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**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**

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In those days we had never heard of passing up a chance to kill a wolf. In a second we were pumping lead into the pack We reached the old wolf in time to watch a fierce green fire dying in her eyes. I realized then, and have known ever since, that there was something new to me in those eyes—something known only to her and to the mountain. I was young then, and full of trigger-itch; I thought that because fewer wolves meant more deer, that no wolves would mean hunters' paradise. But after seeing the green fire die, I sensed that neither the wolf nor the mountain agreed with such a view.¹

Grizzly bears and gray wolves have long inhabited an important and complex place in America's physical, ecological, and psychological landscape. Fabled characters in the story of our nation's historic western expansion, both species evoke strong emotions, positive and negative, among their human neighbors. Current and historic use of western lands includes ranching; farming; hard-rock mineral exploration; oil and gas development; forestry; passive and motorized recreation; interstate transportation, including highway and railroad corridors; and residential development. These uses often conflict with the habitat requirements and social patterns of grizzlies, wolves, and other large, wide-ranging predators, both across the West and within the Greater Glacier Region (GGR) of northwestern Montana (see Map 1). Moreover, wide-ranging predators frequently move across jurisdictional and ownership boundaries and therefore present special management challenges. The political landscape of 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 (see Map 1).² This "kaleidoscope"³ of ownership and management regimes is altered whenever either ownership or regulatory authority is shifted.

The kaleidoscope for grizzly and wolf management is currently undergoing a dramatic shift due to the delisting of the gray wolf in the

¹ ALDO LEOPOLD, *A SAND COUNTY ALMANAC AND SKETCHES HERE AND THERE* 130 (1949).

² See generally MARTIN NIE, *THE GOVERNANCE OF WESTERN PUBLIC LANDS: MAPPING ITS PRESENT AND FUTURE* (2008) (providing an overview of the institutional complexity of the public-private mosaic in the West).

³ We are indebted to Anne Short for the "kaleidoscope" metaphor, which she uses to describe the institutional schemes she found in her research on land ownership and road management regimes in the north coast of California. Anne Short, Ph.D. Qualifying Examination at the University of California, Berkeley (Feb. 16, 2007).

states of Montana and Idaho. Even without changes in ownership regimes, the patterns and processes of transjurisdictional grizzly and wolf management in Montana and Idaho are shifting, which will affect a broader set of ecosystem-based management efforts in both states. We argue that the Endangered Species Act (ESA) has played a central role in nearly all efforts to implement ecosystem-based management, so changes in the legal regime under the ESA are likely to alter management activity in a wide range of arenas beyond wolf management. A close examination of the legal regimes dominating grizzly and wolf management in the GGR thus offers useful insights into both the role of the ESA to date in affecting the character of ecosystem-based management and the likely consequences of changes in the ESA's role in other settings. We focus here on a case study of the grizzly and wolf management kaleidoscope in the GGR to identify and further delineate these insights.

In this Article, we explore how (1) differences in the role of the ESA for the management of grizzly bear and gray wolf populations, and (2) changes in the legal regime associated with delisting of the gray wolf, both affect species conservation and transjurisdictional, ecosystem-based management efforts in the complex institutional landscape of the GGR of northwest Montana. We believe the ESA has played the central role in efforts to implement ecosystem-based management over the past two decades in a wide range of settings, so these differences and likely changes in the legal regime are likely to affect the success of such efforts. The experience of grizzly and wolf management in the GGR is therefore relevant for the conservation of wide-ranging predators and ecosystem-based management in other locations across the United States and within the West.

Part I of this Article examines the evolution and development of the ecosystem-based management concept from the late 1980s until the present, and how its successful application has depended heavily upon the legal force of strong environmental laws such as the ESA. Part II provides information on the legal status and protection efforts, historic and current range and populations, species recovery, and habitat conservation concerns for the grizzly and wolf. Part III includes a summary of statutes, regulations, guidelines, and management plans relevant to grizzly and wolf management, including those applicable to Glacier National Park (GNP), Lewis and Clark National Forest (LCNF), the Blackfeet Indian Reservation, the State of Montana, and Flathead County, Montana. Part IV provides an analysis of species recovery, habitat conservation, and

management success on federal, tribal, and private lands in the region subject to state property defense laws, wildlife laws and regulations, and county land use regulations. Part V concludes by summarizing key insights gained from this case study and more generally their relevance for conservation of wide-ranging predators and ecosystem-based management.

I

ECOSYSTEM-BASED MANAGEMENT

Ecosystem processes do not respect jurisdictional or ownership boundaries. It is therefore difficult to manage land uses on a parcel-by-parcel basis to conserve an ecosystem in its present state, or manage processes locally that depend upon maintaining functioning ecosystems at the broad scale at which ecosystem processes operate. This has become increasingly true as development transforms the landscape, forcing smaller and smaller fractions of the landscape to provide the habitat needs of wildlife species, damaging the functions of watersheds, and a wide range of both commodity and noncommodity economic outputs. Traditional approaches to natural resources management emphasized individual, parcel-by-parcel management decisions by individual public and private landowners for the production of economic outputs. The failure of this system to conserve a range of ecosystem processes wide enough to protect biodiversity led to calls in the late 1980s and early 1990s for a new “ecosystem” approach to, at least, public land and resource management.

The push for a more comprehensive, integrated, landscape-scale approach to public land and resource management was driven primarily by tensions and conflicts between federal public land and resource management agencies and the requirements of the ESA. In particular, forest management by the U.S. Forest Service (USFS) and the U.S. Bureau of Land Management (BLM) in the Pacific Northwest led to sharp conflicts with the habitat needs of the northern spotted owl.⁴ Those conflicts, in turn, led the early Clinton administration to adopt an ecosystem-based management approach via the Forest Ecosystem Management Assessment Team (FEMAT)

⁴ See generally STEVEN LEWIS YAFFEE, *THE WISDOM OF THE SPOTTED OWL: POLICY LESSONS FOR A NEW CENTURY* (1994) (providing a thorough presentation and analysis of the birth and evolution of the Spotted Owl controversy).

process in 1993.⁵ Similar efforts were then developed by the USFS and BLM to incorporate an ecosystem-scale, transboundary approach to federal public land and resource management with the Interior Columbia Basin Ecosystem Management Program (ICBEMP),⁶ and by Congress and the USFS with the Sierra Nevada Ecosystem Project (SNEP).⁷ All of these efforts reflected a directive by the USFS when it transformed its New Perspectives program of 1990 into an explicit call for an “ecosystem management” approach in 1992.⁸ The USFS subsequently entered into an interagency memorandum of

⁵ See Jerry F. Franklin, *Ecosystem Management: An Overview*, in ECOSYSTEM MANAGEMENT: APPLICATIONS FOR SUSTAINABLE FOREST AND WILDLIFE RESOURCES 21, 21–53 (Mark S. Boyce & Alan Haney eds., 1997) (providing an overview of the various scientific and management assessments leading to FEMAT); see also FOREST ECOSYSTEM MGMT. ASSESSMENT TEAM, FOREST ECOSYSTEM MANAGEMENT: AN ECOLOGICAL, ECONOMIC, AND SOCIAL ASSESSMENT II-3 (1993) (describing FEMAT’s approach); *Developing Forest Policy: The FEMAT Model*, 92 J. FORESTRY 6 *passim* (1994) (including several articles evaluating the FEMAT process); K. Norman Johnson et al., *Forest Ecosystem Management Assessment Team Assessment*, in BIOREGIONAL ASSESSMENTS: SCIENCE AT THE CROSSROADS OF MANAGEMENT AND POLICY 85, 85–132 (K. Norman Johnson et al. eds., 1999) (providing an excellent overview by several of the FEMAT participants).

⁶ See Welcome to the Archive of the Interior Columbia Basin Ecosystem Management Project (Project) Home Page, <http://www.icbemp.gov/> (last visited Jan. 16, 2010) (containing project reports and environmental impact statements). Note, this effort, originally called the Eastside Ecosystem Management Project when it was focused only on forest management issues on the eastern slope of the Cascade Mountains of Washington and Oregon, eventually collapsed under its own weight. It proved too ambitious to develop a coherent approach to such a large landscape cutting across at least four states and, we argue, in the absence of a compelling legal obligation like the ESA to manage across multiple ownerships, regulatory jurisdictions, and mandates. See Johnson et al., *supra* note 5, at 269–302 (providing an overview by several of the ICEBMP participants).

⁷ See SIERRA NEVADA ECOSYSTEM PROJECT, FINAL REPORT TO CONGRESS (1996), <http://ceres.ca.gov/snep/>; see also Johnson et al., *supra* note 5, at 303–38. The original driver of congressional interest in the SNEP report was a concern about the status and future of old-growth or late-successional forests on the public lands primarily under USFS jurisdiction. However, the prospect of a listing of the California spotted owl under the ESA also played an important role in the decision by the USFS to commit more resources to the SNEP effort. Congress initially appropriated only \$150,000 to study the old-growth forest issues, see H.R. 5503, 102d Cong. (1992), then USFS Chief Dale Robertson directed nearly \$7 million of additional discretionary funding from the USFS budget toward SNEP to supplement the initial congressional appropriation. See Johnson et al., *supra* note 5, at 306–07. This funding dramatically expanded the scope of what could be accomplished through the SNEP effort. Robertson and other USFS management personnel were motivated, at least in part, by concern that a listing of the California spotted owl would give the USFWS effective control over national forest land management in the region.

⁸ See Winifred B. Kessler & Hal Salwasser, *Natural Resource Agencies: Transforming from Within*, in A NEW CENTURY FOR NATURAL RESOURCES MANAGEMENT 171, 171–87 (Richard L. Knight & Sarah F. Bates eds., 1995).

understanding with the BLM, National Park Service (NPS), Environmental Protection Agency (EPA), and National Marine Fisheries Service to engage in ecosystem management when planning and managing their respective pieces of the public domain.⁹ “By 1994, eighteen federal agencies had adopted some form of ecosystem management as a guiding policy.”¹⁰

But what was meant by the term “ecosystem management”? Not surprisingly, the term took on and continues to hold different meaning for different stakeholders in land and resource management conflicts. Grumbine’s 1994 literature review in *Conservation Biology* stated that “[e]cosystem management integrates scientific knowledge of ecological relationships within a complex sociopolitical and values framework toward the general goal of protecting native ecosystem integrity over the long term.”¹¹ Grumbine’s focus on the ecological dimensions of ecosystem management, while also recognizing the need to address sociopolitical issues and values, was reinforced by Franklin’s characterization in his 1997 overview for an edited collection on ecosystem management.¹² The failure of existing institutions to address the collapse of ecosystem processes and the biodiversity crisis is clearly the basis for ecosystem management in these formulations.

⁹ See Memorandum of Understanding Between the Director of the White House Office on Environmental Policy et al. on Forest Service Management (undated), available at <http://www.reo.gov/library/agreements/femmou.htm> (last visited Jan. 16, 2010). The heads of the White House Council on Environmental Quality, Department of the Interior, Department of Agriculture, EPA, and the Department of Commerce also subsequently signed another Memorandum of Understanding to foster the ecosystem approach along with the Department of the Army, Department of Defense, Occupational Safety and Health Administration, Department of Energy, Department of Housing and Urban Development, and Department of Justice. See Memorandum of Understanding Between the Council on Environmental Quality et al. to Foster One Ecosystem Approach (Dec. 15, 1995), available at <http://www.environment.fhwa.dot.gov/guidebook/vol1/doc17b.pdf>; see also INTERAGENCY ECOSYSTEM MGMT. TASK FORCE, THE ECOSYSTEM APPROACH: HEALTHY ECOSYSTEMS AND SUSTAINABLE ECONOMIES (1995) (describing the “ecosystem approach” and setting forth its recommendations).

¹⁰ HANNA J. CORTNER & MARGARET A. MOOTE, THE POLITICS OF ECOSYSTEM MANAGEMENT 20 (1999) (citing CONG. RESEARCH SERV., ECOSYSTEM MANAGEMENT: FEDERAL AGENCY ACTIVITIES (Cong. Research Serv., CRS Code. No. 94-339 1994)).

¹¹ JUDITH A. LAYZER, NATURAL EXPERIMENTS: ECOSYSTEM-BASED MANAGEMENT AND THE ENVIRONMENT 21 (2008) (citing R. Edward Grumbine, *What is Ecosystem Management?*, 8 CONSERVATION BIOLOGY 27 (1994)); see also Norman L. Christensen et al., *The Report of the Ecological Society of America Committee on the Scientific Basis for Ecosystem Management*, 6 ECOLOGICAL APPLICATIONS 665 (1996).

¹² See Franklin, *supra* note 5.

This ecocentric approach to public land and resource management was not without its critics, however, and others in the debate emphasized the sociopolitical and values dimensions of this new approach. Cortner and Moote show that the emergence of ecosystem management reflected particular historical conditions, and the debate about the meaning of the term reiterated debates from the Progressive Era between “conservationists” like Gifford Pinchot, who favored “wise use” of the resources on the public lands and management and harvesting of forests as if they were an agricultural crop, and “preservationists” like John Muir, who founded the Sierra Club and called for nonutilitarian attention to the ecological, recreational, and spiritual value of public lands.¹³ Also, Layzer shows that many took the opening created by calls for ecosystem management as an opportunity to engage a wider set of stakeholders in decision-making processes that had formerly been either held close by agency technocrats as strictly within their domain or addressable only through litigation. The explicit need to address social needs in ecosystem management, and the model of incorporating local input into how adaptive management areas would be managed under the FEMAT plan, led to calls by some for delegation of decision making into so-called “collaborative” planning processes outside of agency authority.¹⁴

Regardless of its official definition, ecosystem-based management had already emerged through the practice of confronting the habitat requirements of wide-ranging species like the grizzly bear.

¹³ See CORTNER & MOOTE, *supra* note 10, at 11–28.

¹⁴ See generally LAYZER, *supra* note 11. Layzer refers to “ecosystem-based management” rather than “ecosystem management,” because she notes, correctly, that human activities are also being managed within an ecosystem-based management approach. See *id.* at 9. In contrast, we use the term “ecosystem management” in its historical context because of its widespread use over the past two decades, but we adopt Layzer’s terminology for contemporary references to landscape-scale, transboundary management. For a critique of a wholesale move toward locally-based collaborative efforts without adequate participation by all stakeholders and an argument that if spillover effects occur beyond the local community that such approaches must include communities of interest as well as communities of place, see Timothy P. Duane, *Community Participation in Ecosystem Management*, 24 *ECOLOGY L.Q.* 771 (1997). See also BARB CESTERO, *BEYOND THE HUNDREDTH MEETING: A FIELD GUIDE TO COLLABORATIVE CONSERVATION ON THE WEST’S PUBLIC LANDS* (1999), available at http://www.sonoraninstitute.org/library/recoreading/doc_download/509-beyond-the-hundredth-meeting-a-field-guide-to-collaborative-conservation-on-the-west-s-public-lands.html (providing a broad overview of such approaches including a discussion of the case study in *Community Participation in Ecosystem Management*, Duane, *supra* note 14).

Specifically, the need to address grizzly habitat needs on national forest lands adjoining Yellowstone National Park (YNP), in order to maintain the viability of the grizzly bear population within the park, raised calls for a Greater Yellowstone Ecosystem Management approach in the 1980s. Grizzly bears simply did not know and did not care when they wandered across the park boundary onto national forest, BLM, state, or private land. For example, if the grizzly was searching for prey, the grizzly followed ecosystem rather than institutional boundaries. Although the Greater Yellowstone Coordinating Committee did not use either of the terms “ecosystem” or “management,” it was already addressing the interactive relationships between national park and national forest plans in the region by 1987.¹⁵ To some degree, as discussed below, this was compelled by the grizzly bear’s status as a listed species under the ESA.

The Yellowstone fires of the following summer made it clear that ecosystems operate across ownership and jurisdictional boundaries. It turns out that bison, elk, brucellosis, and a wide range of other species and processes in the Yellowstone region have the same problem: it is very hard to keep them in or out of an arbitrarily drawn rectangle that was established in 1872 without regard to watershed boundaries, forest dynamics, predator-prey relationships, seasonal changes, or habitat needs. Indeed, the clear-cutting of the Targhee National Forest in Idaho up to the western boundary of YNP showed how dangerous mismanagement of adjoining lands could affect the highly prized treasures inside the park.¹⁶

As a consequence, the social process of mobilizing opposition to such threats constructed the concept of a Greater Yellowstone

¹⁵ See GREATER YELLOWSTONE COORDINATING COMM., *THE GREATER YELLOWSTONE AREA: AN AGGREGATION OF NATIONAL PARK AND NATIONAL FOREST SERVICE MANAGEMENT PLANS* (1987); see also CONG. RESEARCH SERV., *GREATER YELLOWSTONE ECOSYSTEM: AN ANALYSIS OF DATA SUBMITTED BY FEDERAL AND STATE AGENCIES PLANS* (1987). Interestingly, the agencies use different terminology in the titles and text of their respective reports: the Greater Yellowstone Coordinating Committee refers to the “area,” while the Congressional Research Service refers to the “ecosystem.” The USFS in particular was reluctant to recognize its ecosystem connections to Yellowstone because such recognition was likely to constrain management flexibility by USFS managers with respect to adjoining national forests.

¹⁶ A Landsat 7 satellite image taken on July 13, 1999, clearly shows the western boundary of Yellowstone, created by aggressive clear-cutting on the national forest lands right up to the rectangular park boundary. See NASA, Earth Observatory: Yellowstone Park Boundary from Landsat 7 (July 13, 1999), <http://earthobservatory.nasa.gov/IOTD/view.php?id=546>.

Ecosystem as a way to protect the park itself.¹⁷ The Greater Yellowstone Coalition was formed and the concept of ecosystem-based management was forged in advance of its later permutations by the USFS and BLM through FEMAT and ICBEMP. Other landscape-scale bioregional assessments soon followed in an effort to improve the science upon which ecosystem management might proceed. These efforts included the Natural Community Conservation Planning (NCCP) project in the coastal sage scrub of southern California, the Everglades-South Florida assessment that included Florida Bay, the Great Lakes-St. Lawrence River Basin Assessment, and SNEP.¹⁸ More recently, Thomas has analyzed interagency cooperation and the preservation of biodiversity in case studies of the NCCP, the Klamath bioregion, and the San Joaquin bioregion.¹⁹ Of those three, only the NCCP case—where strict regulations under the ESA represented the alternative to a collaborative solution, thereby radically altering the power relationships among the key stakeholders when they crafted the plan—achieved significant biodiversity protection. Indeed, Doremus and Tarlock titled their recent book on the Klamath bioregion *Water War in the Klamath Basin: Macho Law, Combat Biology, and Dirty Politics*.²⁰ It is difficult to envision a more contested landscape. Ecosystem-based management is not, then, only about getting the science right without having to confront conflicts or tradeoffs among competing social values and interests; the role of law in framing the power relationships among the contestants in such controversies is therefore critical. And, of all the laws affecting ecosystem-based management, the ESA is the most macho law.

¹⁷ See Dennis A. Glick & Tim W. Clark, *Overcoming Boundaries: The Greater Yellowstone Ecosystem*, in STEWARDSHIP ACROSS BOUNDARIES 237, 237 (Richard L. Knight & Peter B. Landres eds., 1998) (providing a good overview of the early years of the protection and management efforts); see also TIM W. CLARK & STEVEN C. MINTA, GREATER YELLOWSTONE'S FUTURE: PROSPECTS FOR ECOSYSTEM SCIENCE, MANAGEMENT, AND POLICY (1994) (describing specific management challenges in the Yellowstone region and how ecosystem-scale processes require transboundary management coordination); COEXISTING WITH LARGE CARNIVORES: LESSONS FROM GREATER YELLOWSTONE (Tim W. Clark et al. eds., 2005) (discussing in detail ecosystem-based management efforts in the Yellowstone region).

¹⁸ See Johnson et al., *supra* note 5.

¹⁹ See CRAIG W. THOMAS, BUREAUCRATIC LANDSCAPES: INTERAGENCY COOPERATION AND THE PRESERVATION OF BIODIVERSITY (2003).

²⁰ HOLLY DOREMUS & A. DAN TARLOCK, WATER WAR IN THE KLAMATH BASIN: MACHO LAW, COMBAT BIOLOGY, AND DIRTY POLITICS (2008).

Layzer reached similar conclusions in her excellent, comprehensive assessment of seven ecosystem-based management efforts: the NCCP process in San Diego; the Everglades effort in Florida; habitat conservation planning in Austin, Texas; the complex CALFED Bay-Delta effort in northern California; the Sonoran Desert conservation plan of Pima County, Arizona; the effort to re-meander the Kissimmee River in Florida; and restoration efforts after decades of legal battles in the Mono Basin in the eastern Sierra Nevada.²¹ Layzer characterizes these cases as “natural experiments” that offer empirical evidence to answer a series of hypotheses that were widely accepted as valid in the 1990s by many resource managers, without having yet faced much empirical scrutiny. She states that her book grew out of her “impatience with the euphoria that accompanied the explosion of collaborative, place-based, environmental problem-solving in the 1990s.”²² Thus, her research was designed to make a systematic, empirical analysis to answer “to what extent, how, and under what conditions does [ecosystem-based management] yield durable, environmentally protective policies that (1) constitute improvements on the status quo and (2) are likely to conserve and restore ecological health?”²³ Her conclusion, after systematically evaluating the seven cases above, is summarized as:

On the one hand, all seven of the initiatives I examine have generated land-use or natural resource management plans that are more holistic and comprehensive than the piecemeal approaches they replaced. Each also boasts concrete achievements, such as the public acquisition of ecologically valuable land. On the other hand, comparison among the cases reveals that the initiatives whose goals were set in collaboration with stakeholders have produced environmental policies and practices that are less likely to conserve and restore ecological health than those whose goals were set through conventional politics.²⁴

This finding is unsurprising to us, even though Layzer notes that it conflicts with the findings of some other researchers, or, in the absence of empirically systematic analysis, hypothesized outcomes. We are unsurprised for two reasons: (1) the collaborative process itself, because it seeks to minimize social and economic conflict, is likely to yield vague plans and commitments while deferring the

²¹ LAYZER, *supra* note 11, at 33–34.

²² *Id.* at xi.

²³ *Id.* at 3.

²⁴ *Id.* at 4–5.

hardest choices that involve tradeoffs among competing social and economic interests and values; and (2) the legal and political context within which collaborative processes occur establish the power relations that in turn determine the capacity of stakeholders to ensure the enforcement of commitments to yield substantive, rather than process-oriented, outcomes. To put it simply: power matters. We reach this conclusion through direct involvement by one of the authors in controversies involving national forest and California spotted owl management in the Sierra Nevada, the CALFED Bay-Delta process, and the Mono Basin controversy.²⁵ Layzer highlights the first of these problems in explaining why some of the ecosystem-based management efforts were unsuccessful:

The initiatives in which goals were set collaboratively have yielded fewer-than-anticipated environmental benefits for a variety of reasons. Above all, to achieve consensus, planners promised to pursue environmental and economic goals simultaneously. To this end, they reframed problems in ways that allowed them to avoid tackling controversial issues or seriously considering policies that would impose short-run costs on development interests. They also adopted technology- and management-intensive solutions that aim to "expand the pie," in the process imposing substantial risk on the environment. In some cases, efforts to implement plans' provisions exposed disagreements that had been glossed over during the collaborative process, resulting in stalemate and delay. Because of insufficient funding and inadequate margins for error in the plans themselves, flexible policy tools and a rhetorical commitment to adaptive management appear unlikely to compensate for these shortcomings.²⁶

Our second observation, that legal and political power "outside the room" still matters even when collaborative planning processes "in the room" ostensibly focus on Habermasian "communicative rationality,"²⁷ is also reinforced by Layzer's findings regarding the most successful of the seven case studies:

²⁵ Coauthor Timothy P. Duane served on the SNEP team from 1993–1996, and the California Spotted Owl Federal Advisory Committee in 1997. He also served as an advisor to CALFED on institutional design, testified before the California State Water Resources Control Board in the Mono Lake case, and has supervised numerous graduate students studying CALFED and the Mono Basin in the eastern Sierra Nevada region of California.

²⁶ LAYZER, *supra* note 11, at 5.

²⁷ See Judith E. Innes, *Planning Theory's Emerging Paradigm: Communicative Action and Interactive Practice*, 14 J. PLAN. EDUC. & RES. 183 (1995); Judith E. Innes, *Planning Through Consensus Building: A New View of the Comprehensive Planning Ideal*, 62 J. AMER. PLAN. ASS'N 460, 461 (1996).

