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THE NORTH AMERICAN MODEL OF WILDLIFE CONSERVATION IN WYOMING: UNDERSTANDING IT, PRESERVING IT, AND FUNDING ITS FUTURE

David Willms and Anne Alexander***

I. INTRODUCTION

In 2013, both the Wyoming Legislature and the public lambasted the Wyoming Game and Fish Department (Department) for requesting license fee increases to help fund the agency. They argued that hunters and anglers already shouldered the bulk of the fiscal responsibility for managing wildlife, and a new fee increase could discourage some from purchasing licenses. Ultimately, the funding measure failed, but the debate brought to the forefront the risks and challenges of relying exclusively on the funding model known as the North American Model of Wildlife Conservation—an ideology developed over the past several generations to manage and protect the future of all Wyoming’s wildlife.

In 2001, Valerius Geist coined the term, “North American Model of Wildlife Conservation,”¹ which the Association of Fish and Wildlife Agencies (AFWA)

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¹ J.F. Organ et al., *The North American Model of Wildlife Conservation*, THE WILDLIFE SOCIETY AND THE BOONE AND CROCKETT CLUB TECHNICAL REVIEW (Dec. 2012), available at <http://wildlife.org/documents/technical-reviews/docs/North%20American%20model%20of%20Wildlife%20Conservation.pdf> (citing V. Geist, S.P. Mahoney, and J.F. Organ, *Why hunting has*

formally described that same year.² Through a resolution, the AFWA identified seven elements best articulating the means of managing wildlife in the United States.³ Each of these tenants is part of the over-arching, guiding principle of the North American Model—hunters and anglers⁴ pay for wildlife conservation and management. Though only formally described twelve years ago, the North American Model evolved over generations, after early American settlers drove species across the continent to extinction or the brink of extinction due to a belief that wildlife was either a marketable consumptive resource, or a hindrance to settlement.⁵

However, since its genesis, this “user pays” model has faced significant funding challenges, which are becoming increasingly difficult to overcome. These challenges stem from new programs and increased responsibilities imposed upon the wildlife agencies by their governing bodies. Today, wildlife agencies do more than just manage game species sportsmen traditionally pursue. They manage non-game species, conduct habitat improvement projects for the benefit of all species, and protect and increase populations of numerous species identified as endangered under both state and federal law. Additionally, sportsmen and other interest groups attend public meetings, and submit comments to the wildlife agencies and their governing bodies asking the agencies to secure access for hunters, pay landowners for damage caused to private property, manage to prevent disease transmission between wildlife and domestic animals, consult with federal agencies on landscape level projects on federal land, and manage against invasive species.⁶ Sportsmen also demand that the wildlife agencies provide educational and hunter recruitment programs, as well as publications emphasizing the state’s wildlife. People demand wildlife agencies do all of this with sportsmen

defined the North American model of wildlife conservation, TRANSACTIONS OF THE 66TH NORTH AMERICAN WILDLIFE AND NATURAL RESOURCES CONFERENCE 175–185 (2001).

² *Investing in America’s Conservation Legacy*, ASSOCIATION OF FISH AND WILDLIFE AGENCIES (Dec. 7, 2013), http://www.fishwildlife.org/index.php?section=north_american_model_of_wildlife_conserv (last visited Apr. 23, 2014).

³ First, state governments oversee wildlife conservation on behalf of the public trust. Organ, *supra* note 1, at 2. Second, a democratic approach to wildlife management should encourage civic involvement. *Id.* Third, under the law, every citizen has equal access to wildlife and the right to participate in hunting. *Id.* Fourth, wildlife cannot be harvested for commercial uses that would exploit the hunt for private economic gain. *Id.* Fifth, non-commercial uses of wildlife are restricted to the harvest of wildlife for food and fur, self-defense, and property protection. *Id.* Sixth, wildlife can be considered an international resource because of its migratory nature. Seventh, wildlife management is guided by science. *Id.*

⁴ For the remainder of this article the term Sportsperson or Sportsmen is used to describe hunters and anglers.

⁵ David Favre, *Wildlife Jurisprudence*, 25 J. ENVTL. L. & LITIG. 459, 468 (2010).

