, at 5 (noting that wolves have an incredible sense of smell, capable of detecting prey over two miles away); Chadwick, *supra* note 2, at 40.

²⁹⁷ DEFENDERS’ LIVESTOCK GUIDE, *supra* note 180, at 12.

²⁹⁸ *Id.* at 6.

²⁹⁹ *See id.* at 9–10, 13–15.

³⁰⁰ Grunbaum, *supra* note 37.

³⁰¹ *See id.* (explaining that George Edwards, the manager of Montana’s livestock compensation program, says Montana “wants to fund non-lethal projects, too, but if it doesn’t pay back ranchers first, animosity toward wolves will only increase”).

measures such as changing grazing patterns, grazing at morning, and gathering to feed at night when wolves generally attack have shown to be effective.³⁰²

Perhaps most promising to the future of the wolf in the NRM is the emergence of a new “dynamic” approach toward wolf management in which ranchers and conservationists have joined forces.³⁰³ The congressional rider may have initiated the conversation, as environmentalists began reaching out to ranchers after the mandated delisting, perhaps seeking to salvage some control over the wolf’s future.³⁰⁴ This cooperation has led to the development of non-profit organizations such as People and Carnivores that work with ranchers to achieve a “coexistence” by aiding them in such preventive measures as building electric fences and paying for range riders.³⁰⁵ Fourth-generation Montana rancher Dean B. Peterson, who resents the decision to reintroduce wolves to the NRM as the decision was “shoved down [their] throat with a plunger,” nonetheless has worked with People and Carnivores: “A lot of my neighbors think I am wet behind the ears to take money from these people. . . . But the wolf is here to stay now, and my feeling is that those people who want it here should share the costs.”³⁰⁶

Greater federal and private funding of compensation and non-lethal prevention programs such as the Defenders’ Fund and organizations such as People and Carnivores, accompanied with incentives for local governments and private landowners to avoid conflict and not kill wolves, could be significant factors in helping ease the tension.

CONCLUSION

James William Gibson, an avid wolf proponent, describes the varying emotions in the aftermath of the congressional rider: “Wolf blood will flow across the Rocky Mountains. . . . For the [wolf opponents], that blood will represent an impressive victory. For wolf advocates, it means

³⁰² See *id.* (citing a study by biologist Timm Kaminski with ranchers in Alberta, Canada that found the grouping of cattle in a tight formation while feeding at night acted as an effective preventative measure as it cleared the pastures for wolves to hunt natural prey).

³⁰³ See Leslie Kaufman, *After Years of Conflict, A New Dynamic in Wolf Country*, N.Y. TIMES, Nov. 5, 2011, at A9; *Wolves: After Years of Conflict, Tentative Partnerships Between Ranchers and Conservationists*, GREENWIRE, Nov. 7, 2011 (LEXIS).

³⁰⁴ See *Wolves: After Years of Conflict, Tentative Partnerships Between Ranchers and Conservationists*, *supra* note 303.

³⁰⁵ See *id.*

³⁰⁶ See Kaufman, *supra* note 303 at A9, A12.

grief.”³⁰⁷ That is the saga of the wolf, perhaps the most polarizing species ever to be addressed by the ESA. “The story of wolves is a story of [‘]on the one hand[’] and [‘]on the other[’].”³⁰⁸ They do cause problems within the NRM. They will prey on cattle and sheep, and may kill the occasional pet.³⁰⁹ However, they also maintain a critical balance within the ecosystems they inhabit.³¹⁰ It is a classic example of “with the good comes the bad.”

It is easy for those in favor of continued wolf protection to watch the drama unfold from afar and call on ranchers to make further sacrifices to accommodate an increasing wolf population. It is an entirely different matter, however, when the presence of wolves threatens your livelihood.³¹¹ Ranchers and other members of these communities have already taken significant measures that have led to a boom in wolf populations since the reintroduction in 1995, allowing for the gray wolf to become perhaps “the most striking Endangered Species Act success story.”³¹² While they may remind us of our loyal canine friends, wolves are apex predators, far from their domesticated cousins. “People might think they’re neat and they might want to go see them in the zoo, but in the wild they’re not a friendly, cuddly creature.”³¹³ There are many complications in living with wolves that are not readily apparent to those not sharing a backyard with them. As a species, however, humans possess an ingenuity that has allowed society to overcome significant challenges.

With respect to the rapidly declining lion populations in Africa, conservationist Dereck Joubert comments: “Everything hinges on people being connected to a planet that is whole; and predators, although scary to live with, actually glue all this together. It’s something we’ve known and lived with for 3 million years.”³¹⁴ If wolves can’t survive in the NRM, where can they survive? Properly addressing the wolf dilemma is not only important for the future of *canis lupus*, but also for the protection of other species and the continued health of our planet.