By contrast, the initiatives in which goals emerged out of conventional politics have yielded greater-than-expected environmental benefits because political officials—judges, administrators, or elected officials—employed political capital and regulatory authority to promote an overarching, environmentally protective goal. Such pro-environmental leadership, which typically occurred in response to lawsuits or campaigns to raise the salience of an environmental problem, enhanced the influence of precautionary interpretations of science and established strict floors below which plans could not fall. It thereby mitigated the disparity in power between development and environmental interests. It also induced a positive feedback, as environmentally protective policies and practices yielded tangible benefits around which new constituencies formed.²⁸

Layzer's findings on the factors influencing the substantive outcomes of ecosystem-based management efforts are profoundly important as we contemplate the future of the public lands as well as calls for reform of major environmental laws such as the ESA.²⁹ In particular, Layzer's work highlights that the ESA is likely to play a central role in determining whether or not "collaborative, landscape-scale planning and implementation that is flexible and adaptive"³⁰ will yield substantive, environmentally protective outcomes. Moreover, it is striking that, in one study of collaborative ecosystem management efforts, eighty-one percent of the 105 case studies involved a species listed under the ESA;³¹ when that author was asked how many of those cases involved collaboration *before* the species was listed, the answer was "none."³² The ESA, representative of power organized

²⁸ LAYZER, *supra* note 11, at 5.

²⁹ See generally STANFORD ENVTL. LAW SOC'Y, THE ENDANGERED SPECIES ACT (2001) (providing a good overview of the ESA); 1 THE ENDANGERED SPECIES ACT AT THIRTY: RENEWING THE CONSERVATION PROMISE (Dale D. Goble et al. eds., 2006) (providing an overview of ESA implementation to date and potential reform proposals for the ESA); 2 THE ENDANGERED SPECIES ACT AT THIRTY: CONSERVING BIODIVERSITY IN HUMAN-DOMINATED LANDSCAPES (Dale D. Goble et al. eds., 2006) (demonstrating how the ESA has been applied in specific contexts and outlining some of the key issues that should be considered in implementing the ESA or reforming the ESA legislatively).

³⁰ LAYZER, *supra* note 11, at viii.

³¹ See STEVEN L. YAFFEE ET AL., ECOSYSTEM MANAGEMENT IN THE UNITED STATES: AN ASSESSMENT OF CURRENT EXPERIENCE 7 (1996).

³² Steven Yaffee, Professor, Univ. of Mich., Remarks at a public session of the Society for Conservation Biology Conference, Victoria, British Columbia, Canada (June 1997); Steven Yaffee, Professor, Univ. of Mich., Personal Communication at an Adaptive Management Workshop, Santa Barbara, California (May 2001). Additionally, former Interior Department Solicitor John Leshy stated during a discussion at the Santa Barbara Adaptive Management Workshop that the ESA "is clearly the single most important driver

outside the room, changed power relations among the key stakeholders and compelled some stakeholders, specifically landowners who otherwise were free to manage their lands without consultation, to enter into collaborative processes to develop management regimes that would survive legal challenge by other stakeholders. Environmental advocates and species' interests were otherwise not being adequately represented in management decisions. The ESA ensured a voice for those interests.³³

The ESA itself therefore generates de facto ecosystem-based management regimes wherever it reaches. For example, if consultation with the U.S. Fish and Wildlife Service (USFWS) is required under section 7,³⁴ federal agencies need to give heightened consideration of the impacts of their actions on listed species. And if conversion of habitat through development could expose responsible parties to legal liability under section 9,³⁵ although enforcement is rare, private landowners may decide to develop a habitat conservation plan under section 10 in order to receive an incidental take permit³⁶ from the USFWS for their proposed habitat conversion, which serves as an insurance policy against future governmental enforcement action. None of these individual actions may rise to the level of a full-scale ecosystem-based management effort worthy of assessment and study in the literature cited herein, but the aggregate and cumulative effect of a series of individual agency and landowner decisions in the shadow of the ESA constitute a form of ecosystem-based management. In effect, the ESA becomes the organizing tool for managing human activities in a way that addresses the cumulative, aggregate consequences of those activities across jurisdictional boundaries at the ecosystem scale. Changing the role of the ESA in a given ecosystem, then, is likely to alter substantive management decisions across that ecosystem.

of ecosystem management in the country." John Leshy, Solicitor, U.S. Dep't of Interior, Remarks at an Adaptive Management Workshop, Santa Barbara, California (May 2001).

³³ See *supra* notes 31–32 and accompanying text.

³⁴ Endangered Species Act § 7, 16 U.S.C. § 1536 (2006).

³⁵ *Id.* § 9, 16 U.S.C. § 1538; *Babbitt v. Sweet Home Chapter of Cmty. for a Great Or.*, 515 U.S. 687, 697 (1995) (finding the Interior Secretary's interpretation was reasonable that "take" under section 9 includes harm caused to listed species by habitat alteration and that "harm" in the context of the ESA "naturally encompasses habitat modification that results in actual injury or death to members of an endangered or threatened species").

³⁶ Endangered Species Act § 10, 16 U.S.C. § 1539.

The approximately six million-acre GGR offers an excellent case study of such de facto ecosystem-based management in action because it includes a diverse set of federal, state, tribal, and local landowners and regulators, including GNP; parts of the Flathead and Blackfoot Indian Reservations; parts of Lewis and Clark, Flathead, Helena, Kootenai, and Lolo National Forests; BLM lands; and lands owned by the State of Montana, private individuals, and corporations. The Bob Marshall, Mission Mountains, Great Bear, and Scapegoat wilderness areas have been designed within the GGR. These actors operate in close proximity to each other around GNP, the Rocky Mountain Front, and Flathead Valley. However, specific legal boundaries limit the scope of their respective state, federal, and tribal jurisdiction over public and private land use-based activities. Each entity is charged with implementing its own governing statutes under separate regulations, guidelines, and management plans.

Additionally, due to the GGR's location on the U.S.-Canadian border, regional wildlife restoration, conservation, and management initiatives are also affected by land use and development in Canada. As of 2006, wildlife in the Canadian Flathead region "remains seriously threatened," as the Province of British Columbia currently "appears more committed to developing its coal, gold, and coal-bed methane than to protecting habitat in its segment of the Flathead River watershed."³⁷ Although transnational wildlife, natural resource, and land management issues are not discussed in detail in this Article, GGR's direct geographic connection to the Canadian Flathead and the effects of international mineral development on continental wildlife corridors also influence the long-term viability, management, and recovery of both the grizzly bear and the gray wolf. Nevertheless, we believe our case study of the GGR offers generally applicable lessons about the relationship between the ESA and ecosystem-based management that will be useful in a wide range of management settings elsewhere.

To some degree, Sax and Keiter have already entered the GGR onto the roster of ecosystem-based management case studies through their excellent 1987 and 2006 studies of the degree to which GNP was able to address the regional threats to its resources through planning

³⁷ Joseph L. Sax & Robert B. Keiter, *The Realities of Regional Resource Management: Glacier National Park and Its Neighbors Revisited*, 33 *ECOLOGY L.Q.* 233, 240 (2006) [hereinafter Sax & Keiter (2006)]. For a summary of proposed mineral development projects in the Canadian Flathead region, see *id.* at 286–300.

and management decision making at the scale of the GGR.³⁸ Our work here complements and builds on their strong foundation. For example, while Sax and Keiter examined the question from the inside looking out, i.e., from the perspective of GNP, we examine the question from the outside looking in, i.e., from the perspective of the transjurisdictional, wide-ranging predator species, the grizzly bear and the gray wolf. We view the GGR here as a case study of de facto ecosystem-based management that both draws on and complements the work of others on existing ecosystem-based management efforts made to date. What distinguishes it, of course, is that the GGR case study reflects ecosystem-based management by default rather than by design. Grizzly bears and gray wolves compel such an approach in the GGR as long as they are protected by the ESA.

II

SPECIES BACKGROUND

A. *The Grizzly Bear*

1. *Legal Status and Protection*

Grizzlies in the Northern Continental Divide Ecosystem (NCDE) of northwest Montana were listed as threatened under the ESA in 1975 by the USFWS. The NCDE is a designated recovery region under the ESA, which has specific legal boundaries that fall within the broader GGR, but no formal legal definition; thus, it has a more flexible set of boundaries.³⁹ Due to its federal listing status, grizzlies “enjoy powerful protection under the law.”⁴⁰ As discussed in Part IV, the ESA gives grizzly bears legal priority over conflicting policies pertaining to land use and management. Notably, the ESA mandates that all federal agencies “conserve” protected species, it prohibits anyone from “taking” these species, and it gives the USFWS veto

³⁸ See *id.* at 300–05; Joseph L. Sax & Robert B. Keiter, *Glacier Park and its Neighbors: A Study of Federal Interagency Relations*, 14 *ECOLOGY L.Q.* 207 (1987) [hereinafter Sax & Keiter (1987)].

³⁹ We use Greater Glacier Region to refer to the general region, and in contrast, the Northern Continental Divide Ecosystem (NCDE) when referring to the area specifically identified by the USFWS as the ESA recovery area for the grizzly bear. Other terms that refer in part to the GGR but that extend beyond the general region to encompass areas in Canada, include the broader “Yellowstone-to-Yukon” corridor of connected protected areas and the “Crown of the Continent” ecosystem.

⁴⁰ Robert B. Keiter, *Of Gold and Grizzlies: A Tale of Two Laws*, 24 *J. LAND RESOURCES & ENVTL. L.* 233, 233 (2004).

power over federal actions that may “jeopardize” them.⁴¹ The USFWS works cooperatively with the Montana Fish, Wildlife, and Parks Service (MT FWP), USFS, NPS, BLM, the Blackfoot Tribe, and the Confederated Salish and Kootenai Tribes. All these entities have representatives appointed to the Interagency Grizzly Bear Committee to manage grizzly bears in northwestern Montana under the authority of the ESA and in accordance with provisions of the approved 1993 USFWS Grizzly Bear Recovery Plan.⁴² Due to continued scientific uncertainty regarding the abundance and distribution of the NCDE grizzly population and achievement of recovery thresholds included in the USFWS Grizzly Bear Plan, it is likely that the grizzly’s threatened status in northwest Montana will remain unchanged into the near future.

2. *Historic and Current Range, and Species Populations*

Now limited to less than two percent of its historic range in the contiguous United States, the grizzly bear (*Ursus arctos horribilis*) was originally distributed throughout western North America, from the mid-plains westward to the California coast, and southward from the Arctic Ocean to central Mexico.⁴³ Early European explorers encountered grizzlies throughout the West, and grizzlies were “undoubtedly common” in western Montana.⁴⁴ It is not known exactly how many grizzlies lived in the United States before 1700. Based on historical sightings and modern-day densities, however, it is estimated that between 50,000–100,000 bears roamed across seventeen current U.S. states.⁴⁵ Between 1800 and 1975, grizzly populations in the lower forty-eight dropped from estimates of over 50,000 to less than 1000 grizzly bears. At the time of the Lewis and Clark Expedition in 1805, grizzlies inhabited the Great Plains and

⁴¹ *Id.* at 235 (citing Endangered Species Act §§ 7, 9, 16 U.S.C. §§ 1536, 1538 (2006)).

⁴² Amy Macleod et al., *Hair Samples Shed Light on Grizzly Bears*, ENDANGERED SPECIES BULL. (U.S. Fish & Wildlife Serv., Wash., D.C.), Fall 2008, at 30 [hereinafter *Hair Samples*]; see also Katherine C. Kendall et al., *Demography and Genetic Structure of a Recovering Grizzly Bear Population*, 73 J. WILDLIFE MGMT. 3 (2009) [hereinafter *Demography*] (setting forth results).

⁴³ U.S. FISH & WILDLIFE SERV., GRIZZLY BEAR RECOVERY PLAN 9 (1993) [hereinafter USFWS BEAR PLAN]; see also MONT. FISH, WILDLIFE & PARKS, GRIZZLY BEAR MANAGEMENT PLAN FOR WESTERN MONTANA 5 (2006) [hereinafter MT FWP BEAR PLAN].

⁴⁴ MT FWP BEAR PLAN, *supra* note 43, at 5.

⁴⁵ *Id.*

flourished along its rivers, and the Expedition documented encounters with thirty-seven grizzlies.⁴⁶ However, as trapping, mining, ranching, and farming pushed westward, the grizzly was extirpated from much of the Great Plains. Moreover, as mountainous areas were settled, logging and recreation also contributed to human-caused bear mortalities.⁴⁷ The decline of the grizzly took less than sixty years, from the end of the trapping era in 1840 to 1900.⁴⁸ This decline was due to a number of factors, including market and subsistence hunting associated with gold exploration, railroad construction, predator control, and habitat loss associated with European settlement.⁴⁹

While grizzlies were never eliminated from Montana, their population likely reached their lowest levels in the 1920s. However, state-level changes, including designation of the grizzly as a game animal in 1923 combined with earlier prohibitions on the use of hunting dogs, bear baiting, and closed seasons, allowed grizzlies to survive in parts of western Montana throughout the twentieth century.⁵⁰ As of 1993, grizzlies in the contiguous United States were restricted to five or six populations estimated to include a total of between 800 to 1000 bears.⁵¹ Four of these populations are located within or partially within the State of Montana. Grizzly bear recovery zones include the NCDE; Cabinet-Yaak in Montana; the Selkirks of northern Idaho and Washington; the North Cascades of Washington; Greater Yellowstone, including lands in southwestern Montana, Wyoming, and Idaho; and potentially the Bitterroots located in western Montana and Idaho (see Map 2).⁵² However, only two of these populations are currently thought to support more than approximately fifty individuals: the recently delisted population in the Greater Yellowstone Ecosystem and the population in the NCDE, (see Map 3).⁵³ Scientists consider the six million-acre NCDE the bear's likely stronghold, harboring the greatest potential number of grizzlies

⁴⁶ DANIEL B. BOTKIN, *OUR NATURAL HISTORY: THE LESSONS OF LEWIS & CLARK* 69 (1995).

⁴⁷ USFWS BEAR PLAN, *supra* note 43, at 9.

⁴⁸ MT FWP BEAR PLAN, *supra* note 43, at 5.

⁴⁹ *Id.*

⁵⁰ *Id.*

⁵¹ USFWS BEAR PLAN, *supra* note 43, at ii, 10–13.

⁵² *Id.*

⁵³ *Demography*, *supra* note 42, at 3.

and the only region contiguous to a strong Canadian grizzly population.⁵⁴

3. *Species Recovery and Habitat Conservation Concerns*

The grizzly historically had a broad range of habitat tolerance. However, over the past century, this species has inhabited contiguous, relatively undisturbed mountainous areas characterized by a high level of topographic and vegetative diversity. According to the USFWS, habitat loss and indirect human-caused mortality are the primary factors limiting the species' recovery.⁵⁵ Indirect bear mortalities have largely occurred along railroad and highway corridors, such as U.S. Highway 2 through Marias Pass (see Map 1). For example, in the 1990s, railroad car collisions on the Burlington Northern-Santa Fe railroad line caused the deaths of thirteen grizzlies feeding on a large grain spill in Marias Pass, just south of GNP.⁵⁶ While the railroad company has taken steps via the ESA's habitat conservation planning process to improve its spill response time and clean-up protocols, as well as providing annual funding for bear habitat improvements, it has not modified the frequency or speed of its trains or installed new safety equipment.⁵⁷ Furthermore, motor vehicles and trucks traveling along major transportation corridors that bisect the NCDE and important wildlife migration corridors are a significant and continued cause of grizzly bear mortality.⁵⁸ Other factors limiting grizzly recovery include low reproductive rates and the effect of global warming on white bark pinecone, which is an important food source.⁵⁹

⁵⁴ *Id.*; see also U.S. DEP'T OF THE INTERIOR, U.S. GEOLOGICAL SURVEY, A STUDY TO ESTIMATE THE GRIZZLY BEAR POPULATION SIZE IN THE NORTHERN CONTINENTAL DIVIDE ECOSYSTEM, MONTANA, U.S.A (2007), available at http://nrmcs.usgs.gov/files/norock/products/NCDE_overview.pdf.

⁵⁵ USFWS BEAR PLAN *supra* note 43, at ii.

⁵⁶ KARSTEN HEUER, WALKING THE BIG WILD: FROM YELLOWSTONE TO THE YUKON ON THE GRIZZLY BEAR'S TRAIL 57 (The Mountaineers Books 2004).

⁵⁷ Sax & Keiter (2006), *supra* note 37, at 256–57.

⁵⁸ *Demography*, *supra* note 42, at 10 (discussing how they “detected incipient fragmentation along the major transportation corridor in the NCDE and caution that continued unmitigated development may lead to reduced gene flow within this population and reduced connectivity to adjacent populations”).

⁵⁹ Robert B. Keiter, *Breaking Faith with Nature: The Bush Administration and Public Land Policy*, 27 J. LAND RESOURCES & ENVTL. L. 195, 238 (2007); see also USFWS BEAR PLAN, *supra* note 43, at 4 (“The limited reproductive capacity of grizzly bears precludes any rapid increase in the population. Grizzly bears have one of the lowest

In Montana, the viability of grizzly populations varies by recovery area. The grizzly population is currently increasing in the Greater Yellowstone area and portions of the NCDE.⁶⁰ According to the MT FWP, the small grizzly population in the Cabinet-Yaak appears to have increased from the 1970s, but may now be declining.⁶¹ While there are still no officially documented grizzlies in the Bitterroots, there have been several reported sightings in the vicinity.⁶² Due to NCDE's size and the adjacent Canadian population of grizzlies, federal scientists identified the NCDE as likely having the best regional prospects for long-term grizzly survival in the contiguous United States.⁶³ Based on results from the first ecosystem-wide status assessment of the NCDE grizzly bear population in the summer of 2004, researchers found the highest concentrations of grizzly bears in GNP, but detected fewer bears in the southern part of the NCDE.⁶⁴ To researchers, these results suggest that the population has generally remained genetically integrated and connected to Canadian populations; however, incipient fragmentation within the ecosystem along Highway 2 and the railroad transportation corridor through Marias Pass, as noted above, was also detected.⁶⁵

The recovery objective of the 1993 USFWS Grizzly Recovery Plan is "[d]elisting each of the remaining populations by population as they achieve the recovery targets."⁶⁶ The achievement of multiple specific subgoals or thresholds is necessary before the USFWS considers the NCDE grizzly population to be legally recovered. As identified in the Plan, these thresholds include a specific distribution of females with cubs across this ecosystem; twenty-one of the twenty-three bear management units (BMU) must be "occupied by females with young [for] a running [or consecutive] [six]-year sum of observations with no two adjacent BMU[s] unoccupied; and known, human-caused [bear] mortality not to exceed [four] percent of the population

reproductive rates among terrestrial mammals, resulting primarily from the late age of first reproduction, small average litter size, and the long interval between litters.").

⁶⁰ MT FWP BEAR PLAN, *supra* note 43, at 6.

⁶¹ *Id.* at 6, 27.

⁶² *Id.* at 6; *see also* USFWS BEAR PLAN, *supra* note 43, at 12. Grizzly bear sightings near the Bitterroots have been reported, but not officially documented by MT FWP, USFWS, or other professionally trained wildlife biologists.

⁶³ *See* U.S. DEP'T OF THE INTERIOR, U.S. GEOLOGICAL SURVEY, *supra* note 54.

⁶⁴ *Demography*, *supra* note 42, at 10.

⁶⁵ *Id.*

⁶⁶ USFWS BEAR PLAN, *supra* note 43, at ii.

estimates” during any two consecutive years, with females accounting for less than thirty percent of total recorded mortalities.⁶⁷ Finally, the last NCDE-specific recovery threshold requires grizzly occupancy within the Mission Mountains (see Map 1).⁶⁸

Due to the lack of data on the NCDE grizzly population, the Northern Divide Grizzly Bear Research Project was initiated in 2002 to study and further evaluate the abundance and distribution of NCDE grizzlies.⁶⁹ Research partners including federal, state, and tribal agencies as well as Canadian-based researchers, currently led by U.S. Geological Survey (USGS) research biologists based in West Glacier and Missoula, Montana, have worked collaboratively to implement the NCDE habitat and monitoring priorities identified in the 1993 USFWS Grizzly Bear Recovery Plan.⁷⁰ The interagency research team includes the USGS, USFS, NPS, USFWS, MT FWP, Blackfoot Fish and Wildlife Department, the University of Montana, and independent researchers based in Nelson, Canada.⁷¹ This group conducted the first rigorous ecosystem-wide study of grizzly bear population size, distribution, and genetic connectivity in 2004.⁷² It documented a total minimum number of 563 grizzly bears and estimated an ecosystem-wide population of 765.⁷³ The study found that the genetic health of the bears was good overall, and that they occupy a range extending 2.6 million acres beyond the designated recovery zone (see Map 3).⁷⁴ However, researchers observed that

⁶⁷ *Id.* at 61. The USFWS’s Bear Plan also notes that this six-year average accounts for two breeding cycles, based on an average three-year breeding interval. BMU occupancy is based on reports screened by interagency team biologists to judge credibility of sightings and eliminate duplicate reports. *Id.* at 20. However, these sightings are opportunistic and not based on scientific field study. Telephone Interview with Katherine Kendall, Research Ecologist, U.S. Dep’t of the Interior, U.S. Geological Survey, in West Glacier Field Station, Mont. (June 30, 2009).

⁶⁸ USFWS BEAR PLAN, *supra* note 43, at 20 (identifying “occupancy” to include sufficient habitat use and adequate distribution by a reproducing female). Adequate distribution of family groups also indicates future occupancy of these areas, as offspring, especially females, tend to occupy habitat within or near the home range of their mother after weaning. *Id.*

⁶⁹ *Hair Samples*, *supra* note 42, at 30; *see also* U.S. DEP’T OF THE INTERIOR, U.S. GEOLOGICAL SURVEY, *supra* note 54.

⁷⁰ U.S. DEP’T OF THE INTERIOR, U.S. GEOLOGICAL SURVEY, *supra* note 54; *see* USFWS BEAR PLAN, *supra* note 43, at 72–76.

⁷¹ *Demography*, *supra* note 42, at 3.

⁷² *Id.*

⁷³ *Id.*

⁷⁴ *Id.*

while sightings at the edge of the population's range have increased, suggesting population growth, allowable human-caused mortality exceeded the USFWS thresholds every year for the last decade.⁷⁵ Specifically, the human-caused mortality rate in 2004, when calculated along with the 2004 grizzly bear abundance estimate, was slightly above the four percent considered sustainable by the USFWS. However, the thirty-five mortalities in 2004 was the highest number on record, and the female mortality rate was double the level allowed under the 1993 USFWS Recovery Plan.⁷⁶ Researchers noted that this figure is noteworthy because female survival is the most important driver of population trend. In 2004, researchers found that female grizzlies were "well distributed" across NCDE and were found within all BMUs.⁷⁷ However, grizzly bear "density varied substantially from high levels in [GNP] in the north to low levels in the south."⁷⁸ Finally, regarding population structure, the 2004 study showed genetic diversity for grizzlies in the NCDE as approaching levels seen in relatively undisturbed populations in northern Canada and Alaska.

According to researchers, the 2004 study results suggest that the NCDE population is not experiencing a severe genetic bottleneck and that connectivity within the population and with the northern Canadian Rocky populations remains largely intact. While noting an apparent recent increase in gene flow along the eastern periphery of their study area, researchers observed reduced connectivity at the more developed western end of the U.S. Highway 2 railroad transportation corridor in the NCDE.⁷⁹ Kendall and her coauthors noted that this "may signal the need for management intervention to ensure gene flow across this corridor in the future."⁸⁰ In their section on the implications of ecosystem management, the authors observed:

[I]t is likely that continued unmitigated development along the Highway 2 corridor will result in genetic fragmentation of the grizzly bear population in the NCDE. Increased traffic volume and development along the other highways in the NCDE carries similar risks. Any long-term management strategy for this population should include ways to facilitate continued genetic interchange

⁷⁵ *Id.*

⁷⁶ *Id.* at 11 (discussing the importance of female survival in driving population trends) (internal citation omitted).

⁷⁷ *Id.*

⁷⁸ *Id.*

⁷⁹ *Id.* at 12.