⁶ See, e.g., WYO. STAT. ANN. § 23-1-901 (2013) (providing claims for damage caused to private property); WYO. STAT. ANN. § 23-4-201 (2013) (governing management of aquatic invasive species).

dollars notwithstanding the fact that, every year, fewer people hunt and fish⁷ and that the user-pays model never contemplated funding most of the activities described above.

Though the “user pays” model has been an effective management tool for several generations, our conservation and political leaders must recognize that with all these additional strains on wildlife agencies, we cannot continue relying on sportsmen to fund all wildlife management. Other users, such as the agriculture and energy industries, tourists, bikers, backpackers, and wildlife photographers must contribute as well. Numerous courts, and the laws of most states, firmly place the responsibility on our government to manage and conserve wildlife for current and future generations.⁸ Inherent in this responsibility is the need to provide funding at an appropriate level to conserve and sustain our nation’s wildlife resources.

We are therefore at a crossroads. Hunters, anglers, politicians, conservationists, agriculture and energy industries, and casual wildlife observers must come together and identify new funding sources to ensure wildlife agencies have the necessary funding to promote wildlife conservation for future generations. In Wyoming, the legislature can take an immediate step toward long-term stewardship of Wyoming’s wildlife resource by putting a Constitutional amendment before the voters directing dollars spent on outdoor equipment and money currently diverted via statute into the Permanent Wyoming Mineral Trust Fund toward wildlife management. This will ensure that all users, not just hunters and anglers, contribute to maintaining the resource under the North American Model. More importantly, shoring up long-term funding will benefit Wyoming’s wildlife, people, industries, and economy.

This article first addresses the history of wildlife management in the United States.⁹ It begins with a discussion of the decimation of the nation’s wildlife resource, and how, in an effort to reverse the trend of treating wildlife as a limitless resource, states imposed regulations restricting the harvest of animals.¹⁰ The focus

⁷ See *infra* Part VI.C.

⁸ See, e.g., *The Public Trust Doctrine: Implications for Wildlife Management and Conservation in the United States and Canada*, THE WILDLIFE SOCIETY 21 (2010), available at http://www.fw.msu.edu/documents/ptd_10-1.pdf (last visited Apr. 23, 2014); ALASKA CONST. art. VIII, § 3 (providing that wherever occurring in their natural state, fish wildlife, and the waters are reserved to the public for common use); LA. CONST. art. IX, §§ 1, 7 (requiring the state to protect, conserve, and replenish all natural resources, including the wildlife and fish of the state, for the benefit of its people); see also N.C. GEN. STAT. §§ 113–133.1 (1994) (providing that the enjoyment of the state’s wildlife resources belongs to all of the people of the state, and that the Wildlife Resources Commission is charged with the administration of wildlife in a manner serving equitably the various competing interests of the people regarding the resource).

⁹ See *infra* Part II.

¹⁰ See *infra* Part II.A.

then turns to the rise and fall of the state ownership doctrine, which led to the creation of federal laws asserting control over wildlife and ultimately increasing the state's management burdens.¹¹

Next, the article sets forth the reasons why wildlife is a critical component of the economy, and the potential economic impacts when wildlife agencies are not properly funded to adequately manage and preserve wildlife.¹² Finally, the article proposes means of including users besides hunters and anglers in funding wildlife management through new funding sources that the State of Wyoming should create through a Constitutional amendment.¹³

II. WILDLIFE IN EARLY AMERICA

We can divide our nation's wildlife history into three phases. First, came the era when settlers arrived in what is now the United States, and a plethora of animals roamed freely and seemingly innumerable across the continent.¹⁴ Second, as settlers began expanding geographic settlement inward from the coast, the nation entered an age of exploitation where our seemingly limitless resource dwindled due to overharvest—driving some species to extinction, and others to the brink of extinction.¹⁵ Third, settlers began recognizing the impacts of their earlier exploits, and through government action moved to protect and preserve species by asserting control over the animals and regulating their harvest.¹⁶

A. *The Decimation of America's Wildlife Resource*

When the first Europeans landed on the east coast, they discovered a land rich in wildlife resources. The eastern forests were home to vast numbers of deer, elk, moose, and beavers,¹⁷ while billions of passenger pigeons filled the sky.¹⁸ In the west lived millions of bison and pronghorn antelope, as well as thousands of grizzly bears, elk, big horn sheep, and moose.¹⁹

These early American settlers viewed wildlife regulation as “profit a prendre,”—those capturing the wildlife retain the right to possess or own what they

¹¹ See *infra* Part II.B.