³⁰⁷ See Gibson, *supra* note 6, at 41.

³⁰⁸ See *Grey Wolves Lose Endangered Status, For Good?*, *supra* note 33.

³⁰⁹ See *id.*

³¹⁰ See *id.*

³¹¹ William Yardley, *In Search of the Grizzly (If Any Are Left)*, N.Y. TIMES, Sept. 17, 2010, at A12 (“People whose livelihoods are not threatened by predators do not get it. . . . If my 401(k) was being raided by grizzly bears, I would think differently.”).

³¹² Chadwick, *supra* note 2, at 40 (quoting Jim Williams, the Montana Department of Fish, Wildlife and Parks wildlife program manager for northwest Montana).

³¹³ Yardley, *supra* note 311, at A12 (John Stuhlmiller, the director of government relations at the Washington State Farm Bureau, discussing ESA protection for grizzly bears in the Pacific Northwest).

³¹⁴ Joubert, *supra* note 234.

As with most challenges presented, there are possible solutions to what at first glance seems to be an uncompromising battle between wolf and rancher in the NRM region. Wolves and successful ranching communities need not be mutually exclusive. In order to ensure a coexistence among wolves and humans, or any other species, both sides of the argument must be appreciated. In the case of the wolf, it is clear that the hyperbole of many opponents is well beyond the truth. The director of Utah's Department of Natural Resources analogized wolf restoration to the "resurrection of the *T. rex*" and as a "biological weapon" aimed to end sport hunting.³¹⁵ It is safe to assume that a wolf hardly has the impact that the forty-foot long, nine-ton *Tyrannosaurus* would have had.³¹⁶ The assumption that the wolf is far from a biological weapon set to destroy commercial hunting is equally safe.

However, those in the surrounding NRM communities have many legitimate concerns regarding wolf reintroduction. These concerns cannot be neglected or pushed aside in the name of wolf recovery. If conservationists use that approach, the polarization of the good wolf and bad wolf will impede recovery. A cooperative approach, as seen with the People and Carnivores initiative, may bring the two sides closer together. Many in the NRM community, such as rancher Dean Peterson, "do not dislike or hate the animal," and view it as "an unreal species that God created."³¹⁷ It is the manner in which they view wolf restoration, their failure to recognize and account for the difficulties wolves face, and the ensuing battle to keep the wolf delisted that is at issue. A recovery plan truly reflecting the best available science, supplemented by a concerted federal and private effort to support ranchers through a more effective compensation program, implementation of educational programs, and the use of non-lethal preventive tools will help protect the species and extinguish the myth surrounding the "big bad wolf."³¹⁸

As a nation, with the federal government and Congress leading the way, America must conform further development to live with the creatures that surround us. The ESA is an effective tool for ensuring this goal, but its future effectiveness relies upon a clear definition of "recovery."

³¹⁵ Bruskotter et al., *supra* note 17.

³¹⁶ *Tyrannosaurus Rex*, NAT'L GEOGRAPHIC, <http://animals.nationalgeographic.com/animals/prehistoric/tyrannosaurus-rex/> (last visited Apr. 6, 2012); Tim Wall, *Tyrannosaurus Rex Could Have Weighed 9 Tons, Grew Fast*, ABC NEWS, Oct. 16, 2011, <http://abcnews.go.com/Technology/tyrannosaurus-rex-weighed-tons-estimate/story?id=14738660>.

³¹⁷ Kaufman, *supra* note 303, at A9.

³¹⁸ See Chadwick, *supra* note 2, at 38.

For all the success the Act has had, in order for it to continue to be at the forefront of environmental regulation it must be able to evolve. A definition of “recovery” specifying the requirement of a species’ capability of long-term survival, evolutionary potential, and functioning in its ecological role, in accordance with best scientific data available, is essential to future implementation.

As a “poster creature”³¹⁹ for conservation and a “charismatic species that enjoy[s] strong popular support,”³²⁰ the gray wolf provides an excellent opportunity for congressional action to strengthen the ESA despite the recent delisting. In addition, wolf management in the NRM is an excellent arena for the development of regulations and procedures at the federal, state, and local levels to handle growing wild populations. Compromise and collaboration are critical. The wolf is, and should be, here to stay; however, conservationists must recognize that the concerns of humans in the NRM must be addressed. If we get it right this time, perhaps we can get it right a few more times. The potential to resurrect the wolf species and successfully integrate it with surrounding communities provides the chance to set the stage for an effective species preservation dialogue. As the polar bear has become the face of the climate change movement, perhaps the gray wolf can be the face of the continually evolving American environmental movement.

³¹⁹ See Doremus, *supra* note 210, at 8.

³²⁰ *Id.* at 2.