⁸⁰ *Id.*

across transportation corridors and the associated development that tends to grow along them.⁸¹

Results from the recent 2004 study will serve as a baseline to monitor future trends and to provide information essential to inform USFWS decisions about NCDE grizzly recovery status and delisting.⁸²

B. The Gray Wolf

1. Legal Status and Protection

The status of wolves under the ESA is an issue of heated legal debate and prolonged administrative review. Prior to May 4, 2009, the USFWS listed the gray wolf as Endangered in northwest Montana and subject to federal authority and management oversight. However, the Federal Register published the USFWS's final delisting rule on April 2, 2009, which became effective May 4, 2009.⁸³ Montana state law and MT FWP regulations now classify the gray wolf as a "species

⁸¹ *Id.* at 15.

⁸² *Hair Samples*, *supra* note 42, at 31. However, to date, there has been no further government or private funding for systematic population monitoring beyond the 2004 baseline study. Future delisting efforts by the USFWS of the NCDE grizzly population will very likely be influenced by the recent district court decision enjoining the USFWS from removing the Yellowstone grizzly bear DPS from the list of threatened species, as well as vacating the final rule, see 72 Fed. Reg. 14,866 (Mar. 29, 2007), designating the Yellowstone DPS and removing it from the list of threatened species. See *Greater Yellowstone Coal., Inc. v. Servheen*, No. CV 07-134-M-DWM (D. Mont. Sept. 21, 2009) (Order Granting in Part and Denying in Part Plaintiff's Motion for Summary Judgment). While plaintiff did not challenge the DPS designation, *see id.* at 13, the court enjoined the USFWS from delisting the Yellowstone grizzly population and vacated the 2007 final rule because it found that plaintiff's succeeded on the following claims: (1) the 2007 final rule in this case did not "demonstrate that the [c]onservation [s]trategy and states['] plans are adequate regulatory mechanisms to maintain a recovered grizzly bear population[.]" and (2) that the record failed to support the USFWS's conclusion that the whitebark pine declines, a key food source, did not pose a threat to the Yellowstone grizzly bear DPS. *Id.* at 45. This decision will likely set the bar higher for future USFWS decisions to delist the grizzly bear, as well as other endangered species including the gray wolf. The grizzly bear and the gray wolf will likely fulfill the ESA's listing and delisting factor regarding the adequacy of "existing regulatory mechanisms," as well as its mandate that the agency must make decisions about listing or delisting a species "solely on the basis of the best scientific or commercial data available." See Endangered Species Act § 4, 16 U.S.C. § 1533(b)(1)(A) (2006); 50 C.F.R. § 424.11(d) (2009).

⁸³ 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. 15,070-01, 15,123-01 (Apr. 2, 2009) (codified at 50 C.F.R. pt. 17) [hereinafter *Final Rule*].

in need of management.”⁸⁴ The gray wolf population in the NCDE and northern Montana naturally emigrated from Canada and was classified as endangered in the Northern Rocky Mountain Distinct Population Segment (NRM DPS). In contrast, the USFWS utilized section 10(j) of the ESA to establish a gray wolf population in YNP and central Idaho utilizing the release of Canadian wolves.⁸⁵ Because of its human-aided reintroduction, the gray wolf population in southern Montana prior to May 4, 2009, was federally listed as “experimental, non-essential.”⁸⁶ After the NRM DPS exceeded its recovery plan thresholds in 2002, the USFWS initiated the lengthy administrative process to delist the entire NRM DPS.⁸⁷ However,

⁸⁴ Montana Fish, Wildlife & Parks, Wolf Program—Wolves Delisted in Montana, <http://fwp.mt.gov/wildthings/management/wolf/default.html> (last visited Jan. 28, 2010).

⁸⁵ See FISH & WILDLIFE SERV., U.S. DEP’T OF THE INTERIOR, THE REINTRODUCTION OF GRAY WOLVES TO YELLOWSTONE NATIONAL PARK AND CENTRAL IDAHO: FINAL ENVIRONMENTAL IMPACT STATEMENT 12 (1994), available at http://www.fws.gov/mountain-prairie/species/mammals/wolf/EIS_1994.pdf.

⁸⁶ The Yellowstone wolves’ designation as “experimental, non-essential” is important as federal regulations allow a livestock owner the ability to haze, harass, or kill a wolf seen actively killing or threatening to kill their livestock. Endangered Species Act § 10(j), 16 U.S.C. § 1539(j) (2006); 50 C.F.R. § 17.84(i) (2009). Additionally, the federal regulation defines “in the act of attacking” to include “the actual biting, wounding, grasping, or killing of livestock or dogs, or chasing, molesting, or harassing by wolves that would indicate to a reasonable person that such biting, wounding, grasping, or killing of livestock or dogs is likely to occur at any moment.” 50 C.F.R. § 17.84(n)(3). Additionally, that federal definition is very similar to Montana’s administrative rule. Compare *id. with* MONT. ADMIN. R. 12.9.1302(3) (2008) (effective upon delisting) (defining “[a]ttacking” as “the actual biting, wounding, or grasping of livestock or domestic dogs”).

⁸⁷ U.S. FISH & WILDLIFE SERV., NORTHERN ROCKY MOUNTAIN WOLF RECOVERY PLAN V (1987) [hereinafter USFWS NRM GRAY WOLF PLAN]. The primary objective of the USFWS NRM Gray Wolf Plan was “[t]o remove 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 [northwest Montana, central Idaho, Yellowstone primarily in Wyoming] for a minimum of three successive years,” and noting that “[c]onsideration will also be given to reclassifying . . . after . . . a [s]tate management plan is in place.” *Id.* at 10. On November 22, 1994, the USFWS designated two nonessential population areas for the gray wolf under section 10(j) of the ESA, including the Yellowstone Experimental Population Area, see 59 Fed. Reg. 60,252-01 (Nov. 22, 1994), and the Central Idaho Experimental Population Area, see 59 Fed. Reg. 60,266-01 (Nov. 22, 1994), assisting in the USFWS’s wolf reintroduction projects. FISH & WILDLIFE SERV., *supra* note 85, at 64. In its 1994 peer-reviewed EIS for wolf reintroduction, the USFWS revisited its 1987 recovery goals, redefining breeding pair to include two adults with at least two pups that survive until at least December 31 of the year of their birth. In defining a “recovered wolf population” the USFWS found “[i]n the Northern Rockies a recovered wolf population is ten breeding pairs of wolves in each of three areas for three successive years with some level of wolf movement between areas,” *id.* at 5, and further determined that a metapopulation of this size and distribution among the three areas of core suitable habitat in the NRM DPS would result in a viable regional

before final delisting, Montana, Idaho, and Wyoming were required to adopt acceptable state wolf management plans to provide an “adequate regulatory mechanism” as required by the ESA.⁸⁸

Montana internally reviewed its management plan within the framework of the Montana Environmental Protection Act.⁸⁹ In 2003, it released a draft for comment, selected a preferred alternative, and submitted its final plan to the USFWS.⁹⁰ In January 2004, the USFWS stated that “the Service is confident that both the Montana and Idaho wolf management plans are adequate to maintain their share of the tri-state wolf population above recovery levels,” and Montana was not required to take additional action in order for the USFWS to proceed with delisting.⁹¹ However, the USFWS had to consider the three states’ management plans in their totality because the wolf populations of the three states collectively comprised the designated NRM DPS (see Map 5).⁹² Due to “significant concerns” with portions of the Wyoming state law and wolf management plan, federal delisting could not be completed until Wyoming “adequately address[ed] these concerns.”⁹³ Courts sustained this decision, rejecting Wyoming’s claims that (1) the USFWS had a mandatory

wolf population. *Id.* at 16. In 2002, the USFWS conducted a review of its 1994 analysis and conclusions on what constituted a recovered NRM wolf population. Again peer-reviewed, seventy-eight percent of polled experts strongly supported that the USFWS’s 1994 conclusions represented a viable wolf population that would achieve recovery objectives. Based on that review, the USFWS reaffirmed its more relevant and stringent 1994 definition of wolf breeding pairs, population viability, and recovery. *See* 74 Fed. Reg. 6107 (Jan. 30, 2009). In 2005 and 2008, USFWS revised regulations to provide for increased management flexibility in states with USFWS-approved wolf management plans. *See* 70 Fed. Reg. 1286 (Jan. 6, 2005); 73 Fed. Reg. 4720 (Jan. 28, 2008); 50 C.F.R. § 17.84(n).

⁸⁸ Keiter, *supra* note 59, at 235 (citing Endangered Species Act § 4(a)(1), 16 U.S.C. § 1533(a)(1)).

⁸⁹ MONTANA FISH, WILDLIFE & PARKS, MONTANA’S WOLF CONSERVATION AND MANAGEMENT PLAN: FINAL ENVIRONMENTAL IMPACT STATEMENT—EXECUTIVE SUMMARY i (2003), *available at* <http://fwp.mt.gov/content/getItem.aspx?id=31249> [hereinafter MT FWP WOLF PLAN FEIS].

⁹⁰ Letter from M. Jeffrey Hagener, Dir., Mont. Dep’t of Fish, Wildlife & Parks, to Interested Parties re: Montana’s Wolf Conservation and Management Plan—Final EIS (Aug. 11, 2003) (on file with authors).

⁹¹ Letter from Steve Williams, U.S. Dep’t of the Interior, Fish & Wildlife Serv., to Jeff Hagener, Dir., Mont. Dep’t of Fish, Wildlife & Parks (undated) (on file with authors).

⁹² *Id.*

⁹³ *Id.*

duty to propose delisting of wolves and control wolf depredations,⁹⁴ and (2) the USFWS's demand that the Wyoming Legislature enact a specific regulatory scheme and change its wolf management plan to comport with the ESA was a violation of both the Guarantee Clause and the Tenth Amendment because the USFWS was commandeering the legislative processes of Wyoming.⁹⁵ Despite the lack of official federal delisting, the USFWS relinquished management responsibility to state wildlife officials in Montana and Idaho because USFWS rules allow for the transfer of expanded management flexibility to states with approved wolf management plans under interagency cooperative agreements.⁹⁶ Thus, since 2005, Montana has served as the lead administrative agency for all wolf conservation and management within the state, administered under applicable federal regulations, and has consequently been provided with federal funding to support its additional regulatory responsibilities.⁹⁷ Following a change in Wyoming state law and approval of its revised wolf management plan in 2007, the USFWS determined that Wyoming met the ESA requirements to provide an "adequate regulatory mechanism" to conserve the in-state portion of the recovered wolves of the NRM DPS into the foreseeable future. Shortly thereafter, the USFWS published a proposed rule seeking to delist the gray wolf in the NRM DPS, thereby commencing the formal federal process to transfer legal authority for wolf management to Montana, Idaho, and Wyoming.

The USFWS published a final rule removing the NRM DPS from the endangered species list in February 2008, finding that "[b]ased on the best scientific and commercial data available, the NRM DPS is no longer an endangered or threatened species pursuant to the [ESA]. . . . The NRM DPS has exceeded biological recovery goals, and all threats in the foreseeable future have been sufficiently reduced or

⁹⁴ See *Wyoming v. U.S. Dep't of Interior*, 360 F. Supp. 2d 1214, 1231, 1233 (D. Wyo. 2005) (arising under section 706(1) of the Administrative Procedures Act).

⁹⁵ *Id.* at 1238. Wyoming's later challenge to the USFWS finding, see 71 Fed. Reg. 43,410 (Aug. 1, 2006), that the state's 2003 laws and management plan did not provide necessary regulatory mechanisms was also dismissed in Feb. 2008. See *Wyoming v. U.S. Dep't of Interior*, No. 06-CV-245J (D. Wyo. Feb. 27, 2008) (Order Granting Petitioners' and Respondents' Stipulation and Joint Motion to Dismiss).

⁹⁶ Williams, *supra* note 91.

⁹⁷ Letter from Carolyn Sime, Coordinator, Mont. Fish, Wildlife & Parks Wolf Program, to Interested Parties re: Wolf Program Activities and Related Information, November 8–29, 2008 (Nov. 28, 2008), available at <http://fwpiis.mt.gov/getItem.05px?id=36035>.

eliminated.”⁹⁸ The USFWS conditionally determined that Wyoming’s 2007 wolf management law met ESA requirements and provided an adequate regulatory mechanism to conserve Wyoming’s portion of the NRM DPS wolf population.

However, in July 2008, the U.S. District Court of Montana granted environmental plaintiffs a preliminary injunction to reinstate ESA protections for the gray wolf based on its findings of a substantial likelihood of irreparable injury to the affected wolf population and the plaintiffs’ likelihood of success on a majority of its claims.⁹⁹ The court found that plaintiffs were likely to succeed on their claims that (1) the USFWS had violated the ESA by delisting without providing adequate reasoning for rejecting its 1994 recovery threshold that required genetic connectivity between wolf subpopulations in Yellowstone, northwest Montana, and central Idaho;¹⁰⁰ (2) the USFWS’s approval of Wyoming’s 2007 Wolf Management Plan was arbitrary and capricious;¹⁰¹ and (3) Wyoming depredation laws were likely to threaten the existence of in-state wolves.¹⁰² In October 2008, the court granted the USFWS’s motion to remand the 2008 delisting rule back to the USFWS, vacate it, and return the NRM DPS to the federal endangered species list, with subpopulations in the same status as they were prior to February 2008. The USFWS then published a new proposed rule and reopened the comment period to reconsider its earlier 2007 proposed rule removing the NRM DPS from the federal endangered species list, emphasizing the new information and issues raised by the court.¹⁰³ In December 2008, the FWS published a final rule to reinstate protection for wolves in the NRM DPS.¹⁰⁴

⁹⁸ Final Rule for 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. 10,514-01 (Feb. 27, 2008).

⁹⁹ *Defenders of Wildlife v. Hall*, 565 F. Supp. 2d 1160 (D. Mont. 2008).

¹⁰⁰ *Id.* at 1172.

¹⁰¹ *Id.* at 1175.

¹⁰² *Id.* at 1175–76.

¹⁰³ 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. 63,926-01 (proposed Oct. 28, 2008).

¹⁰⁴ Reinstatement of Protections for the Gray Wolf in the Western Great Lakes and Northern Rocky Mountains in Compliance With Court Orders, 73 Fed. Reg. 75,356-01 (Dec. 11, 2008) (codified at 50 C.F.R. pt. 17).

This temporary regranting of federal protection for the gray wolves was very short lived. In the final days of the Bush administration, former Deputy Interior Secretary Lynn Scarlett announced the imminent delisting of the NRM gray wolf population in Montana and Idaho. But, she reversed the USFWS's 2007 determination and found that Wyoming still did not have adequate regulatory mechanisms to ensure the protection and conservation of its in-state wolf population.¹⁰⁵ Thus, under Scarlett's decision, wolves in Wyoming would remain listed and subject to the ESA and federal management. This rule was scheduled for publication and intended to take effect thirty days thereafter. But, on January 20, 2009, President Obama's Chief of Staff Rahm Emanuel issued an executive memorandum concerning the management of the federal regulatory process at the beginning of the new administration.¹⁰⁶ As relevant to the latest NRM DPS rulemakings, this memo directed all agencies to withdraw from the Federal Register all proposed and pending final regulations so that they could be reviewed by the new administration.¹⁰⁷ Encouraged by this turn of events, environmental groups lobbied the new Department of the Interior Secretary, Ken Salazar, to abandon the Bush rule and develop a new wolf recovery plan.¹⁰⁸ However, on March 6, 2009, Secretary Salazar affirmed the USFWS's decision to delist gray wolves in Idaho and Montana, but retained the federal listing for wolves in Wyoming.¹⁰⁹ The Federal Register published the USFWS's final delisting rule on April 2, 2009, which became effective May 4, 2009.¹¹⁰ A notice of intent to sue was filed by Earthjustice, a nonprofit environmental advocacy group, on April 2, 2009, as

¹⁰⁵ Press Release, U.S. Fish & Wildlife Serv., Service Removes Western Great Lakes Portion of Northern Rocky Mountain Gray Wolf Populations from Endangered Species List (Jan. 14, 2009), available at <http://www.fws.gov/mountain-prairie/pressrel/09-02.htm>.

¹⁰⁶ Memorandum for the Heads of Executive Departments and Agencies, 74 Fed. Reg. 4435 (Jan. 26, 2009) (regarding "regulatory review" and dated January 20, 2009).

¹⁰⁷ U.S. Fish & Wildlife Service, Gray Wolves in the Northern Rocky Mountains—News, Information and Recovery Status Reports, <http://www.fws.gov/mountain-prairie/species/mammals/wolf/> (last visited Jan. 16, 2010).

¹⁰⁸ See Letter from Rodger Schlickeisen, President, Defenders of Wildlife, et al., to Ken Salazar, Sec'y, U.S. Dep't of Interior (Mar. 4, 2009) (on file with authors).

¹⁰⁹ Press Release, U.S. Fish & Wildlife Serv., Secretary Salazar Affirms Decision to Delist Gray Wolves in Western Great Lakes, Portion of Northern Rockies (Mar. 6, 2009), available at <http://www.fws.gov/mountain-prairie/pressrel/09-12.html>.

¹¹⁰ *Final Rule*, *supra* note 83.

required under 16 U.S.C. § 1540(g).¹¹¹ On behalf of Defenders of Wildlife and several other environmental nonprofit plaintiffs, Earthjustice's legal counsel filed a complaint for declaratory and injunctive relief in the U.S. District Court of Montana, Missoula Division, on June 2, 2009.¹¹² Plaintiffs alleged numerous violations

¹¹¹ See Letter from Douglas L. Honnold & Jenny K. Harbine, Earthjustice, to Ken Salazar, Sec'y, U.S. Dep't of Interior, and Rowan Gould, Acting Dir., U.S. Fish & Wildlife Serv. (Apr. 2, 2009), available at [http://www.defenders.org/resources/publications/programs_and_policy/in_the_courts/60-day_notice_letter_on_gray_wolf_delisting_\(april_2009\).pdf](http://www.defenders.org/resources/publications/programs_and_policy/in_the_courts/60-day_notice_letter_on_gray_wolf_delisting_(april_2009).pdf).

¹¹² *Defenders of Wildlife v. Salazar*, No. CV-09-77-M-DWM (D. Mont. June 2, 2009) (Complaint for Declaratory and Injunctive Relief). This case was consolidated with a separate complaint filed on June 12, 2009, by the Greater Yellowstone Coalition against the U.S. Department of the Interior, No. CV-09-82-M-DWM. The State of Montana and Montana Fish, Wildlife & Parks (MT FWP) filed a motion to intervene to represent its interest in conserving and managing in-state wolf populations and in support of the USFWS's 2009 delisting decision; the district court granted permissive intervention to these parties in the consolidated action on July 31, 2009. On August 5, the State of Montana and MT FWP answered the complaints of both Defenders of Wildlife and Greater Yellowstone Coalition, denying the plaintiffs' allegations regarding the existence of significant threats to the wolves' survival in the NRM DPS and the lack of regulatory mechanisms to ensure sustainable wolf populations and maintain genetic connectivity within the population. On August 20, 2009, plaintiffs filed a request for a preliminary injunction, requesting that wolves be placed back on the federal endangered species list while the court decided the main case within the next year, which would have prevented fall hunting seasons in Montana and Idaho. On August 23, the court granted a motion for permissive intervention filed on behalf of Idaho's Governor Otter. While the court denied Earthjustice's request for a preliminary injunction on September 8, 2009, based primarily on its failure to show irreparable harm to the overall wolf population, Chief Judge Molloy found the plaintiffs to date had demonstrated a likelihood of success on the merits of their claim, specifically the USFWS's delisting of part of the DPS along political (e.g., state) lines noting that "even if the [USFWS] was permitted to delist only a part of a DPS like it has done here, it cannot do so in an arbitrary and capricious manner. The [USFWS] has distinguished a natural population of wolves based on a political line, not the best available science. That, by definition, seems arbitrary and capricious." See *Defenders of Wildlife v. Salazar*, No. CV-09-77-M-DWM & No. CV 09-82-M-DWM, at 9 (consolidated) (D. Mont. filed June 2, 2009) (Sept. 8, 2009) (Order Denying Motion for Preliminary Injunction). Further, Judge Molloy's observation that the USFWS must utilize best available science in its delisting decision, as required by the ESA, is echoed in his recent decision vacating the USFWS attempted delisting of the Yellowstone grizzly DPS, as discussed *supra* note 82. Finally, on September 15, the court stated that while "cognizant of the serious issues and implications at play in this case," it denied Earthjustice's motion to expedite briefing on the merits, specifically stating that "due to the complex issues, size of the record and importance of the issues involved, the Court feels it is important that all involved in the case not be rushed." See *Defenders of Wildlife v. Salazar*, No. CV-09-77-M-DWM & No. CV 09-82-M-DWM, at 2-3 (consolidated) (D. Mont. Sept. 15, 2009) (Order Denying Motion to Expedite; Denying Motion for Hearing). In its September 15th order, the court also issued a scheduling order, requiring cross-motions for summary judgment to be fully briefed by January 28, 2010.

of the ESA, including (1) violation of sections 3 and 4(a), specifically the USFWS's alleged piecemeal approach to listing and delisting of the NRM DPS; and (2) violation of sections 4(a) and 4(b), specifically the USFWS's arbitrary reliance on outdated, unscientific recovery targets, its arbitrary assessment of genetic connectivity, its reliance on nonregulatory state representations in assessment of regulatory mechanisms, and its failure to consider loss of historic range. Plaintiffs also alleged a violation of the Administrative Procedure Act for treatment of wolves in the contiguous United States. As of October 2009, this litigation is ongoing.

2. *Historic and Current Range, and Species Populations*

Before Europeans settled North America, the gray wolf inhabited a wide range of habitats from southern swamps to northern tundra, "from sea to shining sea."¹¹³ A highly adaptable species, wolves existed wherever there was an adequate food supply. Wolf populations declined and their range became more restricted, however, as European settlers overharvested elk, bison, and deer, wolves' primary prey; transformed the physical landscape into farms, ranches, and towns; and persistently killed the wolf on sight. Today, in the contiguous United States, wolves exist primarily in the forests and mountainous regions of at least ten Northern and Rocky Mountain states, while "the majority of wolves in North America live in remote regions of Canada and Alaska."¹¹⁴

The gray wolf was extirpated from the western United States during the 1900s, primarily due to direct conflict with humans and habitat loss.¹¹⁵ In Montana, a statewide bounty law was passed in 1884. In the first year, 5450 hides were presented for payment.¹¹⁶ County-level bounty payments were also made to individuals from 1900 to 1931.¹¹⁷ According to the MT FWP, wolves as a breeding,

¹¹³ KATHARINE BATES & SAMUEL WARD, *AMERICA THE BEAUTIFUL* (1910). Interestingly, this patriotic song was first published in the same year as Congress's legislative establishment of GNP in 1910 when President Taft established Glacier as the country's 10th national park. See National Park Service, Glacier, History & Culture, <http://www.nps.gov/glac/historyculture/index.htm> (last visited Jan. 16, 2010).

¹¹⁴ Wis. Dep't of Natural Resources, Gray Wolf (*Canis lupus*), <http://dnr.wi.gov/org/land/er/factsheets/mammals/wolf.htm#Distribution> (last visited Jan. 16, 2010).

¹¹⁵ Montana Fish, Wildlife & Parks, Gray Wolf, <http://fwp.mt.gov/wildthings/management/default2.html> (last visited Jan. 10, 2010).

¹¹⁶ *Id.*

¹¹⁷ *Id.*

self-sustaining population were likely extinct by the 1930s.¹¹⁸ While some sightings were reported, most wolves dispersed northward into Canada.¹¹⁹ Little to no evidence of in-state breeding was documented in Montana through the 1970s.¹²⁰ In 1973, the USFWS listed the NRM wolf subspecies (*Canis lupus irremotus*) on the federal list of endangered species.¹²¹ However, gray wolves from Canada began to recolonize GNP naturally in 1979. The first wolf den in over fifty years was documented in 1986. Since then, new packs have established throughout northwest Montana due to dispersers from GNP and Canada. To hasten their regional recovery, the USFWS reintroduced an experimental population of sixty-six Canadian wolves into YNP and central Idaho in 1995 and 1996. This reintroduced population grew rapidly and became another source of wolf dispersal across southern Montana.¹²²

In its 2008 annual wolf program report, the MT FWP Gray Wolf Program reported that the minimum Montana wolf population estimate was 497 wolves in eighty-four verified packs.¹²³ Thirty-four of these packs qualified as a “breeding pair” under the USFWS definition, with roughly equal individuals, packs, and breeding pairs recorded by MT FWP in the Northwest Montana Endangered Area and Southern Montana Experimental Area. The 2008 estimated population was up about eighteen percent from 2007, with a thirty-four percent increase from 2006. The MT FWP reports that the population growth is slowing down, in part because the best habitat is already occupied.¹²⁴ About ninety-five percent of Montana’s wolf population lives outside national parks on a combination of public and private lands.¹²⁵ While wildlife agencies believed that higher elevation lands would comprise the wolf’s primary habitat, wolves have tended to favor lower elevation because it is gentle terrain where prey is more abundant, particularly in the winter.¹²⁶

¹¹⁸ *Id.*

¹¹⁹ *Id.*

¹²⁰ *Id.*

¹²¹ *Id.*

¹²² MT FWP WOLF PLAN FEIS, *supra* note 89, at v.