¹² See *infra* Parts VI–VII.

¹³ See *infra* Part VIII.

¹⁴ See *infra* notes 12–15 and accompanying text.

¹⁵ See *infra* Part II.A.

¹⁶ See *infra* Part II.B.

¹⁷ Robert Brown, *The History of Wildlife Conservation and Research in the United States—and Implications for the Future* 4 (2007), available at <http://cnr.ncsu.edu/fer/directory/documents/Article-HistoryofWildlifeResearch.pdf> (last visited Apr. 23, 2014).

¹⁸ *Id.* at 2.

¹⁹ *Id.* at 2.

catch.²⁰ Early settlers freely hunted and trapped wildlife primarily for subsistence and commercial purposes, rather than the recreational purposes of today's hunters.²¹ Due to the commercial exploitation of a seemingly limitless resource, wildlife began to suffer.

The two best-known examples of people over-exploiting wildlife resources are the American bison and the passenger pigeon. In the 1700s, an estimated 40 to 70 million bison roamed the West.²² Yet, as colonization moved from the east to the west, people strained wildlife populations. In 1833, the American Fur Company shipped 43,000 bison hides overseas.²³ However, this number seemed small in comparison to the level of bison harvest once the railroad linked the east and west in the 1860s and 1870s.²⁴ The railroad made shipping of bison hides, meat, and tongues economical, leading to unparalleled slaughter.²⁵ In 1865, commercial hunters killed one million bison, and by 1871, that number increased to five million per year.²⁶ Just fifteen years later, a census revealed that only 540 bison remained in the entire United States—nearly all in Yellowstone National Park.²⁷

As for passenger pigeons, they numbered between three and five billion when Europeans arrived in America.²⁸ Eastern forests were their primary nesting and roosting sites;²⁹ however, when settlers cleared the forests for farmland, the birds started using the farmers' grain fields.³⁰ These birds significantly damaged crops, so farmers often shot them.³¹ Also, because passenger pigeons traveled in large groups, market hunters were able to net and shoot them and sell them in city markets.³² By the 1850s, mass slaughter occurred throughout the pigeon's geographic range.³³ In certain locations, hunters would kill upward of 50,000

²⁰ Darren K. Cottriel, *The Right to Hunt in the Twenty-First Century: Can the Public Trust Doctrine Save an American Tradition*, 27 PAC. L.J. 1235, 1243 (1996).

²¹ Brown, *supra* note 17, at 5.

²² Robert Brown, *A Conservation Timeline 1* (2010), available at [https://www.wildlife-department.com/aboutodwc/A%20Conservation%20Timeline\[1\].pdf](https://www.wildlife-department.com/aboutodwc/A%20Conservation%20Timeline[1].pdf) (last visited May 6, 2014).

²³ Brown, *supra* note 17, at 3.

²⁴ Brown, *supra* note 17, at 4.

²⁵ Brown, *supra* note 17, at 4.

²⁶ Brown, *supra* note 17, at 4.

²⁷ Brown, *supra* note 17, at 4.

²⁸ *The Passenger Pigeon*, SMITHSONIAN INFORMATION (Mar. 29, 2014), http://www.si.edu/encyclopedia_Si/nmnh/passpig.htm.

²⁹ Roosting refers to a place where birds rest or sleep. WEBSTER'S NEW WORLD COLLEGE DICTIONARY 1165 (3d ed. 1997).

³⁰ SMITHSONIAN INFORMATION, *supra* note 28.

³¹ SMITHSONIAN INFORMATION, *supra* note 28.

³² SMITHSONIAN INFORMATION, *supra* note 28.