¹²³ MONT. FISH, WILDLIFE & PARKS, MONTANA GRAY WOLF CONSERVATION AND MANAGEMENT 2008 ANNUAL REPORT 11 (2008), available at <http://fwp.mt.gov/content/getitem.aspx?id=37258>.

¹²⁴ *Id.*

¹²⁵ *Id.*

¹²⁶ MT FWP WOLF PLAN FEIS, *supra* note 89, at vi.

3. *Species Recovery and Habitat Conservation Concerns*

Despite legal and political uncertainties, wolves in the NRM DPS have dispersed throughout Montana, reproducing at rates that exceed initial expectations. For example, as one observer stated: "By nearly any measure, the [US]FWS's northern Rockies wolf recovery effort represents a stunning conservation achievement."¹²⁷ They are also currently thriving and expanding in number and distribution across Idaho and Wyoming. The NRM DPS met the USFWS biological recovery goal sustaining at least thirty "breeding pairs," defined to include an adult male and an adult female and at least two pups, for three consecutive years by the end of 2002.¹²⁸ At that point, the wolf population in Montana was approximately 180 wolves in about thirty-five packs, which average four to seven animals with an average territory of about 200 square miles.¹²⁹ While packs were still found primarily in northwestern Montana and Greater Yellowstone, they have also reestablished along the Idaho border, south-central Montana, and northeast of Yellowstone.¹³⁰

Few observers still argue about the gray wolf's biological ability to recover and to disperse throughout the northern Rockies. The focus of the national debate on this species' conservation has now shifted to how well western states will protect wolves once their management is no longer directly subject to the ESA and the imminent threat of stricter USFWS regulatory controls.¹³¹ With greater tolerance of human presence and a tendency to favor lower elevation terrain, wolf packs now travel over and use private lands in close proximity to people and livestock. Packs in Montana have established across public and private lands and have become tolerant of varying degrees of rural development. Adapted to hunt large ungulates such as deer and elk, wolves may also kill cattle and sheep. Human acceptance of wolf presence is highly variable. Humans are the chief cause of wolf mortality, and the only cause that can significantly affect wolf populations at their current recovery levels.¹³² The degree of legal protection, agency control, and public hunting will directly influence wolf population trends. Thus, these issues have become the focus of

¹²⁷ Keiter, *supra* note 59, at 234.

¹²⁸ MT FWP WOLF PLAN FEIS, *supra* note 89, at v.

¹²⁹ *Id.*

¹³⁰ *Id.*

¹³¹ Keiter, *supra* note 59, at 235.

¹³² MT FWP WOLF PLAN FEIS, *supra* note 89, at vi.

the current legal and administrative debate, discussed in the sections below.

III STATUTES, REGULATIONS, GUIDELINES AND MANAGEMENT PLANS

Although jurisdictional lines may not have much ecological relevance, they are of enormous legal significance. Jurisdictional boundaries define and limit the scope of federal and state authority, as well as the reach of governmental power over individuals and private property.¹³³

A. Endangered Species Act

“Often dubbed the ‘pit bull of environmental law’¹³⁴ and ‘prohibitive policy,’¹³⁵ the ESA was originally passed in December 1973,¹³⁶ in response to the growing threat of extinction faced by many of the nation’s fish, wildlife, and plant species. The federal statute’s stated purpose is “to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved.”¹³⁷ The ESA obligates the USFWS under section 4 to protect any species facing extinction, using only the best scientific and commercial data to make federal listing decisions.¹³⁸ “Once listed, the [ESA] gives these species a clear legal priority: it mandates that all federal agencies ‘conserve’ protected species; it prohibits anyone (even private landowners) from ‘taking’ a protected species [under section 9]; and [under section 7] it gives the [USFWS] effective veto power over any federal actions that may ‘jeopardize’ them.”¹³⁹

¹³³ Robert B. Keiter, *The Old Faithful Protection Act: Congress, National Park Ecosystems, and Private Property Rights*, 14 PUB. LAND & RESOURCES L. REV. 5, 6–7 (1993).

¹³⁴ Keiter, *supra* note 40, at 235.

¹³⁵ STEVEN LEWIS YAFFEE, PROHIBITIVE POLICY: IMPLEMENTING THE FEDERAL ENDANGERED SPECIES ACT 13 (1982).

¹³⁶ Gerry Jackson, *The ESA at Twenty-Five*, ENDANGERED SPECIES BULLETIN (U.S. Fish & Wildlife Serv., Wash., D.C.), Jan.–Feb. 1999, at 25.

¹³⁷ Endangered Species Act § 2(b), 16 U.S.C. § 1531(b) (2006).

¹³⁸ *Id.* § 4(b)(1)(A), 16 U.S.C. § 1533(b)(1)(A).

¹³⁹ Keiter, *supra* note 40, at 235.

However, the 1978 amendments made several important changes to the ESA, taking a little of the bite out of the pit bull that Congress created in 1973. For example, a few notable 1978 amendments include a two-tiered process by which federal agencies could receive exemptions from section 7, an exemption for national security-related activities, an obligation for the Secretary of the Interior to consider the economic impact of critical habitat designations,¹⁴⁰ and the ability of the Secretary to enter cooperative agreements with states that establish and maintain an “adequate and active” program for listed species conservation under section 6.¹⁴¹ While the ESA was “spared radical surgery” and left “basically intact,” key 1978 amendments served to “acknowledge and accommodate competing human concerns.”¹⁴² Importantly, however, the ESA preempts inconsistent state laws, vesting final management responsibility for listed species with federal authorities, namely the Department of the Interior.¹⁴³ Thus, it effectively provides a free travel pass to federally listed species, whether moving across federal, tribal, state, or private lands, as discussed separately in subsections below.

B. Federal Lands and Agencies

The ESA has effectively served to coerce federal agencies to work together in dealing with listed endangered species recovery and habitat conservation issues. However, when operating outside the auspices of the ESA, federal agencies are statutorily responsible to manage their lands and resources consistent with the purposes of agency enabling acts, as well as in accordance with promulgated regulations, guidelines, and management plans.

1. Glacier National Park

GNP was established in 1910 by Congress as the tenth national park. Originally designated in 1900 as a forest preserve open to mining and homesteading, GNP now encompasses approximately one

¹⁴⁰ U.S. Fish & Wildlife Service, Digest of Federal Resource Laws of Interest to the U.S. Fish and Wildlife Service, <http://www.fws.gov/laws/lawsdigest/ESACT.html> (last visited Jan. 16, 2010); *see also* Keiter, *supra* note 40, at 236 (“While spared radical surgery and still basically intact, the [ESA] has nevertheless been modified to acknowledge and accommodate competing human concerns.”).

¹⁴¹ Endangered Species Act § 6(c)(1), 16 U.S.C. § 1535(c)(1) (2006).

¹⁴² Keiter, *supra* note 40, at 236.

¹⁴³ Keiter, *supra* note 40, at 235–36.

million acres.¹⁴⁴ The National Park Organic Act of 1916, as amended, established the NPS as an agency under the direction of the Secretary of the Interior, in order to create unity among the Nation's current and future parks with a national management system. However, like GNP, national parks are created individually by Congress, which provides park-specific legislation.¹⁴⁵ Thus, GNP officials manage that park in accordance with relevant federal acts such as the ESA, the policies of the national park system, and GNP's own 1910 establishment legislation. The National Park Organic Act, as well as GNP's establishment legislation, delegates to the Department of the Interior Secretary and park officials the task of implementing dual mandates of conserving resources unimpaired while providing for the public's use and enjoyment.¹⁴⁶ The GNP Superintendent utilizes his or her discretionary authority to establish annual restrictions, road closures, backcountry permits, and camping requirements to protect the GNP's natural resources, including wildlife.¹⁴⁷

The 2001 NPS Management Policies helped resolve the century-old conflict between conservation and enjoyment of limited park resources by directing that "conservation is to be predominant," and clarifying the definition of impairment.¹⁴⁸ However, this prioritization was recalibrated in the Bush administration's 2006 NPS Policies draft, which "blatantly emphasized use and enjoyment."¹⁴⁹ While the final NPS Policies struck a more balanced chord, the so-called "great debate" will undoubtedly surface again as visitor trips continue to increase.¹⁵⁰ GNP is a core recovery zone for large, potentially dangerous omnivores and includes scenic resources that

¹⁴⁴ National Park Service, *supra* note 113.

¹⁴⁵ Harmony A. Mappes, Note, *National Parks: For Use and "Enjoyment" or for "Preservation"?* and the Role of National Park Service Management Policies in that Determination, 92 IOWA L. REV. 601, 606-07 (2007) (tracking the history and the legislation of the national parks and focusing on whether the parks' primary purpose is preservation or use and enjoyment). This Note determines that since Congress mandated both elements as the purpose of the parks, the NPS must accommodate both. *Id.* at 610-20.

¹⁴⁶ See also National Park Service, Glacier, Glacier's Guiding Principles, http://home.nps.gov/glac/forteachers/glacier_principles.htm (last visited Jan. 16, 2010).

¹⁴⁷ See 36 C.F.R. § 1.7(b) (2009).

¹⁴⁸ Mappes, *supra* note 145, at 624 (quoting NAT'L PARK SERV., MANAGEMENT POLICIES 2001, available at <http://www.nps.gov/refdesk/mp/index.html>).

¹⁴⁹ *Id.* at 636.

¹⁵⁰ *Id.* at 635.

attract admirers from around the world.¹⁵¹ Park managers will continue to struggle with the challenge of maintaining sensitive habitat for “a huge, beloved, endangered animal that is capable of killing people easily” with the interests of visitors “who prefer not to be eaten,” but also want to explore GNP’s wild backcountry.¹⁵²

2. *Lewis and Clark National Forest*

The LCNF abuts the southeast flank of GNP and is managed by the USFS.¹⁵³ The LCNF’s 680,000-acre Rocky Mountain District lies southeast of Highway 2 and Marias Pass. The LCNF also includes forest lands southeast of Great Falls, including the Little Belt and Crazy Mountains (see Map 4). USFS land use and management decisions are guided by the purposes of the Multiple-Use Sustained-Yield Act of 1960,¹⁵⁴ National Forest Management Act of 1976 (NFMA),¹⁵⁵ National Environmental Policy Act of 1969 (NEPA),¹⁵⁶ and the ESA. For the Bob Marshall and Scapegoat Wilderness Areas, the Wilderness Act of 1964 also governs.¹⁵⁷ Traditional forest management policies for oil and gas development, as well as timber harvest and livestock grazing, conflicted with sensitive wildlife and

¹⁵¹ This fact remains true even as the glaciers in GNP recede, see DARKENING PEAKS: GLACIER RETREAT, SCIENCE, AND SOCIETY (Ben Orlove et al. eds., 2008), for a general overview of issues associated with glacier retreats worldwide. The U.S. Geological Survey has excellent images showing the retreat of glaciers at GNP. See U.S. Geological Survey, History of Glaciers in Glacier National Park, http://www.nrmisc.usgs.gov/research/climate_glaciers.htm (last visited Jan. 16, 2010); see also Gregory T. Pederson et al., *Decadal-Scale Climate Drivers for Glacial Dynamics in Glacier National Park, Montana, USA*, 31 GEOPHYSICAL RES. LETTERS 1, 1–2 (2004), available at http://www.nrmisc.usgs.gov/files/norock/products/GCC/GeophysResLet_Pederson_04.pdf (setting forth the factors driving glacial retreat in GNP).

¹⁵² Eric T. Freyfogle, *The Owning and Taking of Sensitive Lands*, 43 UCLA L. REV. 77, 116 (1995).

¹⁵³ The USFS is administratively housed within the U.S. Department of Agriculture (USDA), as opposed to the U.S. Department of the Interior, which houses the NPS, USFWS, BLM, and Bureau of Indian Affairs. For an overview of the reasons for this institutional arrangement and its ramifications for managing public lands in the West, see CHARLES F. WILKINSON, *CROSSING THE NEXT MERIDIAN: LAND, WATER, AND THE FUTURE OF THE WEST* (1992). Additionally, for a more detailed history of the USFS, see HAROLD K. STEEN, *THE U.S. FOREST SERVICE: A HISTORY* (Centennial. ed. 2004) and PAUL W. HIRT, *A CONSPIRACY OF OPTIMISM: MANAGEMENT OF THE NATIONAL FORESTS SINCE WORLD WAR TWO* (1994).

¹⁵⁴ 16 U.S.C. §§ 528–531 (2006).

¹⁵⁵ 16 U.S.C. §§ 1600–1614 (2006).

¹⁵⁶ 42 U.S.C. §§ 4321–4347 (2006).

¹⁵⁷ 16 U.S.C. §§ 1131–1136 (2006).

habitat conservation goals.¹⁵⁸ The Badger-Two Medicine Area (BTM), an important wildlife corridor between GNP and the Bob Marshall Wilderness, also includes “very promising oil and gas lands,” which have been the subject of a high pressure, politically charged debate regarding potential oil drilling and leasing for the last three decades.¹⁵⁹

In addition to applicable federal acts, LCNF has its own Forest Plan and Travel Management Plan and resident Forest Supervisor with his or her own management style. While forest land use and management traditionally focused on commodity resources, especially for oil and gas, initiatives developed under the Clinton administration embraced ecosystem-based planning and sought to shift management “polic[ies] toward landscape scale planning and biodiversity conservation.”¹⁶⁰ Notably, in the 1990s, the USFS made fundamental changes to its NFMA planning rules, which give “priority to ecological sustainability for policy purposes.”¹⁶¹ Although the Bush administration altered these rules and initiatives for landscape-level planning, the policy priorities for the USFS under Bush still included recreational conflicts and loss of open space, which are key issues in the GGR. Within both the USFS and the LCNF staffs, there has been a new commitment to ecosystem-based management, as well as a significant restructuring of the USFS workforce toward “greater disciplinary diversity.”¹⁶² However, as discussed in Part V, controversy over oil and gas development in the BTM area and the management of recreational off-road vehicles (ORV) has continued through the 1990s and 2000s.¹⁶³

¹⁵⁸ See Sax & Keiter (1987), *supra* note 38, at 215, 240–44 (stating the Lewis and Clark Forest Supervisor in 1987 was “from the old school, which is strongly oriented toward traditional commodity uses of the forest”).

¹⁵⁹ *Id.* at 240.

¹⁶⁰ Sax & Keiter (2006), *supra* note 37, at 241; see also discussion *supra* Part II.

¹⁶¹ Sax & Keiter (2006), *supra* note 37, at 242. These changes came in response to recommendations by the so-called Committee of Scientists. See U.S. Dep’t of Agriculture, Forest Service, Committee of Scientists Report, <http://www.fs.fed.us/emc/nfma/includes/cosreport/Committee%20of%20Scientists%20Report.htm>.

¹⁶² Sax & Keiter (2006), *supra* note 37, at 242.

¹⁶³ *Id.* at 244–45.

3. *Other Federal Agencies: U.S. Fish and Wildlife Service, Bureau of Land Management, and Bureau of Indian Affairs*

Other key federal agencies involved in the land use and management in the GGR include the USFWS, BLM, and the Bureau of Indian Affairs (BIA). These agencies exercise authority over land use and management decisions related to endangered species and their habitat, oil and gas permits and leases, and tribal lands, respectively. The USFWS is tasked with reviewing federal, state, and private actions with the potential to affect federally listed species in the GGR, including the grizzly, wolf, Canada lynx, bull trout, water Howella, Spalding's Catchfly, and whooping crane.¹⁶⁴ However, controversy has swirled over the USFWS's politically influenced string of jeopardy and no-jeopardy opinions on impacts of proposed oil drilling in the BTM area, as discussed in Part V.

The BLM is charged with the review and permitting of oil and gas leases on federal lands, including those managed by the USFS. Along with the USFWS and USFS, local BLM officials have been embroiled in controversies over permitting of oil and gas exploration and development in the BTM area. Finally, the BIA, also housed within the Department of the Interior, is charged with managing Indian trust lands, including those located within the Blackfeet Indian Reservation. For trust lands, the BIA's land and resource management decisions, including grazing permits and oil and gas exploration, must be in accordance with applicable federal statutes, including the ESA, NEPA, and the National Indian Forest Resources Management Act.¹⁶⁵ Additionally, the BIA must uphold the federal

¹⁶⁴ See FISH & WILDLIFE SERV., U.S. DEP'T OF THE INTERIOR, THREATENED, ENDANGERED AND CANDIDATE SPECIES IN MONTANA (2009), available at http://www.fws.gov/montanafieldoffice/Endangered_Species/Listed_Species/TEClist.pdf (listing threatened, endangered, and candidate species in Montana as of November 2009); FLATHEAD COUNTY PLANNING & ZONING, FLATHEAD COUNTY GROWTH POLICY 127 (2007), available at http://flathead.mt.gov/planning_zoning/growth_resolution2015a.php [hereinafter FLATHEAD COUNTY GROWTH POLICY] (click on link for "Chapter 2: Land Uses"). This policy was prepared by Flathead County Planning Board with the assistance of Planning and Zoning Staff and in compliance with MONT. CODE. ANN. §§ 76-1-306, 76-1-602, 76-1-603, see FLATHEAD COUNTY GROWTH POLICY, *supra*, at ii (click on "PB Resolution"), and was adopted by Resolution No. 2015 A on March 19, 2007. *Id.* at i (click on "Cover").

¹⁶⁵ 25 U.S.C. §§ 3101-3120 (2006).

government's strict fiduciary duty to manage tribal land and resources held in trust in the best interest of Indian beneficiaries.¹⁶⁶

C. Tribal Lands: Blackfoot Indian Reservation

When European explorers first arrived, the GGR was occupied by several Native American Indian tribes—the Blackfeet controlled the prairies east of the Rocky Mountains or the “Backbone of the World,” while the Salish and Kootenai resided in valleys to the west.¹⁶⁷ Today, the 1.5 million-acre Blackfeet Reservation directly abuts GNP and LCNF to the east, while the Salish and Kootenai Reservation lies to the southwest.¹⁶⁸ As noted above, federal trust lands located within the Blackfeet Reservation are managed by the BIA, while the nine-member Blackfeet Tribal Business Council serves as the governing legal body within the Reservation. The Blackfeet Tribe has approximately 15,560 enrolled members, of which 8560 are off-reservation and 7000 are on-reservation.¹⁶⁹ Some members are original allotted and unallotted landowners, while other members lease tribal properties. The Blackfeet Tribe, in its relationship with the federal government, is recognized as a domestic sovereign through applicable treaties, laws, and executive orders.¹⁷⁰

¹⁶⁶ Telephone Interview with Dan Carney, Biologist, Blackfeet Nation Fish & Wildlife, in Blackfeet Reservation, Mont. (Mar. 31, 2009); see also Colleen M. Diener, Comment, *Natural Resources Management and Species Protection in Indian Country: Alternatives to Imposing Federal and State Enforcement Upon Tribal Governments and Native Americans*, 41 IDAHO L. REV. 211, 220–21 (2004).

¹⁶⁷ National Park Service, Glacier, Nature & Science <http://home.nps.gov/glac/naturescience/index.htm> (last visited Jan. 16, 2010).

¹⁶⁸ National Park Service, *supra* note 113.

¹⁶⁹ See Blackfeet Nation, The Blackfeet Today, <http://97.74.249.201/about-the-blackfeet/the-blackfeet-today.html> (last visited Jan. 16, 2010).

¹⁷⁰ Carney, *supra* note 166; Diener, *supra* note 166, at 217 (“Executive orders 13084 and 13175 (Clinton’s consultation orders) best articulate the guidelines of the federal government-to-government policy [which is that]—[e]xecutive agencies are to respect tribal self-government and sovereignty, and strive to meet the tribal trust responsibilities that arise from the unique federal-tribal relationship.”). Despite such orders and treaties between tribes and the U.S. government, however, the history of federal Indian law is one in which Supreme Court jurisprudence has established plenary power for Congress to act unilaterally in such relationships, *United States v. Kagama*, 118 U.S. 375, 384–85 (1886), under the theory that Tribes are “domestic dependent nations,” *Cherokee Nation v. Georgia*, 30 U.S. 1, 10 (1831), seeking redress in “the Courts of the conqueror,” *Johnson v. M’Intosh*, 21 U.S. 543, 588 (1823). Tribal efforts to exercise their sovereignty have, therefore, often been met with federal and state resistance to true government-to-government relationships. See generally JESSICA R. CATTELINO, *HIGH STAKES: FLORIDA SEMINOLE GAMING AND SOVEREIGNTY* (2008) (providing an excellent recent exploration

While the relationship between state and federal wildlife management is established under section 6 of the ESA,¹⁷¹ relations between Indian tribes and the United States is not addressed in the ESA. However, guiding procedures for U.S. agencies impacting tribal interests are well established by U.S. Indian law, including federal trust obligations, President Clinton's government-to-government requirements, and the Indian Self-Determination Act.¹⁷² "Thus, the ESA cannot be imposed on tribal governments without the federal government addressing tribal interests and honoring tribal sovereignty."¹⁷³ Further, the U.S. government cannot allow state laws or actions to affect tribal interests without considering and consulting affected tribes.¹⁷⁴ But, relevant to individuals, statutory language indicates that the ESA was intended to apply to all U.S. citizens, including tribal members. But the ESA, like other statutes, inherently provides qualified immunity to tribal members exercising their treaty rights.¹⁷⁵

1. *Blackfeet Treaty Rights*

Complex U.S.-tribal treaty issues surround access rights claimed by the Blackfeet Tribe to the BTM area to hunt and fish, as well as to harvest timber for domestic use. Under an 1896 agreement with the U.S. government, the Tribe claims use rights to this area, located within both GNP and LCNF lands.¹⁷⁶ Historically, relations between

of the complex dimensions of Indian sovereignty in the American Federal system as well as the challenge of forming meaningful government-to-government relationships with Indian tribes as true sovereigns).

¹⁷¹ Endangered Species Act § 8, 16 U.S.C. § 1537 (2006).

¹⁷² Indian Self-Determination and Education Assistance Act of 1975, 25 U.S.C. §§ 450 to 450e-3 (2006); *see also* Diener, *supra* note 166, at 226.

¹⁷³ Diener, *supra* note 166, at 226–27.

¹⁷⁴ *Id.* at 227 (citing Exec. Order No. 13,175, 65 Fed. Reg. 67,249 (Nov. 6, 2000) (requiring consultation and collaboration with tribal officials when developing federal policies that implicate tribal interests)).

¹⁷⁵ *Id.* at 233, 245; *see also* Phillips Petroleum Co. v. U.S. Env'tl. Prot. Agency, 803 F.2d 545, 556 (10th Cir. 1986) (providing that the Safe Water Drinking Act empowers the EPA to regulate Indian lands, reasoning that such interpretation is "consistent with the presumption that Congress intends a general statute applying to all persons to include Indians and their property interests," but that "this rule of construction can be rescinded where a tribe raises a specific right under a treaty or statute which is in conflict with the general law to be [applied]").

¹⁷⁶ Sax & Keiter (1987), *supra* note 38, at 213 (citing a treaty agreement between the U.S. government and the Blackfeet Indian Reservation in Montana made on September 26, 1895).

the Blackfeet and GNP management were strained due to the Tribe's position that eastern portions of the park were still part of their traditional domain, which they frequently used for tribal cattle grazing.¹⁷⁷ During the 1990s, the Tribe finally weighed in on the oil and gas leasing proposed within the BTM area and opposed the USFWS's blanket access restriction, which had been exchanged for withdrawal of its jeopardy opinion for the grizzly related to proposed drilling impacts, excluding Blackfeet from this religiously significant area.¹⁷⁸ The Tribe, supported by findings of a cultural area study conducted during the Hall Creek oil well permitting review, sought designation of the BTM area as a traditional cultural district (TCD) under the National Historic Preservation Act.¹⁷⁹ In 2002, the National Historic Register Keeper determined BTM was eligible for TCD designation, but excluded the immediate area around the proposed well site. However, tribal insistence that the TCD include the well site has generated a new cultural study and has kept oil leases pending.¹⁸⁰

2. *Blackfeet Grizzly and Wolf Management Plans*

As a domestic sovereign, the Tribe has developed, through the Blackfeet Fish and Wildlife Department (BFWD), draft and final management plans for bears, including both grizzly bears and black bears, and wolves within the Reservation.¹⁸¹ Both plans are consistent with federal ESA requirements. Approved by the MT FWP in July 2008, the Blackfeet Wolf Management Plan is also voluntarily consistent with Montana's wildlife laws and regulations. State approval allows tribal ranchers to receive compensation through Montana's new Livestock Loss Reduction and Mitigation Program, discussed in Part V. The Tribe and Montana Livestock Loss Reduction and Mitigation Board entered into a cooperative agreement

¹⁷⁷ *Id.* at 213, 258 n.152.

¹⁷⁸ Sax & Keiter (2006), *supra* note 37, at 272.

¹⁷⁹ 16 U.S.C. §§ 470 to 470w-6 (2006).

¹⁸⁰ Sax & Keiter (2006), *supra* note 37, at 274 (stating that as of 2006 the cultural review process was ongoing and that "[m]ost observers believe that eventually an expanded TCD designation will be made, and will incorporate the Hall Creek site, which will in practice doom oil and gas operations there").

¹⁸¹ See BLACKFEET TRIBAL BUS. COUNCIL, BLACKFEET TRIBE WOLF MANAGEMENT PLAN (2008) [hereinafter BLACKFEET WOLF PLAN]; BLACKFEET TRIBAL BUS. COUNCIL, DRAFT BEAR MANAGEMENT PLAN AND GUIDELINES FOR BEAR MANAGEMENT ON THE BLACKFEET INDIAN RESERVATION (1998) [hereinafter BLACKFEET DRAFT BEAR PLAN].

in October 2008 allowing for compensation to tribal ranchers for wolf kills of livestock verified by BFWD within the Reservation.¹⁸² Although much shorter in length than its federal and state counterparts, the succinct but detailed tribal Management Plan includes: goals for promoting the long-term survival of both species within the Reservation and minimizing wildlife-human conflicts in ways consistent with tribal values, specific plan objectives, a management policy, implementation steps, and provisions for future revision. The Tribe's Management Plan states that hunting of wolves may be considered a management option, as regulated by quotas established through the Blackfeet Fish and Wildlife Code.¹⁸³

D. State of Montana

1. Montana Fish, Wildlife, and Parks Service

The MT FWP is the primary agency tasked by statute to manage state wildlife. Upon delisting, it is also charged with implementing the Montana Wolf Conservation and Management Plan.¹⁸⁴ As of 2008, Montana's wolf program employs 4.5 full-time, field-level wolf management specialists based in Kalispell, Missoula, Butte, and Bozeman. These specialists are responsible for wolf monitoring efforts, landowner relations, wolf-livestock conflict resolution, and public outreach, and are assisted by a statewide wolf program coordinator based in Helena.¹⁸⁵ Currently operating under federal regulatory guidance and supported by federal funding, the MT FWP will administer Montana's own wolf management plan, as well as implement applicable state statutes, administrative rules, and hunting

¹⁸² Carney, *supra* note 166; *see also* Karl Puckett, *New State Agency Releases Payments for Wolf Kills*, GREAT FALLS TRIB., Oct. 31, 2008.

¹⁸³ BLACKFEET WOLF PLAN, *supra* note 181, at 11.

¹⁸⁴ *See* MONT. CODE ANN. § 87-5-131 (2007), *amended by* 2009 MONT. LAWS 275 (charging MT FWP with management of the gray wolf after federal delisting as a "species in need of management" and allowing the MT FWP or Department of Livestock to "control wolves for the protection and safeguarding of livestock if the control action is consistent with a wolf management plan approved by both [departments]").

¹⁸⁵ *See* Ken McDonald, Wildlife Division Administrator, Montana Fish, Wildlife & Parks, *Comment on U.S. Fish and Wildlife Service Proposed Rule 73 FR 63926 Designating the Northern Rocky Mountain Population of Gray Wolf as a DPS and Removing the DPS from the Federal List of Endangered and Threatened Wildlife*, Aug. 5, 2008, available at <http://www.fws.gov/mountain-prairie/species/mammals/wolf/MT%20Gray%20Wolf%20Comment.pdf>.

quota regulations once the wolf is officially delisted.¹⁸⁶ Under Montana law, the MT FWP “shall supervise all the wildlife, fish, game . . . and fur-bearing animals of the state and may implement voluntary programs that encourage hunting access on private lands and that promote harmonious relations between landowners and the hunting public.”¹⁸⁷ This statute also grants MT FWP “all powers necessary to fulfill the duties prescribed by law and to bring actions” in state court to enforce fish and game laws, as well as administrative rules the Department has adopted.¹⁸⁸

2. *Montana Wildlife Laws and Administrative Rules*

Montana has enacted state regulatory mechanisms to guide in-state wolf management and conservation, including both state statutes and administrative rules. Enacted in 2001, statutory law requires that if the USFWS delists the wolf, the MT FWP is authorized to remove the wolf from the state list of endangered species and manage the wolf as “a species in need of management” until the MT FWP determines that the wolf is no longer in need of such protection.¹⁸⁹ Upon this determination, the MT FWP Commission may reclassify and regulate the taking of wolves as a big game animal or fur bearer, subject to state administrative rulemaking requirements. MT FWP is also allowed to control wolves for the protection and safeguarding of livestock if the control action is consistent with a wolf management plan approved by both the MT FWP and the Department of Livestock.¹⁹⁰ This statute prohibits any person from taking, possessing, transporting, exporting, or selling wildlife deemed in need of management, except as provided in MT FWP regulations.¹⁹¹

Furthermore, this statute makes knowingly or negligently violating state wildlife laws a misdemeanor, subject to fines, imprisonment for up to six months, and forfeiture of state hunting privileges.¹⁹² However, another section states that no criminal liability shall be imposed for taking of state-protected wildlife if such wildlife is “attacking, killing, or threatening to kill a person or livestock, except

¹⁸⁶ MONT. CODE ANN. § 87-5-131 (2007).

¹⁸⁷ *Id.* § 87-1-201.

¹⁸⁸ *Id.*

¹⁸⁹ *Id.* § 87-5-131.

¹⁹⁰ *Id.*

¹⁹¹ *Id.* § 87-5-106.

¹⁹² *Id.* § 87-1-102(1).

that, for purposes of protecting livestock, a person may not kill or attempt to kill a grizzly bear unless the grizzly bear is in the act of attacking or killing livestock. In addition, a person may kill or attempt to kill a wolf or mountain lion that is in the act of attacking or killing a domestic dog.”¹⁹³ A person taking wildlife under such circumstances must report the activity within seventy-two hours and surrender the animal to MT FWP. Additionally, a “take” is defined as “harass, hunt, capture, or kill or attempt to harass, hunt, capture, or kill,”¹⁹⁴ and Montana Administrative Rules define “attacking” to mean “the actual biting, wounding, or grasping of livestock or domestic dogs.”¹⁹⁵ State defense of property statutes, which allow a private citizen to kill a wolf in the act of killing or threatening to kill livestock, are similar to federal 10(j) regulations historically in place under the ESA in southwestern Montana for the experimental Yellowstone wolf population.¹⁹⁶

In 2008, the MT FWP began work to develop a wolf hunting season and harvest quota system. In February, the MT FWP Commission approved a final wolf season structure, defined three statewide wolf management units, designated one management subunit for the North Fork of the Flathead River (see Map 5), and gave MT FWP authority to define other subunits and assign harvest subquotas. After this initial rulemaking, the MT FWP Commission delayed further harvest quota rulemaking following the issuance of the federal preliminary injunction in July 2008, see discussion *supra* Part III, but continued rulemaking for state wolf management.¹⁹⁷ Over the summer of 2008, MT FWP continued its rulemaking to reclassify the wolf upon federal delisting from “endangered” to “a species in need of management” under state law and to establish the manner and types of nonlethal and lethal control methods allowed in future wolf-livestock conflicts.¹⁹⁸

Approved by the MT FWP Commission in September 2008, new regulations specify when and how lethal control can be used to resolve wolf-livestock conflicts. For example, on a case-by-case

¹⁹³ *Id.* § 87-3-130(1).

¹⁹⁴ *Id.* § 87-5-102(9).

¹⁹⁵ MONT. ADMIN. R. 12.9.1302 (2008).

¹⁹⁶ See discussion *supra* Part III regarding wolf reintroduction into the Greater Yellowstone Ecosystem.

¹⁹⁷ McDonald, *supra* note 185, at 3–4.

¹⁹⁸ MONT. CODE ANN. § 87-5-131 (2007).

basis, the MT FWP may authorize the legal control of “problem wolves” by agency control conducted by the MT FWP, Montana Department of Livestock, or U.S. Department of Agriculture (USDA) Wildlife Services.¹⁹⁹ Lethal control may be used by a livestock owner with an MT FWP-issued permit under conditions authorized and specified therein, or to protect human safety. Before authorizing the use of lethal control, the MT FWP or USDA Wildlife Services must investigate the alleged wolf-livestock conflict and may elect to translocate the wolf or use other nonlethal control methods. If a livestock owner uses lethal control, the killing or injuring of a wolf under permit must be reported within twenty-four hours and physical evidence left undisturbed pending further agency investigation. A problem wolf is defined as “a wolf that has been confirmed by the [MT FWP] or USDA Wildlife Services to have attacked or been in the act of attacking livestock within the past [forty-five] days.”²⁰⁰

On July 8, 2009, the MT FWP Commission approved final quotas for a 2009 state wolf hunting season. Utilizing the season structure adopted by the MT FWP in 2008, the Commission approved a statewide hunting quota of seventy-five, distributed across the three Montana wolf management units (WMU). Specifically, it approved a hunting quota of forty-one wolves in northwest Montana, twenty-two in western Montana, and twelve in southwest Montana. In the North Fork Flathead River Subunit, which includes the private lands in the drainage area on the west side of GNP, the Commission approved a subunit quota of two wolves. The subunit quota applies toward the total quota for WMU 1, which encompasses northwestern Montana (see Map 5). The MT FWP began selling wolf hunting licenses on August 31, 2009, and early season backcountry hunting began on September 15, 2009.²⁰¹

¹⁹⁹ MONT. ADMIN. R. 12.9.1305.

²⁰⁰ MONT. ADMIN. R. 12.9.1302.

²⁰¹ Montana Fish, Wildlife & Parks, Wolf Licenses, <http://fwp.mt.gov/hunting/licenses/wolflicenses.html> (lasted visited Jan. 16, 2010). While delisting litigation, discussed *supra* in Part II.B and note 112, threatened to derail the planned 2009 hunting season, Earthjustice’s request for a preliminary injunction was denied on September 9, 2009, and the MT FWP continued to move forward with its hunting season as previously approved. As of September 18, 2009, the MT FWP has sold a total of 9353 total resident and nonresident wolf hunting licenses. The early season wilderness backcountry areas, which include the west side of the Bob Marshall Wilderness Complex, opened on September 15 for deer, elk, black bear, mountain lion, and wolf hunting. In the first few days of the hunt in Montana, three wolves were reported harvested, including one in the Bob Marshall Complex within WMU 1. See also Montana Fish, Wildlife & Parks,

3. *Montana Wolf Conservation and Management Plan*

Montana's Wolf Conservation and Management Plan was developed over a several-year period within the framework of the Montana Environmental Protection Act. The MT FWP coordinated its review, held hearings, and received extensive public comment during the Plan's Draft and Final Environmental Impact Statement (EIS) process. The MT FWS Wolf Plan was approved by the Montana Legislature in 2003 and by the USFWS in 2004. In 2005, Montana and the USFWS entered into a cooperative agreement that placed MT FWP as the lead agency in charge of wolf management, in compliance with federal regulations, until delisting. The MT FWP Wolf Plan seeks to maintain at least fifteen breeding pairs of wolves in-state, which includes a buffer of five breeding pairs above the USFWS recovery threshold of ten breeding pairs. Under the Plan, the MT FWP is charged with monitoring the status and trajectory of in-state wolf populations and utilizing an adaptive management framework²⁰² to maintain populations throughout the state. The MT FWP Wolf Plan does not cap the total number of wolves in-state or limit their distribution.²⁰³ Instead, it states that wolves "will be managed like other free-ranging wildlife in Montana and within the

Montana Wolf Program Weekly Report, <http://fwp.mt.gov/wildthings/wolf/wolfweekly2009.html?p=4> (click on "2009-09-18 Montana Wolf Weekly" hyperlink) (last visited Jan. 16, 2010).

²⁰² "Adaptive management" is an approach predicated on recognition that all management interventions are experiments and therefore all management interventions should be monitored carefully and then management decisions should be altered if the interventions do not generate the ecological response anticipated when the initial decision was made to initiate the intervention. *See* ADAPTIVE ENVIRONMENTAL ASSESSMENT AND MANAGEMENT (C.S. Holling ed. 1978); CARL J. WALTERS, ADAPTIVE MANAGEMENT OF RENEWABLE RESOURCES (1986) (discussing the concept of adaptive management). More recently, researchers have emphasized the need to consider the interaction of social and ecological systems in a "complex adaptive systems" framework that recognizes the roles of uncertainty and stochasticity in all systems and therefore the need to manage systems to maintain ecological resilience. *See* BARRIERS & BRIDGES TO THE RENEWAL OF ECOSYSTEMS AND INSTITUTIONS (Lance H. Gunderson et al. eds., 1995); PANARCHY: UNDERSTANDING TRANSFORMATIONS IN HUMAN AND NATURAL SYSTEMS (Lance H. Gunderson & C.S. Holling eds., 2002); *see also* Resilience Alliance, About RA, <http://www.resalliance.org/560.php> (setting forth more recent developments in complex adaptive systems) (last visited Jan. 16, 2010). Additionally, for a recent application of the concepts to strategic planning by a public land and resource management agency in a complex western landscape, see Tanya L. Higgins & Timothy P. Duane, *Incorporating Complex Adaptive Systems Theory into Strategic Planning: The Sierra Nevada Conservancy*, 51 J. ENVTL. PLAN. & MGMT. 141 (2008).

²⁰³ McDonald, *supra* note 185, at 4–6.

constraints of the biological and social characteristics, [and] the physical attributes of the environment, land ownership, and land uses.”²⁰⁴

The MT FWP’s Wolf Plan and its current wolf program, described above, are complemented by other MT FWP programs that emphasize wildlife habitat conservation, including Habitat Montana, Wildlife Mitigation Trust, and Montana’s Forest Legacy Program. Various funding sources enable MT FWP to protect habitats and provide public recreation through conservation easements and land purchases. MT FWP also works with land conservation organizations as well as other state and federal agencies to manage habitat and open space for wildlife, particularly focusing on “lower elevation foothill areas important for wintering ungulates.”²⁰⁵

E. Flathead County

Flathead County is the third largest county in Montana, encompassing approximately 3.4 million acres. Nearly 82.5% of the county is managed by federal (primarily NPS and USFS), state, and tribal (the Confederated Salish and Kootenai Tribes) governments.²⁰⁶ The county’s subdivision regulations apply to all private lands outside the cities of Kalispell, Columbia Falls, and Whitefish (see Map 1). The county’s largely unzoned rural lands serve as a key interface between expanding human settlements and lower elevation wildlife habitat.

Influential on regional land use and wildlife habitat, the county has experienced a “population boom” over the last thirty years.²⁰⁷ Between 1970 and 1980, it experienced a thirty-two percent population increase. While growth rates lessened during the 1980s, from 1990 to 2000 the county’s population increased by twenty-six percent, resulting in a 2000 population of almost 75,000 residents. The growth rate between 2000 and 2005 was consistent with 1990s trends. Approximately sixty-nine percent of the county’s population resides outside of its three incorporated cities.²⁰⁸ In 2004, almost 900 new lots were created; residential is the single most rapidly growing

²⁰⁴ MT FWP WOLF PLAN FEIS, *supra* note 89, at xi.

²⁰⁵ McDonald, *supra* note 185, at 6.

²⁰⁶ FLATHEAD COUNTY GROWTH POLICY, *supra* note 164, at 14–15.

²⁰⁷ *Id.* at 33.

²⁰⁸ *Id.* at 34.

land use in the county.²⁰⁹ This pattern of rapid rural and exurban growth is consistent with a broader trend of growth throughout the west, where high-amenity regions have experienced more rapid growth than many urban areas in the region.²¹⁰

1. Flathead County Growth Policy, 2007

In 2005 and 2006, responding to the continued popularity of the Flathead Valley as a year-round residential community, the County developed a Growth Policy to “establish goals and policies that build a foundation for safe and healthy growth that preserves Flathead County’s most valued characteristics.”²¹¹ Approved in 2007, that policy’s primary objectives include protecting views, promoting a diverse economy, maintaining the identity of rural communities, properly managing and protecting the natural and human environment, as well as preserving the rights of private property owners.²¹² The Growth Policy includes goals and policies for conserving natural resources. Specifically, Goal 41 is to: “Promote the preservation of critical fish and wildlife habitat and preserve the area’s unique outdoor amenities and quality of life.”²¹³ Implementing policies include distributing educational brochures on living near wildlife to homeowners and buyers, discouraging unmitigated development in areas identified as critical wildlife habitat, and protecting critical wildlife corridors.²¹⁴

2. Flathead County Zoning Regulations

Adopted in 1973 and revised in December 2008, the 226-page Flathead County Zoning Regulations establish and define use districts, which include agricultural, suburban agricultural, and

²⁰⁹ *Id.* at 22–23.

²¹⁰ See generally WILLIAM R. TRAVIS, *NEW GEOGRAPHIES OF THE AMERICAN WEST* 13–25, 22 (2007) (providing overview of “rapid rural and exurban growth in the western United States”); TIMOTHY P. DUANE, *SHAPING THE SIERRA: NATURE, CULTURE, AND CONFLICT IN THE CHANGING WEST* (1999) (providing an assessment of a region that has been experiencing such a growth pattern over a longer time period than most areas in the Intermountain West).

²¹¹ FLATHEAD COUNTY GROWTH POLICY, *supra* note 164, at 1.

²¹² *Id.* at 1–3.

²¹³ *Id.* at 115.

²¹⁴ It is important to note, however, that habitat conservation policies and goals are not enforceable and frequently conflict with other County policies and goals. “Promoting” and “discouraging” are not the same as “requiring” and “prohibiting.” Thus, in practice, these policies and goals are unlikely to result in any substantive habitat conservation.

residential. Agricultural districts include minimum lot sizes of twenty, forty, or eighty acres; suburban agricultural districts allow minimum lots of five or ten acres; the rural residential district lot size is 2.5 acres; and suburban residential lots can be a minimum of one acre. While the planned unit development option exists in all districts, this overlay district is not frequently used.²¹⁵ Perhaps the most notable aspect of the county's zoning regulations is the large amount of private land that is designated unzoned.²¹⁶ Thus, only the legally meaningless policies and goals apply to land use decisions in areas not subject to zoning regulations.

3. Flathead County Subdivision Regulations

While unzoned areas of the county are not subject to zoning regulations, the county's subdivision regulations, adopted in July 2007 and revised in December 2008, apply to most subdivisions in the county. The subdivision regulations split development into either major or minor subdivisions, with major subdivisions being those creating six or more lots from the original tract of record as of July 1, 1973.²¹⁷ Issues related to impacts on wildlife habitat are most frequently encountered during major subdivision review, particularly in rural unzoned areas adjacent to or near federal lands.²¹⁸ Major subdivision applicants must assess the impacts on the natural

²¹⁵ Telephone Interview with Alex Hogle, Planner, Flathead County Planning & Zoning, in Flathead County, Mont. (Apr. 21, 2009) (stating that when the planned unit development option has been used it has been for high density lakefront and ski area condominium developments).

²¹⁶ This is typical for rural counties in the early stages of exurban growth. Growth coalition theory posits that informal bilateral social controls will at first give way to limited rules and regulations as an area grows, with selective adoption and enforcement of such rules and regulations only in areas in which there is active conflict between use and exchange values. A community will then move to widely adopted and enforced trilateral controls, including formal hearings on land use and litigation over land use decisions, when such conflict between use and exchange values is widespread throughout the community. See JOHN R. LOGAN & HARVEY L. MOLOTCH, *URBAN FORTUNES: THE POLITICAL ECONOMY OF PLACE* (1987) (setting forth the general framework of growth coalition theory); THOMAS K. RUDEL, *SITUATIONS AND STRATEGIES IN AMERICAN LAND-USE PLANNING* (1989) (summarizing the shift from informal bilateral relations to rules and regulations to formal trilateral relations). Additionally, coauthor Timothy P. Duane illustrates the above-described evolution and development of a different region that parallels Flathead County's growth pattern. See DUANE, *supra* note 210.

²¹⁷ Flathead County Planning and Zoning, *A Citizen's Guide to Major Subdivisions in Flathead County* (undated) (on file with authors).

²¹⁸ Telephone Interview with John Vore, Wildlife Biologist, Montana Fish, Wildlife & Parks, in Kalispell, Mont. (Apr. 21, 2009).

environment, including wildlife habitat, as required by the Montana Subdivision Platting Act of 1973; under county regulations, they must also preserve this habitat “to the extent possible.”²¹⁹

IV

ANALYSIS OF SPECIES RECOVERY AND HABITAT CONSERVATION SUCCESS

A. *Federal Lands Management for Habitat Conservation*

1. *Federal Agency Cooperation*

Over the last thirty years, cooperation between federal agencies over land use and management decisions affecting regional biodiversity conservation and ecosystem-based management has generally increased.²²⁰ Traditionally favoring intensive commodity resource development, LCNF Supervisors since the late 1980s have become more sensitive to regional endangered wildlife habitat issues in land and resource planning. As noted earlier, USFS management has become increasingly influenced by personnel with a diversity of educational backgrounds, including landscape planning and wildlife biology.²²¹ While GNP managers still struggle to balance wildlife habitat protection with public use and enjoyment, both NPS and USFS management plans, policies, and actions must be consistent with the USFWS’s Interagency Grizzly Bear Guidelines. Under these guidelines, both agencies are required to identify grizzly habitat, follow USFWS management directions, and cooperate on matters pertaining to threatened and endangered species.²²² As necessary, the NPS “shall control visitor use and access to [grizzly] habitat, including closure to entry.”²²³ Within forest service lands, “[l]and [uses] which cannot be made compatible with the goal of grizzly

²¹⁹ Flathead County Development Code, § 4.7.3 (2008); *see also* MONT. CODE ANN. §§ 76-3-504 (setting forth local subdivision regulations), 76-3-603 (setting forth required contents of environmental assessment) (2007). Note that in Flathead County’s Development Code, the statement “to the extent possible” does not establish any ecological criteria that must be met when reviewing and approving subdivisions under the regulations. Instead, it suggests that social, economic, political, and cultural factors will limit such requirements.

²²⁰ Sax & Keiter (2006), *supra* note 37, at 241–42.

²²¹ *Id.* at 246.

²²² USFWS BEAR PLAN, *supra* note 43, at 139–40 (app. A).

²²³ *Id.* at 139.

recovery, and are under [USFS] control, will be redirected or discontinued.”²²⁴

2. *Wildlife and Tribal Interests Versus Oil and Gas Drilling Leases*

Biodiversity and wildlife habitat conservation have traditionally competed, particularly on multiuse USFS and BLM lands, with more intensive land uses. These uses include hard-rock mining, oil and gas development, grazing and forestry, and more recently, ORV recreation. The LCNF has long been devoted to commodity resource extraction, particularly oil and gas. But in recent years, it has turned away from its traditional emphasis due to legal constraints, as well as opposition from neighboring communities, including the Blackfoot Tribe.²²⁵ The LCNF’s BTM area, located just south of GNP, has been the focus of recurring conflicts over mineral development. It also serves as an important wildlife corridor and habitat for grizzly, wolf, and lynx.²²⁶ One driving force behind the Blackfoot Treaty, under which the Tribe was pressured to sell a strip of land along the western side of its Reservation known as the “ceded strip,” which later became part of GNP and LCNF, was miners in search of copper and gold.²²⁷ While no large deposits were ever found, the BTM area was later identified as “very promising” for oil and gas exploration and development.²²⁸

Among the many drilling leases issued in BTM during the early 1980s, one of the most controversial was the Hall Creek site. In 1987, the LCNF Supervisor’s stated position was that the proposed drilling should go forward unless it could be shown to be illegal, and the

²²⁴ *Id.* at 140.

²²⁵ Sax & Keiter (2006), *supra* note 37, at 267.