³³ SMITHSONIAN INFORMATION, *supra* note 28.

birds per day.³⁴ Due to the unregulated slaughter of pigeons, by 1900, no pigeons remained in the wild.³⁵ The last passenger pigeon died in captivity in 1914.³⁶ The near extinction of bison and the extinction of passenger pigeons in such a short time helped give rise to a movement that encouraged state management of wildlife, and laid the foundation for the North American Model of Wildlife Conservation.³⁷

B. A changing culture and the rise of state management systems

Unregulated harvest of animals led to dwindling populations, and a question about who owned wildlife. The Supreme Court initially answered this question through a landmark decision, establishing that the government holds and manages wildlife, fish, and waterways for the benefit of the resources and the public, also known as the public trust doctrine.³⁸ In 1842, the United States Supreme Court first explored the relationship between the government, its citizens, and wildlife.³⁹ In *Martin v. Waddell's Lessee*, the Court denied a landowner's effort to exclude people from taking oysters that the landowner claimed as his own from the New Jersey mudflats.⁴⁰ The Court held that a public right to a natural resource, in this instance mollusks, was superior to an individual's right to deplete the resource for his own private enjoyment.⁴¹ This decision, coupled with the wide spread over-harvest of animals, provided the needed impetus for states to begin enacting laws and regulations governing the harvest of game animals.⁴²

In 1848, Orange and Rockland Counties of New York adopted some of the nation's first game laws⁴³ in an effort to regulate trout fishing and the hunting of woodcock, quail, and deer.⁴⁴ Other jurisdictions followed suit,⁴⁵ but simply having regulations did not stem the tide of commercial hunting or exploitation

³⁴ SMITHSONIAN INFORMATION, *supra* note 28.

³⁵ SMITHSONIAN INFORMATION, *supra* note 28.

³⁶ SMITHSONIAN INFORMATION, *supra* note 28.

³⁷ Brown, *supra* note 17, at 4–6.

³⁸ *Martin v. Waddell's Lessee*, 41 U.S. 367 (1842).

³⁹ *Id.* at 380–90.

⁴⁰ *Id.* at 406–18.

⁴¹ *Id.*

⁴² MARK DAMIEN DUDA, MARTIN F. JONES & ANDREA CRISCIONE, *THE SPORTSMAN'S VOICE: HUNTING AND FISHING IN AMERICA* 1–4 (2010).

⁴³ Brown, *supra* note 17, at 5.

⁴⁴ Brown, *supra* note 22, at 29.

⁴⁵ Katie Spidalieri, *Looking Beyond the Bang For More Bucks: A Legislative Gift to Fund Wildlife Conservation on its 75th Anniversary*, 60 CLEV. ST. L. REV. 769, 774 (2012) (“every state had some type of game law by 1880”).

of wildlife. In need of an enforcement mechanism, states hired law enforcement officers to administer and enforce game laws. In 1852, Maine became the first state to employ a game warden.⁴⁶

Despite these early efforts, people continued commercially hunting wildlife at alarming rates.⁴⁷ Recognizing the great strain on the nation's wildlife caused by commercial hunting, dozens of hunting, conservation, and scientific organizations formed in the 1880s.⁴⁸ These organizations lobbied for stricter laws to prevent market hunting⁴⁹ and wasteful sport hunting.⁵⁰

States responded to the efforts of these early conservation groups by managing wildlife more aggressively. They formed commissions tasked with developing the laws and regulations needed to successfully preserve and manage wildlife within their boundaries, which included collecting fees for hunting and fishing licenses to fund management practices.⁵¹ By 1910, every state in the union had some sort of commission to protect wild game and fisheries.⁵² Additionally, states created wildlife agencies whose sole purpose was managing the taking of species and enforcing hunting seasons and bag limits.⁵³ These agencies served, and continue to serve, as the brick and mortar for present day wildlife management—a user pays system operated by individual states.

When state agencies began, each one operated as though they had the authority to manage all wildlife within their boundaries. In the late 1800s the Supreme Court confirmed states' belief that they held wildlife within their boundaries for the benefit of the people.⁵⁴ However, later decisions eroded this belief through assertions of federal supremacy over the state's wildlife management authority.⁵⁵ These cases helped set the stage for present day battles between states and the federal government over wildlife management, as well as contributing to the financial strains so many state wildlife agencies are experiencing.

⁴⁶ Brown, *supra* note 17, at 5.

⁴⁷ Brown, *supra* note 17, at 5–8.

⁴⁸ Brown, *supra* note 17, at 6–7. Some of the groups included the League of American Sportsmen, the American Ornithologist's Union, the Camp Fire Club, the New York Zoological Society, the Audubon Society, and the American Bison Society. Brown, *supra* note 17, at 6.