²²⁶ See FOREST SERVICE, U.S. DEP’T OF AGRICULTURE, FINAL ENVIRONMENTAL IMPACT STATEMENT: ROCKY MOUNTAIN RANGER DISTRICT TRAVEL MANAGEMENT PLAN 255–56 (2007), available at http://www.fs.fed.us/r1/lewisclark/projects/rmrd_travel_plan_feis/index-feis.shtml (click on “Wildlife / Fish” under “Chapter III: Affected Environment and Environmental Consequences”) [hereinafter LCNF TRAVEL PLAN FEIS]; FOREST SERVICE, U.S. DEP’T OF AGRICULTURE, ROCKY MOUNTAIN RANGER DISTRICT TRAVEL MANAGEMENT PLAN: RECORD OF DECISION FOR BADGER-TWO MEDICINE (2009), available at http://www.fs.fed.us/r1/lewisclark/projects/rmrd_travel_plan_feis/rod-badger-two-med/badger-twomed-rod_final_031209.pdf [hereinafter LCNF TRAVEL PLAN ROD].

²²⁷ LCNF TRAVEL PLAN FEIS, *supra* note 226, at 227 (click on “Blackfoot Reserved Rights” under “Chapter III: Affected Environment and Environmental Consequences, Social / Economics”).

²²⁸ Sax & Keiter (1987), *supra* note 38, at 240.

district ranger was widely said to be an active project proponent.²²⁹ At that time, the Tribe's position on proposed oil drilling was ambiguous, perhaps because there were also several wells on the Reservation.²³⁰ The USFWS initially issued a jeopardy opinion under section 7 of the ESA, finding that Hall Creek well access and nearby production facilities would adversely impact the grizzly. But, after minor modifications by LCNF and the oil company lessee, the USFWS issued an amended no-jeopardy opinion. This revised opinion was conditioned on LCNF limiting all other access in BTM to reduce human impacts.²³¹ New access restrictions incited opposition from the Blackfeet, who claimed treaty access rights to BTM under the Blackfeet Treaty, see discussion *supra* Part IV. Exclusion from BTM, "which continued to have importance to them for ritual purposes, significantly raised the stakes."²³² The BLM also spent considerable time reviewing the Hall Creek proposal. At LCNF's request, it approved oil and gas development plans as proposed, but its decision was reversed on an administrative appeal made by several local residents.²³³

Oil and gas development in BTM "appeared as the most immediate and most potentially damaging domestic external threat [GNP] faced" twenty years ago.²³⁴ But today, exploratory drilling has yet to take place in BTM and is not anticipated to occur in the near future. In 2000, American Petrofina, the original applicant for the Hall Creek drilling permit, turned the lease back to Sidney Longwell. Chevron also relinquished nearby leases.²³⁵ Longwell purchased the 6200-acre Hall Creek lease for \$1 per acre per year in 1982, signing it over to Petrofina to develop. Its 1985 permit approval "set off a small

²²⁹ *Id.* at 241.

²³⁰ Sax & Keiter (2006), *supra* note 37, at 271.

²³¹ Sax & Keiter (1987), *supra* note 38, at 242.

²³² Sax & Keiter (2006), *supra* note 37, at 272; see also *supra* Part III.C. (discussion regarding TCD designation process). The Blackfeet Tribe's insistence that the TCD include the well site generated a new cultural study after 2002 and kept 1980s oil leases in a legal state of suspension throughout the Bush administration pending resolution of the Tribe's claims.

²³³ Sax & Keiter (1987), *supra* note 38, at 244; see also Glacier-Two Medicine Alliance, 88 I.B.L.A. 133 (1985).

²³⁴ Sax & Keiter (2006), *supra* note 37, at 268.

²³⁵ *Id.* at 268–69 (noting that contrary to predictions twenty years ago the Rocky Mountain Front is thought "unlikely to be richly rewarding for hydrocarbon production"); see also Sonja Lee, *Battle for Hall Creek*, GREAT FALLS TRIB., June 13, 2004.

firestorm.”²³⁶ However, despite administrative appeal, regional protests, and formation of the Two Medicine Alliance by local residents opposed to drilling in BTM, the Hall Creek drilling plan was again approved by the USFS and BLM in 1991.²³⁷

Executive actions during the Clinton administration then began to turn the tide back in favor of allied conservation and tribal interests. In 1993, Interior Secretary Bruce Babbitt suspended approval of the Hall Creek well and instituted a moratorium on all drilling in BTM. In 1997, the new LCNF Supervisor, Gloria Flora, declared the entire Rocky Mountain District off limits to future drilling.²³⁸ Her decision reversed the directions for LCNF management provided under the 1986 LCNF Plan. The LCNF Plan had made virtually all of LCNF lands, except for wilderness tracts legally barred from development, available for leasing. However, over forty oil and gas leases issued during the early 1980s remain in a legal state of suspension, which tolls their usual expiration after ten years without production.²³⁹ But Flora’s historic decision seems to “clearly have had a sort of catalytic effect” and attracted private foundations and grant funding for local pro-conservation NGOs along the eastern Rocky Mountain Front.²⁴⁰ The Blackfeet have continued to oppose drilling in BTM due to the area’s very high cultural and religious significance. While Longwell restarted the process to obtain a drilling permit, “his chances of success seem slight” today given the Blackfeet’s continued objection to all development and claims that oil drilling will violate their religious and cultural rights.²⁴¹

²³⁶ Lee, *supra* note 235.

²³⁷ *Id.*

²³⁸ Gloria Flora, who was trained as a landscape architect rather than a forester, relied on nonutilitarian criteria in her decision that set an important legal precedent for USFS policy under NMFA. See NIE, *supra* note 2, at 20–21 (citing Rocky Mountain Oil & Gas Ass’n v. U.S. Forest Serv., 12 F. App’x 498, 500 (9th Cir. 2001)). Ms. Flora subsequently resigned in 2000 from her position as Supervisor of the Humboldt-Toiyabe National Forest in Nevada due to violence against USFS employees associated with protests by the “wise use” movement over reductions in commodity extraction and road closures. See *Eco-Terrorism and Lawlessness on the National Forests: Oversight Hearing Before the House Resources Subcomm. on Forests and Forest Health of the H. Comm. on Resources*, 107th Cong. 95–102 (2002) (statement of Gloria Flora, Public Employees for Environmental Responsibility) (describing the forces driving Ms. Flora to resign).

²³⁹ Sax & Keiter (2006), *supra* note 37, at 277.

²⁴⁰ *Id.* at 279.

²⁴¹ *Id.* at 269. Interestingly, Longwell is now an economic development director for the City of Baton Rouge, Louisiana. See Lee, *supra* note 235.

Unfortunately, oil drilling is not the only land use that may conflict with wildlife habitat in LCNF. Use of federal lands by ORVs throughout the West, including northwest Montana, has exploded over the last two decades. While reducing timber harvesting in areas close to GNP and providing stipulations for future oil and gas leases,²⁴² the 1986 LCNF Forest Plan, which remains on the books, and its 1988 Travel Management Plan “essentially allowed ORV and other motorized uses on all roads and trails throughout the forest.”²⁴³ A revised travel plan study for LCNF’s Rocky Mountain District was initiated in 2000. During public review of the proposed plan, ninety-eight percent of the almost 40,000 comments received urged the USFS to maintain traditional foot and horse travel, but heavily restrict or eliminate all ORV use on the BTM area trails.²⁴⁴

A Final Environmental Impact Statement (FEIS) for the Travel Plan was released in October 2007. Its alternative-neutral introduction stated, “[t]he 1988 Travel Plan may no longer provide the types of recreation opportunity desired by the public and may not be compatible with other resources. It is timely to address these concerns before problems cause resource damage or confuse visitors.”²⁴⁵ The FEIS analyzed likely effects of Travel Plan alternatives on cultural and biological resources, including wildlife habitat connectivity and effects on the wolf, grizzly, and lynx.²⁴⁶ In its Final Record of Decision (ROD) for BTM, released and effective March 16, 2009, Forest Supervisor Lesley Thompson, “[a]fter careful consideration of the public comments and the [five] alternatives analyzed in the [FEIS],” issued his decision to implement alternative five with minor modifications.²⁴⁷ While generally restricting all motorized access, including snowmobiling, from the BTM area, the

²⁴² Sax & Keiter (1987), *supra* note 38, at 246.

²⁴³ Sax & Keiter (2006), *supra* note 37, at 280 (quoting a long-time observer “[All-terrain vehicles] run amok in the Badger-Two Medicine area. They are everywhere. Trails are now as wide as Central Avenue”).

²⁴⁴ *Id.*

²⁴⁵ LCNF TRAVEL PLAN FEIS *supra* note 226, at ix (click on “Summary”).

²⁴⁶ *Id.*

²⁴⁷ Letter from Lesley W. Thompson, Forest Supervisor, Lewis & Clark Nat’l Forest, to Travel Management Participant (Mar. 16, 2009), *available at* http://www.fs.fed.us/r1/lewisclark/projects/rmrd_travel_plan_feis/rod-badger-two-med/cover_ltr_btm_rod.pdf (“I realize my decision on travel management is a major change from what has been allowed since 1988 as this decision emphasizes non-motorized use. This decision still provides many recreational opportunities while providing resource protection. I hope you will join me in implementing this new travel plan for the [BTM] area.”).

final ROD allows licensed road vehicle travel either seasonally or year-long, depending on conditions, to travel over 6.6 miles of existing roads, and seasonal travel for unlicensed motorized vehicles on two miles of roads. All roads are located only around the edges of the BTM area, see Map 4.

The recently selected alternative five for the new LCNF Rocky Mountain District BTM Travel Management Plan was specifically developed “in response to consultation with the Blackfeet tribal government and to address cultural issues in the [BTM] area.”²⁴⁸ This alternative acknowledges that LCNF and the Blackfeet Indian Reservation share a common boundary in the BTM area, the Blackfeet retain specific reserved rights in accordance with the Blackfeet Treaty, and much of BTM has been determined eligible for listing in the National Register of Historic Places as a TCD. Additionally, alternative five restricts motorized wheeled vehicles from all roads within the BTM area, including all existing roads, with the exception of campground and trailhead access parking lots.²⁴⁹ However, it does provide for “a limited amount of motorized recreation on a smaller system of motorized trails located in the southern two-thirds of the [LCNF’s Rocky Mountain Ranger District].”²⁵⁰ The final BTM Travel Plan was approved by the USFWS in December 2008 and by the Blackfeet Tribal Historic Preservation Office on March 5, 2009.²⁵¹

B. Blackfeet Tribal Management for Habitat Conservation

The Blackfeet’s bear and wolf management plans acknowledge that these species have “co-existed with the Blackfeet people throughout history.”²⁵² But, both plans also identify the need for current species management to protect human safety and property. Both plans consider a range of management options for individual wildlife behavior considered a nuisance, threatening, or aggressive.

²⁴⁸ LCNF TRAVEL PLAN FEIS, *supra* note 226, at 21 (click on “Chapter II: Alternatives”); LCNF TRAVEL PLAN ROD FOR BTM, *supra* note 226, at 24.

²⁴⁹ LCNF TRAVEL PLAN FEIS, *supra* note 226, at 21 (click on “Chapter II: Alternatives”).

²⁵⁰ *Id.*

²⁵¹ See LCNF TRAVEL PLAN ROD FOR BTM, *supra* note 226 (click on “Appendix D—U.S. Fish and Wildlife Service—Letter of Concurrence” and “Appendix E—Blackfeet Tribal Historic Preservation Office—Letter of Concurrence”).

²⁵² BLACKFEET DRAFT BEAR PLAN, *supra* note 181, at 3; BLACKFEET WOLF PLAN, *supra* note 181, at 3.

Despite their similarities, the language of the plans emphasizes a closer tribal relationship to the bear than the wolf. While the Blackfeet's Bear Plan finds that bears, both grizzly and black, "play a significant role in their culture, traditions, and religion,"²⁵³ the Blackfeet's Wolf Plan merely observes that wolves "like many wildlife species, [are] entwined in Blackfeet culture, tradition, and religion."²⁵⁴ Moreover, the Bear Plan includes a section and survey of tribal culture and clan traditions related to the bear, conducted by current Director of the BFWD Gayle Skunk Cap, Jr. By contrast, their current Wolf Plan does not include a tribal culture and traditions section or related survey, even though one of the stated objectives of the Wolf Plan is to "[i]ncorporate Blackfeet culture and traditions into the management of wolves on the reservation."²⁵⁵

Differences in tribal attitudes toward the bear and the wolf are also supported by statements made by BFWD wildlife biologist Dan Carney. In a telephone interview, Carney noted that there was greater overall tribal acceptance of the presence of grizzly bears than wolves on the Reservation. He stated that grizzlies, as omnivores, pose less of a threat to tribal livestock than carnivorous wolves. However, Carney reported that both species are thriving east of GNP. Three wolf packs, including the ten-member Livermore Pack, have established territories within the Reservation. Grizzlies are roaming "all around" as well as east and southeast of the Reservation.²⁵⁶ Carney noted that while they are more socially accepted, grizzlies actually pose a greater physical danger to humans than wolves, which rarely attack. His comments track those of Director Skunk Cap, who noted in the Bear Plan that his survey "findings indicate that the Blackfeet have always regarded bears with a balance of respect and fear."²⁵⁷

In response to tribal survey comments about "possible bad luck and taboos for improper handling or killing of bears," the Blackfeet Bear Plan incorporates management activities that are deemed sensitive to Blackfeet traditions²⁵⁸ and consistent with the ESA. It contains capturing and handling protocol for relocation within the Reservation.

²⁵³ BLACKFEET DRAFT BEAR PLAN, *supra* note 181, at 3.

²⁵⁴ BLACKFEET WOLF PLAN, *supra* note 181, at 3.

²⁵⁵ *Id.*

²⁵⁶ Carney, *supra* note 166.

²⁵⁷ BLACKFEET DRAFT BEAR PLAN, *supra* note 181, at 4.

²⁵⁸ *Id.*

The Plan states that “[b]ecause of the cultural relationship between the Blackfeet people and bears, and for the sake of professional ethics, all bears and bear handling situations will be treated with the utmost respect and dignity at all times.”²⁵⁹ Pertaining to habitat, the Bear Plan states:

The tribal wildlife biologist or BFWD director will review and comment on all activities of the Tribe or Bureau of Indian Affairs that require tribal permits, environmental assessments, or similar documentation to ensure that conservation of bear habitat is considered in the process. Mitigation will be required so that impacts on bears and/or their habitat from such actions will be minimal.²⁶⁰

The Nature Conservancy has also helped form a tribal land trust. The Blackfeet Trust, which is the first of its kind in the nation, has helped protect grizzly bear habitat in and around the Blackfeet Indian Reservation through conservation easements.²⁶¹

Due in part to the different legal status of the grizzly and wolf under the ESA, the Tribe’s management policy, created in anticipation of delisting, states that “[w]olf hunting may be considered a management option the same as with other big game on the reservation [and] hunting will be regulated with quotas through the Blackfeet Fish and Wildlife Code.”²⁶² Similar to Montana’s Wolf Management Plan, the Blackfeet Wolf Plan states that wolves will be managed:

[N]either toward a maximum nor a minimum number of wolves on the reservation. Management direction will be to assure the long term presence of a wolf population and minimize the potential of conflict with people and resolve that conflict when it occurs. Wolf population management strategies will depend more on wolf behavior and amount of conflict with livestock and people.²⁶³

The Blackfeet Wolf Plan also includes the “possible consideration” in wolf management of the wolves’ effect on wild ungulates, which the Tribe manages in order to provide “important hunting opportunities to tribal members,” and as a revenue source for the

²⁵⁹ *Id.* at 10.

²⁶⁰ *Id.* at 11.

²⁶¹ The Nature Conservancy, How We Work: Conservation Methods, www.nature.org/aboutus/howwework/conservationmethods/privatelands/conservationeasements/about/acrossland.html (last visited Jan. 16, 2010).

²⁶² BLACKFEET WOLF PLAN, *supra* note 181, at 4.

²⁶³ *Id.*

Tribe, which sells limited trophy hunting permits.²⁶⁴ The Blackfoot Wolf Plan also states that “[i]f evidence shows wolves are having a severe impact on ungulate herds and reducing them to unacceptable levels, the wolf harvest quota may be adjusted within reason to reduce the number of wolves accordingly.”²⁶⁵ Regulations for hunting, illegal killing, and harassing of wolves are included in the Blackfoot Fish and Wildlife Code, which is enforced by tribal game wardens. While neither the Tribe nor the BFWD assumes responsibility for livestock depredation, the Wolf Plan states that the BFWD will work to acquire reimbursement for confirmed wolf losses through agreements with private organizations or other agencies.²⁶⁶ The Tribe recently entered a cooperative agreement to get such reimbursement with the Montana Livestock Loss Reduction and Mitigation Board.²⁶⁷ Finally, the Blackfoot Wolf Plan is consistent with a recent public statement by Director Skunk Cap, who is quoted as saying: “I’m not necessarily glad they’re back, but if we can keep them in balance, that will be fine.”²⁶⁸ Tribal efforts to date reflect an earnest attempt at striking this balance.

C. Private Property Management for Habitation Conservation

Current pressures on land use and management of privately owned lands varies markedly east and west of GNP and the Continental Divide. While ranching remains the dominant land use along the Rocky Mountain front east of GNP, residential development of former rural, agricultural, and timber lands has increased rapidly west of GNP, particularly in Flathead County. As stated by John Vore, a MT FWP wildlife biologist based in Kalispell, “oil and gas development is the biggest threat to wildlife habitat in eastern Montana, and residential development is the biggest threat in western

²⁶⁴ *Id.*

²⁶⁵ *Id.* The NPS’s excellent quarterly publication, *Yellowstone Science*, has published many articles on the relationship between wolf reintroduction and ungulate management in the Northern Range of YNP. See generally, National Park Service, *Yellowstone Science Topics*, <http://www.nps.gov/yell/planyourvisit/yellsci-subject.htm> (last visited Jan. 16, 2010).

²⁶⁶ BLACKFEET WOLF PLAN, *supra* note 181, at 6.

²⁶⁷ Carney, *supra* note 166; see also Karl Puckett, *New State Agency Releases Payments for Wolf Kills*, GREAT FALLS TRIB., Oct. 31, 2008.

²⁶⁸ Karl Puckett, *Wolf is Officially Off the Endangered Species List Today*, GREAT FALLS TRIB., Mar. 28, 2008.

Montana.”²⁶⁹ This section focuses on issues related to wildlife-livestock conflicts on private lands, the likely effect of Montana’s new statutes and regulations regarding livestock protection and annual wolf harvest on wildlife habitat conservation, and the cumulative effects of property subdivision and development on the rapidly changing wildlife-exurban interface in Flathead County.

1. Current and Historic Livestock-Wildlife Conflicts

While recognized by some environmentalists, such as Defenders of Wildlife and Nature Conservancy, and minimized by others, a tension clearly exists between traditional ranching and livestock depredation, particularly by the wolf, and to a lesser extent by the grizzly. It cannot be denied that this tension is a source of heated and passionate social debate in rural communities along the Rocky Mountain front whose economic livelihood historically depended largely on ranching-related activities.²⁷⁰ As discussed *supra* in Part II, the wolf was extirpated across the western United States and Montana in the

²⁶⁹ Vore, *supra* note 218.

²⁷⁰ There has been a major shift in rural western economies from a high level of dependence on commodity extraction to a more amenity-dominated economic base that depends on maintaining environmental quality and recreational opportunities rather than the export of timber, forage, water, and mineral resources from the public lands. THOMAS MICHAEL POWER, *LOST LANDSCAPES AND FAILED ECONOMIES: THE SEARCH FOR A VALUE OF PLACE* (1996) (providing a general outline of this movement); *see also* National Parks Conservation Association, Background Reports, http://www.npca.org/northern-rockies/gateways_yellowstone/ (providing links to four commissioned studies of the Yellowstone region’s economy that demonstrate this shift for the Greater Yellowstone Ecosystem) (last visited Jan. 20, 2010); DUANE, *supra* note 210 (describing this shift in the Sierra Nevada ecosystem); William C. Stewart, *Economic Assessment of the Ecosystem*, in 3 *SIERRA NEVADA ECOSYSTEM PROJECT: FINAL REPORT TO CONGRESS* (1966) (ch. 23), available at http://ceres.ca.gov/snep/pubs/web/PDF/VIII_C23.PDF. However, the differences between the rapidly growing Flathead County on the western side of GNP, and the slower growing eastern side of GNP are important to understanding the NCDE region’s economic, social, cultural, and political dynamics. Pressures on the western side of GNP are driven primarily by population growth and development of private land, while pressures on the eastern side of GNP are dominated by public land and resource management policy related to commodity extraction. Moreover, a high level of dependence on amenity migrants who rely on investment or retirement income has created a new set of problems for some communities given the recent economic crisis. *See, e.g.*, William Yardley, *Economic Slump Dashes the Oregon Dreams of Californians*, N.Y. TIMES, June 17, 2009, at A20 (demonstrating how rural and exurban development in the west has created economic dependence by local communities upon continuing such growth). Areas that have become dependent on rapid growth have also become dependent on construction employment to absorb the lost employment in the commodity extraction sector, so those areas are also vulnerable to the collapse of the housing sector and high gasoline prices. *See id.*

early 1900s. Direct conflict between wolves and humans primarily arose from the perceived and actual threat of livestock depredation. This perception, which continues today, is influenced by embedded social and cultural values that usually evolve slowly and often are not easily changed.²⁷¹ As noted in Montana's Wolf Management Plan "[t]he social, cultural, and aesthetic values people assign to the gray wolf today grow out of a long and colorful history of interactions between wolves and humans."²⁷²

Based on a review of many public comments received during its state-level EIS for proposed alternatives for in-state wolf conservation and management, the MT FWP stated:

When discussing social and cultural implications associated with wolves, the primary affected environment is the values of people living in the presence of a recovered wolf population. A simplification about what drives the differences in attitudes towards wolves might be summed up in a few words: the perceived chance of personal benefit or loss resulting from the presence of wolves. Those who perceive they will benefit (either directly or vicariously) tend to favor wolf presence, and those who perceive a threat of personal loss oppose presence.²⁷³

The Montana Gray Wolf Conservation and Management Plan EIS reviews data available on in-state livestock depredation. Noting that while the most detailed information available is specific to the Greater Yellowstone area, due to the in-depth analyses required for the reintroduction of wolves to Yellowstone Park, the EIS also includes information available from northwestern Montana where wolves have been present since the mid-1980s. The MT FWP Wolf Plan finds that one concern about wolf recovery is the potential for wolves to stress, injure, or kill livestock, primarily cattle and sheep. It notes that direct financial losses may result from wolf depredation. Indirect losses may also accumulate due to increased management activities or changes to

²⁷¹ See generally JOSEPH CAMPBELL, *PATHWAYS TO BLISS: MYTHOLOGY AND PERSONAL TRANSFORMATION* 47–62 (2004). Also, for excellent illustrations of how important cultural values and history are in addressing public land and resource management conflicts in the west, see Sarah F. Trainor, *Finding Common Ground: Moral Values and Cultural Identity in Early Conflict Over the Grand Staircase-Escalante National Monument*, 28 J. LAND RESOURCES & ENVTL. L. 331 (2008), and ELISABETH M. HAMIN, *MOJAVE LANDS: INTERPRETIVE PLANNING AND THE NATIONAL PRESERVE* (2003).

²⁷² MONT. FISH, WILDLIFE & PARKS, *MONTANA'S WOLF CONSERVATION AND MANAGEMENT PLAN: FINAL ENVIRONMENTAL IMPACT STATEMENT, CHAPTER 2*, at 26 (2003), available at <http://fwp.mt.gov/content/getitem.aspx?id=31227>.

²⁷³ *Id.*

agricultural operations. All losses accrue to individual ranchers and may be significant to them.²⁷⁴ The MT FWP Wolf Plan includes data from Montana Wildlife Services investigations and records of confirmed wolf kills of livestock between 1997 and 2002 on private land. In-state cattle depredations confirmed as wolf-caused include twenty in 1999, fourteen in 2000 and twelve in 2001; confirmed sheep depredations over the same three years were twenty-five, seven, and fifty, respectively. The MT FWP Wolf Plan's EIS finds that "[w]olves don't necessarily depredate on livestock whenever livestock are encountered, but it is evident that wolf packs that regularly encounter livestock will depredate sporadically."²⁷⁵ It notes that field observations indicate that even when a wolf or pack does not kill livestock, livestock can become distressed by the presence of wolves in the area and sometimes injure themselves on fence lines or farm equipment. Finally, it observes that overall livestock losses appear related to the availability of wild prey, increasing pack size, and the learned behavior of individual wolves.²⁷⁶

2. *Effect of Montana's Wildlife Laws and Regulations*

Montana's Gray Wolf Conservation and Management Plan, as well as state laws and MT FWP regulations, have been deemed consistent with requirements of the ESA. MT FWP was designated by the USFWS as the lead agency in charge of managing in-state wolf populations, subject to federal regulations, for the last five years.²⁷⁷ As discussed *supra* in Part IV, state regulations include requirements for any lethal control of agency-verified "problem" wolves. Effective upon federal delisting, the wolf will be listed under state law as a "species in need of management." MT FWP has already promulgated management regulations for both lethal and nonlethal controls, and

²⁷⁴ *Id.* at 36–37.

²⁷⁵ *Id.* at 36–37 (citing Ed Bangs & John Shivik, *Managing Wolf Conflict with Livestock in the Northwestern United States*, CARNIVORE DAMAGE PREVENTION NEWS (Nat'l Wildlife Res. Center, U.S. Dep't of Agric.), July 2001, at 2–5).

²⁷⁶ *Id.* at 37–41. Also, from 2007 to 2008, confirmed wildlife depredation of cattle barely increased, from 75 to 77, but confirmed sheep depredation increased from 27 to 111. Compare MONT. FISH, WILDLIFE & PARKS, QUICK FACTS ABOUT THE GRAY WOLF CONSERVATION & MANAGEMENT 2008 ANNUAL REPORT (2009), available at <http://fwpiis.mt.gov/content/getItem.aspx?id=37257>, with MONT. FISH, WILDLIFE & PARKS, QUICK FACTS ABOUT THE GRAY WOLF CONSERVATION & MANAGEMENT 2007 ANNUAL REPORT (2008), available at <http://fwpiis.mt.gov/content/getItem.aspx?id=32283>.

²⁷⁷ See discussion *supra* Part IV.

has established a statewide framework for future quota-based public wolf harvests within defined wolf management units and subunits. Hunters will be required to purchase a wolf license and report all successful kills. Based on monitoring of hunting season harvest data, MT FWP is authorized to close the hunting season as necessary. It has established a limited fall and winter hunting season controlled by standard fair chase rules and a total bag limit of one wolf per hunter per year.²⁷⁸

The MT FWP Wolf Plan and its implementing regulations provide for adaptive management of wolf populations within the three statewide management units, as well as the North Fork Subunit adjacent to GNP (see Map 5). The North Fork Subunit was designated by MT FWP to allow for tailored management of this core habitat area along the North Fork of the Flathead River. Due to its proximity to GNP and direct connection with high-value wolf habitat in Canada,²⁷⁹ long-term persistence of North Fork packs and their ability to successfully disperse will be considered by MT FWP in its management of this Subunit. Such considerations illustrate specific ways that MT FWP will implement its management objective of maintaining regional wolf habitat connectivity.²⁸⁰ State law also provides MT FWP with the authority to create other subunits as necessary under adaptive management. This discretion allows MT FWP to respond quickly to unpredicted population changes as wolves respond to natural variables and human pressures, including lethal control and quota-based wolf harvest.

State wolf management programs, discussed above and in Part IV, have the potential to increase available wolf habitat by providing incentives to landowners and ranchers to allow wolves to inhabit and move more freely across private properties. Permitted control options, supervised by the state, also provide ranchers with a needed level of certainty and assurance that they can respond to wolf-livestock problems as they develop. The state's annual wolf harvest management option, although recently disparaged by well-versed critics,²⁸¹ has been carefully considered and will be supervised by MT

²⁷⁸ McDonald, *supra* note 185, at 12.

²⁷⁹ *Id.* (stating GNP provides one of the most "secure areas for wolf packs to persist on the landscape and function[s] as a source of dispersing wolves").

²⁸⁰ *Id.*

²⁸¹ See Verlyn Klinkenborg, Editorial, *Science, Mythology, Hatred, and the Fate of the Gray Wolf*, N.Y. TIMES, Apr. 13, 2009, at A20 (advocating for federal delisting of wolves without state-sponsored hunting).

FWP, a qualified and professional state fish and wildlife agency with ample experience in administering and enforcing state hunting regulations. MT FWP is also likely correct in its observation that an annual wolf harvest is one way to increase the base of stakeholders committed to long-term conservation of wolf populations. A limited seasonal opportunity to hunt wolves may provide the necessary incentive for affected landowners to allow wolves to roam on private lands, given the potential for personal and communal profits to be gained from recreational hunting. Landowners with the ability to grant access to their lands for state-restricted, quota-based seasonal hunting may find it worthwhile to allow wolves to range across their properties, and thus the greater Montana landscape.²⁸²

Values-based philosophical objections to wolf hunting may still remain, however, even if allowing wolf hunting would improve the alignment of economic interests for private landowners. Continued social conflict over wolf management under the Montana Plan is therefore likely, even if it may be adequate to ensure continued wolf viability in accordance with the recovery plan adopted by the USFWS. As Martin Nie stated:

[W]olf recovery and management is a value- and interest-based political conflict transcending science, biology, and technical approaches to problem solving. In many respects, the debate is quite similar to that of other value-laden political disputes, such as abortion and the death penalty. Sometimes, as with the case of livestock depredation problems, differences may stem more from economic interests than from fundamental value differences. It is constructive to frame the debate in terms of values and interests, partly because many future debates over wolves will have very little to do with science and technical wildlife management. Instead,

²⁸² The importance of gaining wider social acceptance for ecosystem-based management efforts is widely recognized, and that recognition was one of the drivers of the move toward collaborative approaches in the 1990s. *See generally* JULIA M. WONDOLLECK & STEVEN L. YAFFEE, MAKING COLLABORATION WORK: LESSONS FROM INNOVATION IN NATURAL RESOURCE MANAGEMENT (2000) (describing the benefits and challenges of collaboration in resource management); CESTERO, *supra* note 14 (offering a balanced overview of the debate about when and how incorporating collaborative efforts into agency decision making can be helpful). *But see* LAYZER, *supra* note 11 (indicating inherent difficulties with such a collaborative approach). Also, for an illustration of the importance of garnering social acceptance of conservation planning goals in rural western conservation planning efforts rather than relying only on scientific assessments to determine such goals, see Timothy P. Duane, *Good Politics Before Good Science? The Path to Successful Public Conservation Planning*, in LASTING LANDSCAPES: REFLECTIONS ON THE ROLE OF CONSERVATION SCIENCE IN LAND USE PLANNING 80, 80 (2007).

many of them will revolve around competing human values and different constructions of the natural world.²⁸³

Our studies and collective ecological understanding have increased since the early 1900s. It is now widely recognized that predators such as wolves play a key functional role in maintaining sustainable ungulate populations and healthy ecosystems.²⁸⁴ This knowledge has and will continue to be accounted for within the MT FWP adaptive wolf management policy. State educational programs for landowners and hunters are likely the best way to distribute this ecological information in a user-friendly manner. NGOs could also work with the MT FWP or independently to raise public awareness on the positive effects of wolves in balancing ecosystem functions, processes, and feedback loops. In sum, like the Blackfeet's Wolf Plan, Montana's Wolf Plan provides a detailed and comprehensive framework for in-state wolf recovery, regional population persistence, and habitat conservation. The state has accounted for social and cultural values of Montanans and aims to balance environmental concerns with social and economic interests.²⁸⁵ Though its implementation remains untested pending federal delisting,

²⁸³ Martin Nie, *State Wildlife Governance and Carnivore Conservation*, in *PEOPLE AND PREDATORS: FROM CONFLICT TO COEXISTENCE* 197, 198–99 (Nina Fascione et al. eds., 2004).

²⁸⁴ See generally Robert B. Keiter, *Biodiversity Conservation and the Intermixed Ownership Problem: From Nature Reserves to Collaborative Processes*, 38 *IDAHO L. REV.* 301, 305 (2002) (“Top predators are key ecological components that exert an important cascading influence on the surrounding ecosystem: at the pinnacle of the food chain, they serve as umbrella species, effectively regulating abundance among other species further down the chain, which in turn can have major ecological implications for the surrounding landscape. Thus, protecting and restoring these top predators or umbrella species is the key to minimizing extinctions and promoting ecological integrity.”).

²⁸⁵ Nie, *supra* note 283, at 213 (“[MT FWP Wolf Plan] is widely considered the most comprehensive and representative plan in the region. It is founded on a general appreciation of the significant sociopolitical dimensions of wolf management.”). Indeed, Nie and others praise Montana's approach in comparison to that of other states dealing with wolf management, namely Alaska, Idaho, Wyoming, and Idaho. See *id.*; see also NINA FASCIONE ET AL., *DEFENDERS OF WILDLIFE, PLACES FOR WOLVES: A BLUEPRINT FOR RESTORATION AND RECOVERY IN THE LOWER 48 STATES* 16 (2006) (“[O]nly Montana has a plan that meets long-term wolf conservation objectives” in the Northern Rockies, while “Idaho and Wyoming remain hostile toward wolves.”). The cultural conflicts and political dimensions of wolf management vary by state, so it is not surprising that we see very different approaches to wolf management in the six states described in Nie's work. See generally MARTIN A. NIE, *BEYOND WOLVES: THE POLITICS OF WOLF RECOVERY AND MANAGEMENT* (2003) (providing additional comparisons of Alaska, Minnesota, and Wisconsin wolf management regimes).

Montana's Wolf Plan and implementing MT FWP regulations appear capable of balancing these important state interests.

3. Effect of State Livestock Loss Reduction and Mitigation Program

To help mitigate tensions that arise from livestock depredation, Montana recently enacted a state program aimed at addressing financial issues related to wildlife-related livestock losses. Montana's Livestock Loss Reduction and Mitigation Program is modeled after a similar program independently and successfully run by the Defenders of Wildlife in the Greater Yellowstone Area to compensate ranchers for livestock kills by reintroduced wolves.²⁸⁶ In 2007, the Montana Legislature created the Livestock Loss Reduction and Mitigation Board and established a livestock loss compensation trust.²⁸⁷ Following a political debate, the legislature housed the program

²⁸⁶ The Yellowstone program represented an innovative effort to address the distributive effects of wolf reintroduction. By compensating ranchers for wolf predation of their livestock, those ranchers would no longer bear the economic burden of wolf reintroduction while the broader Yellowstone regional economy and specific tour operators, benefited through increased tourism to see the wolves in the region. Ranchers might still have philosophical objections to wolves in the landscape, but they could no longer claim they bore economic burdens imposed by outsiders. The Wolf Compensation Fund was established in 1987 by Defenders of Wildlife's Northern Rockies representative Hank Fischer, who worked in that position from 1977–2002. See HANK FISCHER, *WOLF WARS* viii, 101–03 (1995). That Fund, now called the Bailey Wildlife Foundation Wolf Compensation Trust, paid over \$1 million in Montana, Idaho, and Wyoming from 1987–2008: \$532,473 in the Greater Yellowstone Ecosystem; \$150,928 in Northwest Montana; and \$370,012 in Central Idaho for wolf depredation. It also pays compensation in Utah and the Southwest for Mexican wolf recovery efforts. Payments in Northwest Montana covered losses of 217 cattle, 137 sheep, and 12 other animals. See Defenders of Wildlife, *Wolf Compensation Payments Statistics*, http://www.defenders.org/resources/publications/programs_and_policy/wildlife_conservation/solutions/full_list_of_payments_in_the_northern_rockies_and_southwest.pdf (last visited Jan. 30, 2010). Some ranchers have argued that the compensation does not adequately address the total economic impact of wolves on their livestock, for example, the costs incurred to maintain greater herd monitoring, as well as those that cannot be sufficiently documented as wolf-related losses, such as the greater stress on the animals. Defenders of Wildlife responded to these concerns by establishing the Bailey Wildlife Foundation Proactive Carnivore Compensation Fund “to cost-share with livestock producers on projects to prevent conflicts between wolves and livestock.” FASCIONE ET AL., *supra* note 285, at 4. The Fund invested roughly \$250,000 on more than seventy projects throughout the United States from 1999–2006, including the Northern Rockies, the Southwest and the Great Lakes. *Id.*

²⁸⁷ Karl Puckett, *New State Agency Releases Payments for Wolf Kills*, GREAT FALLS TRIB., Oct. 31, 2008.

within the Department of Livestock instead of the MT FWP.²⁸⁸ In 2008, Montana allocated \$30,000 from its annual budget to fund the program, which also received an initial \$50,000 grant from the Defenders of Wildlife. Enabling legislation allows tax-deductible donations from private donors, although contributions to date have been few.²⁸⁹ The seven-member board approved and disbursed \$102,995 in compensation payments for confirmed and probable wolf-caused livestock kills, as inspected by state-approved federal, state, or tribal wildlife professionals between May 12, 2008, and May 8, 2009.²⁹⁰ Legislation included in the Omnibus Public Land Management Act of 2009,²⁹¹ sponsored by Senator Tester of Montana and Wyoming representatives, also provides federal funds to state livestock loss programs. This Act directs the Secretary of the Interior to “establish a [five]-year demonstration program to provide grants to States and Indian Tribes . . . to assist livestock producers in undertaking proactive, non-lethal activities to reduce the risk of livestock loss due to predation by wolves,” and “to compensate livestock producers for livestock losses due to such predation.”²⁹² Under “eligible land,” the Act specifically states that activities and losses “may occur on [f]ederal, [s]tate, or private land, or land owned by, or held in trust for the benefit of, an Indian tribe.”²⁹³ Established as a federal cost-sharing program, that Act caps federal assistance at fifty percent of the total cost of the activity,²⁹⁴ with authorized appropriations of \$1,000,000 for 2009 and each fiscal year

²⁸⁸ Although called for in the state’s wolf management plan, the Board is not involved in wolf management decisions. The Board is only responsible for reviewing depredation claims and authorizing disbursement of livestock loss funds. *See* Press Release, Mont. Dep’t of Livestock, New Livestock Loss Reduction & Mitigation Board Meets (Feb. 13, 2008), available at <http://mt.gov/liv/news/2008/20080213.asp>.

²⁸⁹ Telephone Interview with Steve Merritt, Public Information Officer, Mont. Dep’t of Livestock, in Helena, Mont. (Mar. 28, 2009).

²⁹⁰ E-mail from George Edwards, Livestock Loss Mitigation Coordinator, Mont. Dep’t of Livestock (June 10, 2009) (on file with authors). In his correspondence with the authors, Edwards noted that this figure likely represents only a small portion of the overall livestock losses due to wolf depredation because the Board only pays claims for losses investigated and confirmed by the USDA Wildlife Services. Further, he stated that due to this program’s recent inception, not all livestock owners knew they could submit claims.

²⁹¹ Omnibus Public Land Management Act of 2009, Pub. L. No. 111-11, 123 Stat. 991 (2009).

²⁹² *Id.* § 6202(a).

²⁹³ *Id.* § 6202(e).

²⁹⁴ *Id.* § 6202(f).

thereafter.²⁹⁵ Interestingly, authors observe that the broad definition of Eligible Land, as defined by section 6202(e) of the Omnibus Public Land Management Act of 2009 and excerpted above indirectly acknowledges the need for ecosystem-based management for wide-ranging species such as the wolf, and that federal, state, tribal, or private land ownership boundaries do not generally impede species movement across the landscape. Finally, the Nature Conservancy has purchased conservation easements along the Rocky Mountain Front, helping financially to enable ranchers to continue their traditional way of life, while also protecting key low-elevation wildlife habitat. These easements also protect lands from future subdivision.²⁹⁶

4. *Effect of Flathead County Growth Policies and Land Use Regulations*

While ranching-related issues dominate the social, political, and economic landscape east of GNP and the Continental Divide, the primary threat to wildlife habitat in the Flathead Valley is rapid population growth and associated land development.²⁹⁷ While Flathead County has taken preliminary steps to try to address these issues, wildlife habitat conservation is not very high on the planning commission's current agenda.²⁹⁸ While its new Growth Policy

²⁹⁵ *Id.* § 6203.

²⁹⁶ The Nature Conservancy, How We Work: Conservation Methods, Conservation Easements, <http://www.nature.org/aboutus/howwework/conservationmethods/private-lands/conservationeasements/about/acrossland.html> (last visited Jan. 31, 2010); see generally ANTHONY ANELLA & JOHN B. WRIGHT, SAVING THE RANCH: CONSERVATION EASEMENT DESIGN IN THE AMERICAN WEST (2004) (providing an excellent overview of efforts to protect "working landscapes" on ranchlands in the west); RANDALL ARENDT ET AL., RURAL BY DESIGN: MAINTAINING SMALL TOWN CHARACTER (1994) (providing a general overview of strategies for conserving rural landscapes in the face of suburban and exurban subdivision pressures).

²⁹⁷ Vore, *supra* note 218 (also noting that the only wildlife mitigation he has seen was in relation to fence height); see also Hogle *supra* note 215 (stating that Flathead County "is generally a conservative community that is not very sensitive to wildlife issues"). Once again, this is not surprising given the social and cultural history of the region and the hypotheses of the growth coalition theory.

²⁹⁸ Vore, *supra* note 218; Sax & Keiter (2006), *supra* note 37, at 158–65 (offering an excellent discussion of the contentious history of attempts to adopt stricter land use regulation in Flathead County). The political battles parallel the late 1970s state of similar attempts in Nevada County, California. See DUANE, *supra* note 210 (tracing the history of political battles over land use and growth management from the mid-1960s through the late 1990s). As coauthor Timothy P. Duane notes, the balance of use and exchange values shifted over the subsequent two decades resulting in a rapid shift in political power in the mid-1990s as environmentally oriented leaders managed to take control of the County

includes a wildlife habitat protection goal, implementing policies to discourage “unmitigated” development in areas identified as critical wildlife habitat are broad, subjective, and undefined. Furthermore, several of the Growth Policy’s primary objectives, including “[p]reserv[ing] the rights of [p]rivate [p]roperty [o]wners,” may also conflict with other vaguely worded objectives, such as “[p]roperly [m]anag[ing] and [p]rotecting the [n]atural and [h]uman [e]nvironment.”²⁹⁹ The Growth Policy does not establish ways to objectively measure the effects of development on wildlife habitat or attempt to prioritize potentially competing objectives. For example, in its influence on actual projects, one local wildlife biologist noted that the Growth Policy is “anemic and ignored.”³⁰⁰

Another problem currently impeding thoughtful land use and conservation planning in Flathead County is that much of the county remains unzoned.³⁰¹ Areas which have been zoned generally surround the existing cities of Kalispell, Columbia Falls, and Whitefish (see Map 1). According to one county planner, zoned areas are usually already intensively used and have existing infrastructure.³⁰² While subdivision regulations apply across the county, careful planning for wildlife habitat conservation within the major subdivision review process, where most effects on the natural environment occur, is still limited.³⁰³ For example, during major subdivision review, an environmental assessment required by state law is conducted to evaluate development impacts.³⁰⁴ The County

Board of Supervisors. However, that control was short lived as voters reacted strongly against an effort to adopt stricter land use controls to conserve biological diversity and habitat values a few years later. See Duane, *supra* note 282 (demonstrating the importance of addressing social and cultural values explicitly when pursuing conservation planning).

²⁹⁹ FLATHEAD COUNTY GROWTH POLICY, *supra* note 164, at 3 (including under the plan’s property rights protection objective the observation that “[a] large number of meeting attendees cited protection of private property rights as a major concern”). As noted above, this is consistent with both growth coalition theory and Duane’s studies in the Sierra Nevada, see DUANE, *supra* note 210, and Duane, *supra* note 282, for a brief summary of the evolution of land use regulation and politics in the Sierra Nevada.

³⁰⁰ Vore, *supra* note 218.

³⁰¹ *Id.* (noting that in Flathead County, to “zone” is a four-letter word).

³⁰² Hogle, *supra* note 215.

³⁰³ *Id.*

³⁰⁴ See generally Montana Subdivision and Platting Act, Mont. Code Ann. §§ 76-3-103- 76-3-616 (2009). Under this Act, a “subdivision” is defined as “land so divided that it creates one or more parcels containing less than 160 acres” and a “minor subdivision” is defined as “a subdivision that creates five or fewer lots from a tract of record.” *Id.* § 76-3-103. The Act states that environmental assessments, “when required,” must be

Planning and Zoning Office consults with one of four local MT FWP wildlife biologists to review independently the likely effects of proposals on wildlife, including new roadways, lots, house envelopes, and other residential infrastructure. The county is most proactive in suggesting ways to limit effects on the natural environment in the preapplication process.³⁰⁵ Residential clustering is recommended by the Subdivision Regulations and Planning Office's Citizen Guide to

accompanied by the subdivision application and include a description of "wildlife use within the area of the proposed subdivision" and a summary of "probable impacts." *Id.* § 76-3-603. However, the Act was amended in 2009 to provide several exemptions for specific types of subdivisions from the preparation of an environment assessment. *Id.* § 76-3-504(b). Statutory exemptions from the preparation of an environment assessment apply to: the first minor subdivision of a tract of record pursuant to section 76-3-609, and a subdivision located within an incorporated city or town where the governing body has adopted a growth policy and subject to zoning pursuant to section 76-3-616. Further, under section 76-3-509, a local governing body that has adopted a growth policy may elect to exempt subdivisions approved under "cluster development" regulations from an environment assessment. "Cluster development" is defined in section 76-3-103 as "a subdivision with lots clustered in a group of five or more lots that is designed to concentrate building sites on smaller lots . . . , while allowing other lands to remain undeveloped." Finally, for subdivisions to which the requirement of an environmental assessment applies, the Act sets forth criteria for local government review, including written findings of fact that weigh "primary criteria," which include "the natural environment, wildlife and wildlife habitat," and allows the local governing body to require the applicants to "reasonably minimize potentially significant adverse impacts identified." *Id.* § 76-3-608. Thus, on its face, the statute appears to give local planning bodies wide latitude when reviewing subdivisions and related environment assessments. However, in reviewing the County's approval of a major subdivision, the court found that the County acted unlawfully when it approved a preliminary plat that failed to comply with the requirements of section 76-3-603; thus requiring reversal of its plat approval. *See Citizens for Responsible Dev. v. Board of County Comm'rs of Sanders County*, 208 P.3d 876, 883 (Mont. 2009). Furthermore, the court found that the County violated the procedural requirements of the Act by failing to exercise its discretion and make a baseline determination regarding whether the application and associated contained sufficient information for review. *Id.* at 880. While not applied directly to specific wildlife requirements, the court's decision could extend to the sufficiency of such review. Further, in the opening lines of the opinion, the court discusses favorably "the idyllic setting [of the proposed subdivision] on the banks of the Clark River near the Idaho border. It possesses many positive qualities which are characteristic of many small, rural communities in the Treasure State." *Id.* at 878.

³⁰⁵ Hogle, *supra* note 215 ("[S]ome developers take [staff] suggestions to heart while others do not."). Additionally, Hogle stated that park land dedication provisions can be used for conserving sensitive wildlife habitat, but Montana Fish, Wildlife & Parks biologist Vore later noted that these conserved areas, if established, are too dispersed and small to provide any significant habitat to most species. Vore, *supra* note 218 (stating that if such lands are conserved "[i]t's five acres here, five acres there with no real connectivity," and that "you might find an occasional white-tailed deer, but you are not going to find a grizzly using those little areas").

Major Subdivisions in Flathead County.³⁰⁶ But, in practice, it is rarely used to mitigate the effects of development on sensitive wildlife habitat.³⁰⁷ Once the proposal goes before the nine-member Planning Board for public hearing, “significant changes are not made.”³⁰⁸ After public hearing, the Planning Board recommends the subdivision proposal to the elected Planning Commission for a final stamp of approval.³⁰⁹

In sum, the outlook for wildlife habitat and corridor conservation in Flathead County, especially given the influence of current local politics, looks fairly bleak. A system for transferring development rights from sensitive wildlife lands to areas near existing cities could be a helpful conservation planning tool. However, as most of the lands used by wildlife are unzoned, it is unclear what value a transferable development rights system could bring.³¹⁰ Finally, while the MT FWP has developed an online GIS database that identifies key wildlife habitat and corridors, wildlife conservation planning in the County’s current subdivision process is effectively voluntary.³¹¹ Other tools the county could use to reduce exurbanization and sprawl include: increased focus on landscape-level planning, augmenting master plans with alternative development scenarios and visual simulations, assisting in the collection of biological data on privately-held lands, using GIS-based conservation planning to inform the

³⁰⁶ Flathead County Planning & Zoning, *Citizen’s Guide to Major Subdivisions in Flathead County* (undated) (on file with authors).

³⁰⁷ Vore, *supra* note 218.