⁴⁹ Market hunting is a commercial form of hunting where animals are harvested for both money and economic development. *See generally* Brown, *supra* note 17, 1–4.

⁵⁰ Brown, *supra* note 17, at 6–7.

⁵¹ Brown, *supra* note 17, at 8–9.

⁵² Brown, *supra* note 17, at 8.

⁵³ Dean Lueck, *An Economic Guide to State Wildlife Management*, PERC RESEARCH STUDY RS 00-2, 3–4, available at http://perc.org/sites/default/files/rs00_2.pdf.

⁵⁴ *See generally* Geer v. Connecticut, 161 U.S. 519, 529 (1896), *overruled by* Hughes v. Oklahoma, 441 U.S. 322 (1979).

⁵⁵ *See supra* notes 60–70 and accompanying text.

The strongest argument for state supremacy over wildlife appeared in *Geer v. Connecticut*, when the Court recognized a state's right to regulate wildlife.⁵⁶ In 1896, Edward Geer sought review of a Connecticut Supreme Court of Errors decision penalizing him for legally possessing animals, but illegally transporting them across state lines.⁵⁷ The Court concluded that states represent the public, and that people as a whole own the wildlife and therefore states have a duty to protect the public interest in wildlife "in their united sovereignty."⁵⁸ Thus, in *Geer*, the Court confirmed that states own wildlife in a sovereign sense and their authority to manage and conserve wildlife is inherent in state ownership.⁵⁹

Though *Geer* confirmed state sovereign ownership of wildlife, later courts eroded that proposition. In 1920, the United States Supreme Court in *Missouri v. Holland* considered the State of Missouri's argument that the Migratory Bird Treaty Act infringed on powers reserved to the states by the Tenth Amendment of the United States Constitution, and therefore was not a valid exercise of federal power.⁶⁰ The Court determined that although a State may regulate the harvest and sale of wildlife within its boundaries, it does not have the power to usurp federal authority.⁶¹ Accordingly, the Court confirmed that the federal government could take actions to protect wildlife, despite the state ownership doctrine.⁶² Subsequent state challenges to federal oversight of wildlife were similarly unsuccessful.⁶³

In 1976, the State of New Mexico challenged the 1971 Wild and Free-Roaming Burros Act.⁶⁴ Congress created the Act to protect wild burros and horses on federal land. In particular, the Act protected "all unbranded and unclaimed horses and burros on public lands of the United States" from "capture, branding,

⁵⁶ *Geer*, 161 U.S. 519.

⁵⁷ *Id.* at 529. Michael C. Blumm & Aurora Paulsen, *The Public Trust in Wildlife*, 2013 UTAH L. R. 1437, 1459 (2013) (internal citations omitted), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2189134 (discussing *Geer v. Connecticut* and quoting the Court as stating "[t]he wild game within a state belongs to the people in their collective sovereign capacity. It is not the subject of private ownership except in so far as the people may elect to make it so; and they may, if they see fit, absolutely prohibit the taking of it, or traffic and commerce in it, if it is deemed necessary for the protection or preservation of the public good.").

⁵⁸ *Geer*, 161 U.S. at 529. According to Justice Edward White, this "power or control lodged in the state, resulting from . . . common ownership, is to be exercised, like all other powers of government, as a trust for the benefit of all people, and not as a prerogative for the advantage of the government as distinct from the people, or for the benefit of private individuals as distinguished from the public good." *Id.*

⁵⁹ Blumm & Paulsen, *supra* note 57, at 1459.

⁶⁰ *Missouri v. Holland*, 252 U.S. 416 (1920).

⁶¹ *Id.* at 434.

⁶² *Id.*

⁶³ See *supra* notes 64–71 and accompanying text (discussing other cases confirming federal authority to manage wildlife).