³⁰⁸ Hogle, *supra* note 215.

³⁰⁹ Vore, *supra* note 218 (“Wildlife habitat is a low priority for County Commissioners. Reviewing subdivision proposals is the most frustrating part of my job.”). This parallels coauthor Timothy P. Duane’s findings in the Sierra Nevada, see DUANE, *supra* note 210 and DUANE, *supra* note 282, and Travis’s observations about land use planning across the west, see TRAVIS, *supra* note 210.

³¹⁰ DUANE, *supra* note 210; Sax & Keiter (2006), *supra* note 37, at 263. A transferable development rights (TDR) system depends upon some restrictions on land development. If there is no restriction, there is no need to acquire TDRs from another location in order to gain permission to develop. Consequently, TDRs would have no value and the landowners who have been granted TDRs as partial compensation for more severe restrictions on their own development potential would gain nothing from the TDRs. TDR systems have therefore been successful only in places that have fairly strong land use development restrictions, such as the Tahoe Regional Planning Agency. See RICK PRUETZ, BEYOND TAKINGS AND GIVINGS: SAVING NATURAL AREAS, FARMLAND AND HISTORIC LANDMARKS WITH TRANSFER OF DEVELOPMENT RIGHTS AND DENSITY TRANSFER CHARGES 239–40 (2003).

³¹¹ PRUETZ, *supra* note 310.

public review, and assessing further the use of conservation easements to protect identified priority habitat and key wildlife corridors.³¹² While some of these planning tools are already available for Flathead County, for example the MT FWP GIS databases, others will take greater political will to implement than the current Flathead County Planning Commission has shown to date.³¹³

V

INSIGHTS FOR PREDATOR HABITAT CONSERVATION AT AN ECOREGIONAL SCALE

One general observation gained from this case study is that there are no quick and easy solutions to the complex legal, cultural, economical, and political problem of managing predator habitat at an ecoregional scale. As Nie stated in 2003, “[f]uture decisions over wolves and their management will be tough going, however they are made. There is something about this animal that makes finding common ground easier said than done.”³¹⁴ The same is true, although perhaps to a lesser degree, about grizzly bear management. Ecosystem-based management efforts, then, no matter how much collaboration they may entail, are likely to continue to face social, political, and cultural conflict over large-predator management.

It is evident, however, that the ESA is a strong and effective legal tool that has generally worked well in the GGR. This is consistent with Sax and Keiter’s observations in their two studies of the GGR, where they noted that law has not generally played a major role in promoting regional approaches to mitigate threats to GNP itself, but that the ESA has played a major role in compelling some attention to regional issues by constraining the action of neighboring federal

³¹² David M. Theobald, *Challenges in Bridging Conservation Science and Land Use Planning*, in *LASTING LANDSCAPES*, *supra* note 282, at 13–22; *see also* Environmental Law Institute, Land & Biodiversity Publications, http://www.eli.org/Program_Areas/land_biodiversity_pubs.cfm (last visited Jan. 16, 2010) (publishing a number of other documents in its program to work with state and local governments to improve conservation planning).

³¹³ *See supra* notes 216, 297–99 and accompanying text discussing the growth coalition theory and the hypothesis that the political dynamics of local land use are a function of conflicts between use and exchange values. In sum, such conflicts are unlikely to result in strong land use regulation except in places where rapid population growth, increasing development density, and increasing community scale are likely to increase conflicts with use values that mobilize a counter coalition to the growth coalition that typically dominates local politics in the absence of these conditions.

³¹⁴ NIE, *supra* note 283, at 215.

agencies from taking actions that could otherwise threaten either listed species or other values that the NPS sought to protect.³¹⁵ Moreover, Sax and Keiter found that nongovernmental actors played a major role in compelling such attention to the requirements of the ESA and other federal laws through litigation, when the NPS itself was otherwise not forceful about protecting those interests.³¹⁶ These lawsuits have included litigation against the USFWS itself, which is charged with enforcing the ESA. The ESA mandates have successfully forced federal, tribal, and state agencies with traditionally different missions to work together in considering the effects of land use and management on endangered species habitat. Protection of habitat and migration corridors for wide-ranging predators, such as grizzlies, wolves, and lynx, has a secondary benefit of protecting the region's biodiversity, including less charismatic fauna and flora. The NCDE is fortunate in that wolves are not its only wide-ranging predators, and that grizzlies and lynx will likely remain legally protected under the ESA into the near future.³¹⁷

Specific examples of interagency and intergovernmental cooperation on wildlife conservation and management include the

³¹⁵ In both their 2006 and 1987 studies of GNP and its neighbors, Sax and Keiter observe the relatively small role law played in developing regional land management approaches in and around Glacier. See Sax & Keiter (2006), *supra* note 37; Sax & Keiter (1987), *supra* note 38, at 255 (noting that the GNP officials' enthusiasm over the region's U.N. biosphere reserve designation, which involves no formal legal mandates on neighboring landowners, was a "little premature."). Further, they were "astonished at how little weight Glacier officials attached to the coercive aspects of those statements of national policy, and at how resolutely they ignored the fact that NEPA produces injunctions, that NFMA gives rise to administrative appeals of forest plans, and that the ESA generates jeopardy opinions." See Sax & Keiter (1987), *supra* note 38, at 260; see also Sax & Keiter (2006), *supra* note 37, at 301 (reiterating this observation and further stating that "[t]he biosphere reserve concept has not had any measurable direct effect, but may have helped lay the groundwork for other conservation measures that have helped protect the park beyond its boundaries").

³¹⁶ See Sax & Keiter (1987), *supra* note 38, at 248 (observing that grizzly bears presence in and surrounding GNP has "mobilized citizen watchdog groups"); Sax and Keiter (2006), *supra* note 37, at 306 (recognizing the "vigorous [legal] efforts of private environmental advocates" taken to help protect wildlife habitat and corridors in the GGR). Finally, in their 2006 study, Sax and Keiter also identified "the law and its enforcement" as an "indispensable factor" which has "played a pivotal role in promoting management across formal boundaries," with modern statutes, most significantly the ESA, the Wilderness Act, and NEPA, imposing "managerial consistency across boundaries where their mandates apply." Sax & Keiter (2006), *supra* note 37, at 307.

³¹⁷ The Canada Lynx, or *Lynx canadensis*, is currently listed as federally threatened under the ESA. U.S. Fish & Wildlife Service, Species Profile, <http://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=A073> (last visited Jan. 30, 2010).

establishment of effective interagency grizzly and wolf management teams. But, it is an open question whether and how long cooperation and funding for intergovernmental wolf management will continue after delisting. However, one positive example of new intergovernment cooperation has emerged between the Blackfeet Tribe and State of Montana on the issue of livestock depredation. It is also interesting to observe the similarity between management strategies independently approved by the Tribe and the State, which both consider the use of lethal control of identified problem wolves and quota-based hunting systems.

Despite potential state political pitfalls inherent in completely turning authority for management of in-state wolf populations back to Montana due to the overwhelming regional success of wolf recovery, delisting under managed conditions appears to be a step worth taking. As noted above, Montana's approved Wolf Conservation and Management Plan and detailed MT FWP regulations appear capable of balancing the important state interests of long-term wolf population persistence with social, cultural, and economic concerns over livestock depredation.³¹⁸ Further, the ESA and established USFWS recovery thresholds can still serve as a federal baseline for the success of state wolf management polices. Future relisting of wolves is also an option if Montana is unable to meet the minimum federal requirements for wolf conservation in the future. Quota-based hunting on private, state, and tribal lands may provide an effective incentive to ranchers and other landowners to manage their own properties in ways that conserve important habitat and promote the dispersal of wolves across the greater Montana landscape. Biologically blessed with fecundity and adaptability to a range of habitats, the primary threat to wolves is not lack of reproductive capacity or lack of habitat. Rather, the wolf's greatest threat remains its lack of social acceptance within communities directly affected by its recovery. Social investment and local appreciation of wildlife

³¹⁸ However, as Nie suggests, the balance that is struck is still likely to be objectionable to many parties. Nie, *supra* note 283. We do not take a position here on whether Montana's balance is the right one—instead, we simply observe that the prospect of litigation and enforcement under the federal ESA acts as a key consideration in determining whether or not ecological viability of wolf recovery is given significant weight in the balancing process. Any balance that fails to meet the test of being able to survive a legal challenge under the ESA is unavailable as a legally feasible option. The balancing process must, therefore, give at least a minimum level of weight to ecological criteria.

resources, as well as efforts to integrate the wolf into the state's identity and its recreational and tourist economy, will likely be key to sustained wolf conservation in the absence of a strong federal mandate. Since there is biological room for state-based experimentation, such as livestock loss mitigation programs and quota-based hunting systems, wolf delisting in Montana appears to be a valid administrative step in the species' long-term conservation and management.

In contrast to the wolf, however, there is less room for experimentation and margin of error with grizzly bear recovery. Unlike the wolf, the grizzly has a very low reproductive rate and its primary threat is loss of suitable habitat and corridors, as well as indirect human-caused mortality, such as trains, trucks, and automobiles. It will be interesting to observe whether the USFWS under the Obama administration, based on science and continued grizzly population monitoring, will be able to establish achievement of its 1993 NCDE recovery thresholds and push for delisting of this grizzly population in the near future. Unlike the wolf, which is widely perceived as "the new kid on the block" following its complete extirpation in the early 1900s, the grizzly was never extirpated from GNP and is more socially accepted by Montanans living within the GGR.³¹⁹ The grizzly has long been recognized as "the most highly visible and politically important species listed under the [ESA]. It might fairly be said that the entire land management scheme surrounding [GNP] is built on the grizzly."³²⁰ The grizzly has also mobilized watchdog groups, who are unlikely to stand quietly by if the NCDE population remains threatened.³²¹ Finally, there is clearly ample room for strengthening land use regulations to conserve wildlife habitat and corridors within Flathead County. However, any future changes, unless state mandated or motivated by future private or state interests in expanding core grizzly and wolf habitat around the North Fork and GNP, are unlikely to occur without a significant shift in county politics.³²² To encourage change and ecologically

³¹⁹ Vore, *supra* note 218.

³²⁰ Sax & Keiter (1987), *supra* note 38, at 247-48.

³²¹ *Id.*

³²² Another interesting option is proposed by Keiter:

To promote a regional ecosystem management agenda, the federal government could potentially employ its formidable array of constitutional powers to regulate or otherwise constrain private land use practices. The courts have consistently interpreted the Article IV property clause as giving Congress broad authority to

educate local governmental decision-making bodies, future NCDE initiatives for landscape-level habitat conservation should further involve and integrate state subdivisions, such as the county.³²³

As Layzer notes, all efforts at ecosystem-based management are experiments. This is true whether the effort is systematic and involves the coordinated response of a wide range of institutional actors through a collaborative decision-making process, or whether it involves the uncoordinated kaleidoscope of management regimes that are so typical across the western landscape. The GGR has been an example of the latter, but it is about to undergo a dramatic rotation of the kaleidoscope; shifting wolf management responsibility from the USFWS to the MT FWP will initiate a new experiment in ecosystem-based management. As such, adaptive management principles should apply. The MT FWP should be closely monitored and the new management regime should be altered if it fails to achieve its goals. The role of the federal ESA, and the prospect of returning oversight to the USFWS if the experiment is unsuccessful, will be a critical factor influencing the likelihood of success. The state-managed approach to wolf management is therefore not an *alternative* to federal oversight under the ESA; instead, its very success depends on both the continued existence of the federal ESA and the careful eye of the USFWS, as well as the constant vigilance of advocacy groups who may litigate to ensure that both the MT FWP and USFWS comply with the ESA. In that sense, the impending experiment in wolf management is an experiment in federalism that mimics the successful implementation of a similar model under the Clean Air Act, where states are delegated authority to regulate stationary

regulate activities on nearby lands that threaten the purposes for which federal lands are being managed.

Keiter, *supra* note 284, at 319. Even if not used, the threat of its use could serve to strongly encourage Flathead County, or the State of Montana on their behalf, to step up land use controls around GNP and sensitive Flathead Forest lands. It is clear that strong federal action, e.g., use of the ESA, influences state, tribal, local, and private actors even when the federal action is not *directly* applied. The prospect of federal action motivates actions. Nevertheless, we are not advocating such a heavy-handed approach by the federal government. If one thing is clear, it is that social and cultural acceptance are necessary for the long-term viability of recovery efforts. See Duane, *supra* note 282.

³²³ One way to encourage this would be with federal funding for technical assistance to states and local governments that engage in conservation planning efforts. Access to some funding sources for conservation efforts, such as state bond funds or federal Land and Water Conservation Act funds, could also be linked to state and local government participation in such conservation assessment and planning efforts, see DUANE, *supra* note 210, at 466–67, for similar recommendations.

sources under State Implementation Plans that must be approved by the EPA,³²⁴ and the Clean Water Act, where states are delegated authority to determine impairment conditions and to develop water quality management plans such as Total Maximum Daily Loads for impaired waterways.³²⁵ In both cases, the federal law and federal oversight maintain a strong presence.

Moreover, the federalism examples of the Clean Air Act and the Clean Water Act both support the conclusion that the law, and the capacity of third parties to enforce it through litigation in federal courts, is an important element in achieving the environmental goals of Congress. This is no less true for endangered species policy than for clean air or clean water; without the prospect of litigation and federal enforcement, many parties will “shoot, shovel, and shut up” rather than modify their management activities at some economic cost to conserve wildlife and habitat. Some states and even local governments have regulatory authority and enforcement capacity to fill gaps left by the departure of federal oversight, but they are the exception. Federal environmental laws were adopted in large part because state oversight in these areas was inadequate. Moreover, implementation and enforcement of those federal laws was often resisted by federal agencies charged with oversight. Third party enforcement through litigation is therefore responsible for much of our success to date.

Nonetheless, we recognize that litigation is not always the best strategy, and federal agencies are not always in the best position to balance the conflicting social, economic, political, and philosophical views of those most likely to be affected by implementation of environmental laws. We therefore believe that the states can and should play a central role in working through those conflicts as long as they stay within the sideboards established by federal law, and as long as both federal agencies and third party litigation can ensure that the *ends* established by such federal law are not compromised by the *means* chosen by states. In some cases, of course, the means chosen by states may actually improve the likelihood of achieving the federally established ends. Allowing wolf hunting in Montana may be one of those cases, but it is unclear at this point. Despite philosophical objections to such hunting, it may be that allowing wolf hunting will increase the likelihood of private landowners managing

³²⁴ See Clean Air Act § 111, 42 U.S.C. § 7410(a) (2006).

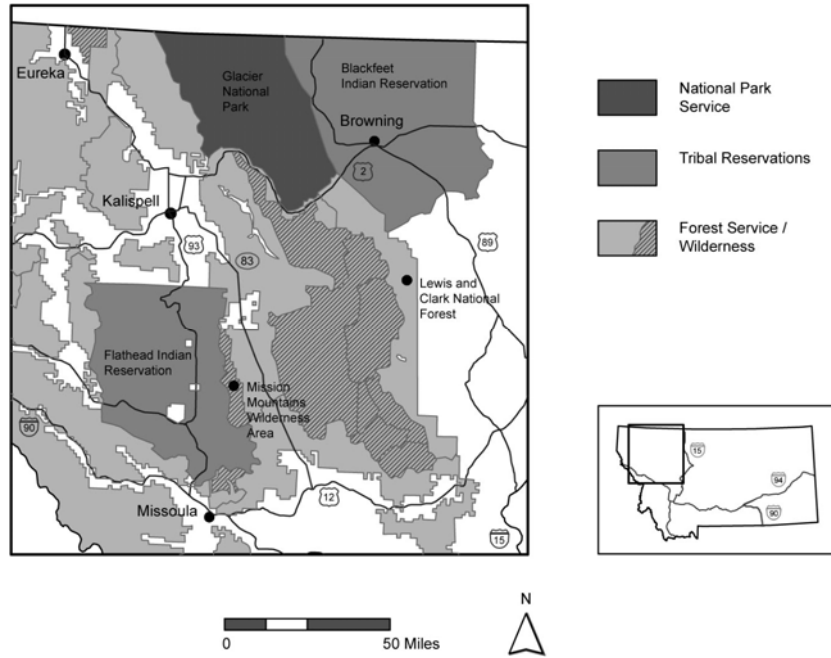
³²⁵ See *id.* § 303, 33 U.S.C. § 1313(a).

their lands to support wolf habitat. We are therefore open to experimenting to test this hypothesis with the wolf, which is fecund and has quickly dispersed throughout available habitat. Such an approach would clearly be too risky, however, for the more tenuous population of the grizzly bear. Moreover, such an experiment with the wolf should be closely monitored and altered if it is not successful. Recovery thresholds should therefore be set with an adequate margin of safety and they should automatically trigger reestablishment of USFWS regulatory authority, rather than merely the option of such authority, in any decision to delegate authority to the states.³²⁶ Such an automatic trigger will keep the right incentives aligned for state agencies as well as those who want regulatory authority to lie with the states rather than federal agencies.

In conclusion, this case study underscores the importance that political, economic, social, and cultural values play at all levels of government in the management and conservation of large predator species to influence how legal regimes are applied and enforced. These factors strongly influence agency actions and decisions affecting landscape-level protection of wide-ranging predator habitat, as well as the conservation of biodiversity more generally. In short, the path to successful ecosystem-based management, even de facto ecosystem-based management, requires a combination of a big legal stick, financial incentives, political leadership and will, and broad-based social and cultural buy-in. The latter is based on a wide range of factors: fear of legal liability, desire for financial gain, personal ethical commitments, and community values. Attention to all of these factors is therefore necessary if the “fierce green fire” of Aldo Leopold’s wolf is to continue to burn in the West.

³²⁶ Whether or not the USFWS wolf recovery thresholds are adequate ecologically remains highly contested. According to wolf recovery coordinator Edward Bangs, the USFWS “surveyed 80 scientists around the world” and “[b]etween 75% and 80% of them thought that this goal [of 300 wolves] was good enough, although I, personally think it is too low.” Virginia Morell, *Wolves at the Door of a More Dangerous World*, 319 *SCI.* 890, 891 (2008).

MAP 1
GREATER GLACIER REGION, NORTHWEST MONTANA



Source: U.S. Geological Survey

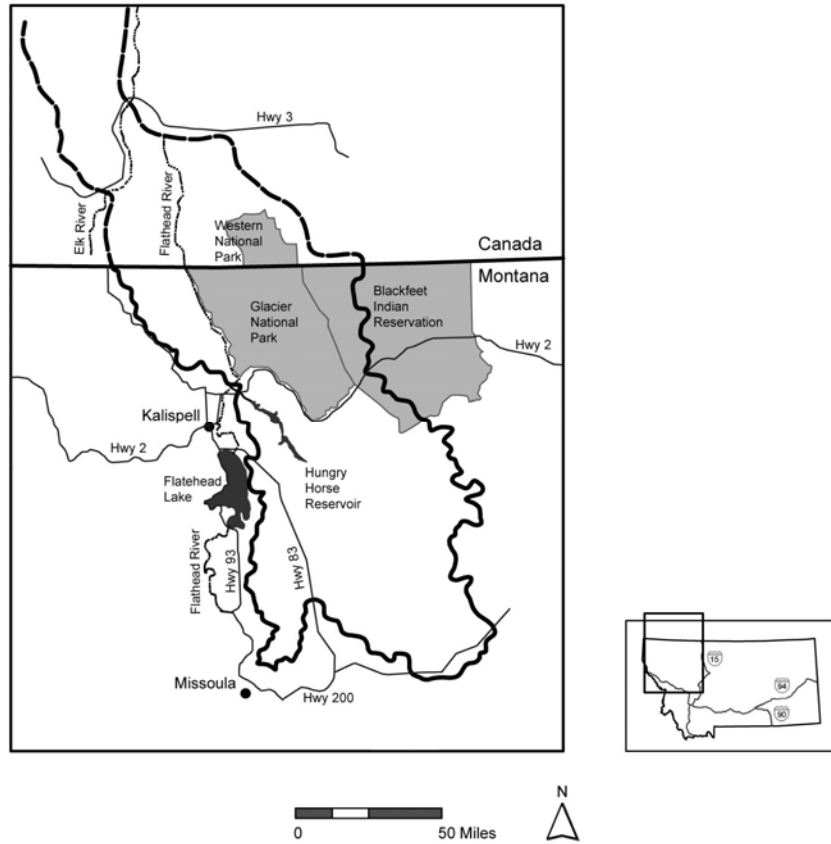
MAP 2

GRIZZLY BEAR RECOVERY ECOSYSTEMS, INCLUDING NORTHERN CONTINENTAL DIVIDE



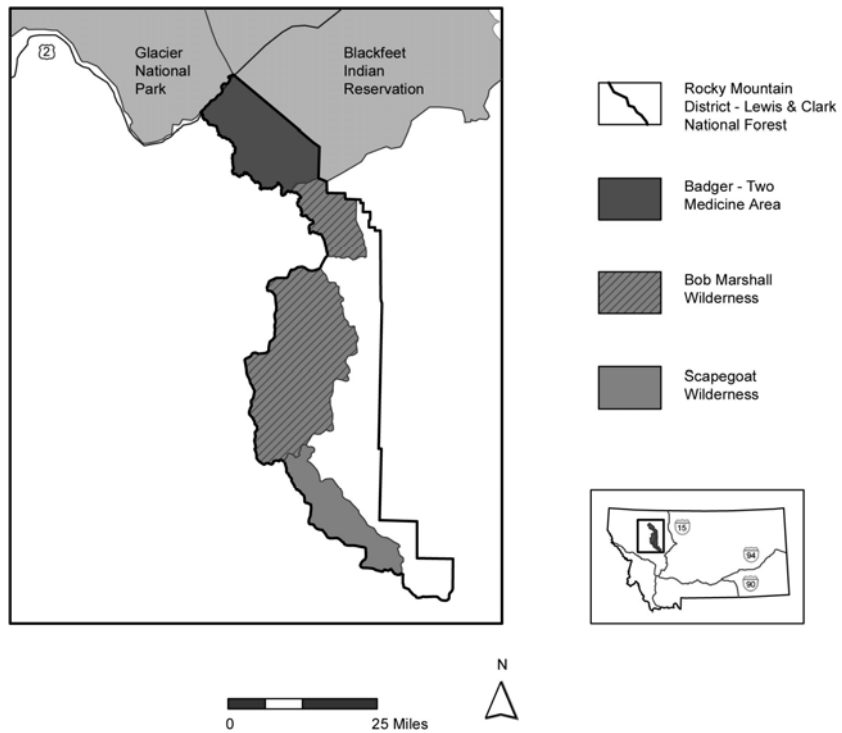
Source: Montana Fish, Wildlife & Parks 2006 Grizzly Bear Management Plan for Western Montana, based on U.S. Fish and Wildlife Service's 1993 Recovery Zones

MAP 3
NORTHERN CONTINENTAL DIVIDE RECOVERY ZONE



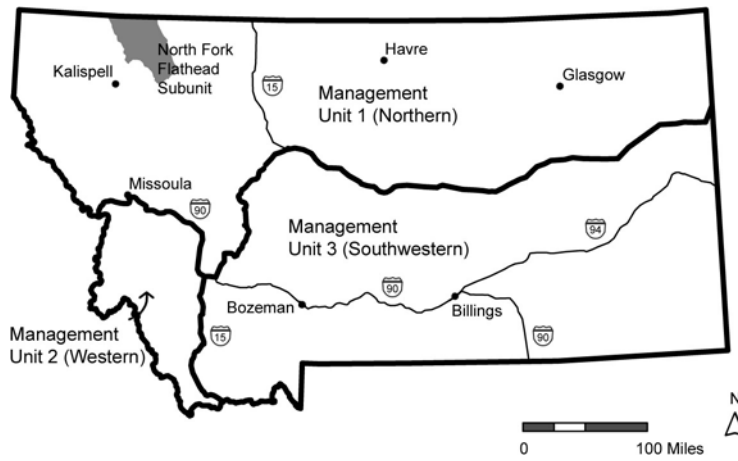
Source: U.S. Fish and Wildlife, 1993

MAP 4
LEWIS AND CLARK NATIONAL FOREST AND ASSOCIATED WILDERNESS AREAS



Source: U.S. Forest Service and Badger-Two Medicine, Travel Management Plan Record of Decision

MAP 5
STATE OF MONTANA WOLF MANAGEMENT UNITS, INCLUDING
NORTH FORK SUBUNIT



Source: Montana Fish, Wildlife & Parks, Montana Rulemaking for
Wolf Management and Regulated Public Harvest, 2008