⁶⁴ *Kleppe v. New Mexico*, 426 U.S. 529 (1976).

harassment, or death”⁶⁵ New Mexico challenged the constitutionality of the Act, claiming the animals were state property. However, the Court dealt a blow to the state ownership doctrine by holding that federal power over wildlife on federal lands is plenary, limited only by the U.S. Constitution, and supersedes contrary state law.⁶⁶

Just a few years later, the Court again weakened the state ownership doctrine. In 1979, the Court overruled the constitutionality of a state law forbidding entry of game into interstate commerce.⁶⁷ The Court in *Hughes v. Oklahoma*, considered the constitutionality of an Oklahoma law prohibiting transporting minnows out of state.⁶⁸ Ultimately, the Court concluded that Oklahoma’s law violated the Commerce Clause of the United States Constitution by impermissibly infringing on interstate commerce.⁶⁹ The *Hughes* Court did not completely eliminate the principle that states could manage wildlife when stating that “the general rule we adopt in this case makes ample allowance for preserving, in ways not inconsistent with the Commerce Clause, the legitimate state concerns for conservation and protection of wild animals”⁷⁰ However, it struck a blow to the idea that states actually owned wildlife by referring to a “19th-century legal fiction of state ownership.”⁷¹

Despite this strong language against state ownership, states continue to rely on *Geer* to support state regulation of wildlife, but in a trust capacity rather than an ownership capacity.⁷² Ultimately, the cases following *Geer* paved the way for the federal government to assert a larger role in wildlife conservation, which in turn strained the states’ traditional user pays management model.

III. THE FIRST FEDERAL CONSERVATION LAWS

Heeding the warnings and efforts of the newly formed conservation organizations to conserve the nation’s wildlife species, Congress noticed the depleting wildlife resource and decided to take action through the passage of a series of seminal laws that preserve habitat, regulate wildlife, and conserve natural

⁶⁵ *Id.* at 531 (quoting 16 U.S.C. §§ 1331, 1332(b) (1970 ed., Supp. IV)).

⁶⁶ *Id.* at 536–41.

⁶⁷ *Hughes v. Oklahoma*, 441 U.S. 322, 335, 338–39 (1979).

⁶⁸ *Id.*

⁶⁹ *Id.* at 337–38.

⁷⁰ *Id.* at 335.

⁷¹ *Id.* at 335–36.

⁷² *E.g.*, Pullen v. Ulmer, 923 P.2d 54, 60 (Alaska 1996) (“nothing in [*Hughes*] . . . indicated any retreat from the state’s public trust duty discussed in *Geer*”); State v. Fertterer, 841 P.2d 467, 470–71 (Mont. 1992) (noting that *Hughes* abandoned title ownership, but that the state continues to have sovereign ownership over wildlife).

resources. One of the first federal actions occurred in 1891 when conservationists persuaded Congress that the only way to protect the nation's timbered land was through retaining Federal ownership.⁷³ Congress therefore passed the Forest Reserve Act,⁷⁴ which led to the creation of Shoshone National Forest in northwest Wyoming—the nation's first federally managed forest reserve.⁷⁵ In the years that followed, Presidents added millions more acres to the forest reserve system, and in doing so, protected the habitat of many of the Nation's wildlife species. In addition to preserving wild places through forest preserves, Congress and Presidents developed new means of conservation.

Some of the most expansive contributions to conservation at the federal level were ushered through Congress during Theodore Roosevelt's presidency.⁷⁶ Roosevelt's passion for wildlife and nature drove his efforts, as did his deep disturbance with uncontrolled market hunting, poaching, and depleting a once vast resource.⁷⁷ Feeding his passion, Roosevelt launched a habitat conservation agenda unmatched by other leaders.⁷⁸ During his eight years in office, Roosevelt's administration worked with Congress to create five National Parks, sixteen National Monuments, and fifty-one wildlife refuges.⁷⁹ In all, Roosevelt set aside 148 million acres—more than 50,000 for each day he was in office.⁸⁰

Although Congressional action preserved large swaths of land for wildlife conservation, Congress also needed to create mechanisms protecting animals from illegal harvest and trade. The first national legislation specifically for wildlife conservation—the Lacey Game and Wild Birds Preservation and Disposition

⁷³ *Management of Public Land Resources*, 60 YALE L.J. 455, 460 (1951).

⁷⁴ 26 Stat. 1103; 16 U.S.C. § 471, repealed in 1976 by Pub. L. No. 94-579. This law allowed the President of the United States to set aside forest reserves from the land in the public domain. 16 U.S.C. § 471, repealed in 1976 by Pub. L. No. 94-579. President Benjamin Harrison immediately utilized the Act and reserved 13 million acres of land. Scott W. Hardt & Charles L. Kaiser, *Fitting Oil and Gas Development into the Multiple-Use Framework: A New Role for the Forest?*, 62 U. COLO. L. REV. 827, 829–30 (1991). President Harrison's successor, President Grover Cleveland further reserved several more millions of acres. *Id.*

⁷⁵ U.S. DEP'T OF AGRICULTURE, *History and Culture: The First National Forest*, available at <http://www.fs.usda.gov/main/shoshone/learning/history-culture> (last visited Apr. 23, 2014).

⁷⁶ Ian A. Bowles & Cyril F. Kormos, *The International Conservation Mandate of the United States Government*, 11 N.Y.U. ENVTL. L.J. 372, 374 (2003).

⁷⁷ Jim DiPeso & Tom Pelikan, *The Republican Divide on Wilderness Policy*, 33 GOLDEN GATE U. L. REV. 339, 345 (2003) (stating that Theodore Roosevelt used the conservation movement to fight the slaughter of wildlife by market hunters).

⁷⁸ Brown, *supra* note 17, at 7–8.

⁷⁹ Brown, *supra* note 17, at 7–8.

⁸⁰ Brown, *supra* note 17, at 8.

Act (Lacey Act)—passed in 1900.⁸¹ The Lacey Act made it a federal offense to transport illegally taken wild game across state borders.⁸² Originally, the Lacey Act prohibited transporting animals killed in violation of state law, meaning that if you illegally harvested an animal in one state and transported it to another, the government could prosecute you.⁸³ Congress amended the law in 1935 to also prohibit transporting animals taken in violation of foreign laws.⁸⁴ The Lacey Act became a highly effective way to hold people accountable who tried to avoid prosecution for wildlife crimes they committed by moving across state lines.⁸⁵ However, it did not directly regulate the taking of wildlife on a federal level.⁸⁶ Indeed, Congress enacted legislation regulating the direct taking of wildlife less than two decades later.

In 1918, Congress entered the foray of regulating the harvest of wildlife by enacting the Migratory Bird Treaty Act.⁸⁷ Congress created this Act to implement specific migratory bird treaties the United States entered into with foreign governments protecting North American and Arctic migratory birds.⁸⁸ The Migratory Bird Treaty Act allowed some hunting of migratory birds in accordance with associated federal regulations. Furthermore, it prohibited various conduct involving the taking of migratory birds, bird parts, nests, or eggs.⁸⁹

Although the federal government set aside land to conserve wildlife and both the states and federal government established laws regulating and punishing harvest, governments initially struggled to finance these endeavors. States and the Federal Government responded to a lack of funding over the first half of the twentieth century by establishing a series of funding mechanisms enabling them to enforce their fledgling laws.⁹⁰

⁸¹ 16 U.S.C. § 701 (1982); 18 U.S.C. § 42 (1982). See William D. Palmer, Comment, *Endangered Species Protection: A History of Congressional Action*, 4 ENVTL. AFF. 255 (1975); Davina Kari Kaile, *Evolution of Wildlife Legislation in the United States: An Analysis of the Legal Efforts to Protect Endangered Species and the Prospects for the Future*, 5 GEO. INT'L ENVTL. L. REV. 441, 447 (1993).

⁸² 18 U.S.C. § 42 (1982).

⁸³ Victor J. Rocco, *Wildlife Conservation Under the Lacey Act*, 80 N.Y. ST. B.J. 10, 12 (2008).

⁸⁴ See Act of June 15, 1935, ch. 261, § 242, 49 Stat. 378, 380; H.R. Rep. No. 74-886, at 2 (1935).

⁸⁵ Brown, *supra* note 22, at 29.

⁸⁶ See *supra* notes 82–85 and accompanying text.

⁸⁷ 16 U.S.C. §§ 703–713 (1918).

⁸⁸ *Id.*; see James Lockhart, Annotation, *Validity, Construction, and Application of Migratory Bird Treaty Act 16 U.S.C. §§ 703 to 712, and its Implementing Regulations*, 3 A.L.R. FED. 2d 465 (2005).

⁸⁹ 16 U.S.C. §§ 703–713 (1918).

⁹⁰ See *infra* Part IV.

IV. FUNDING WILDLIFE MANAGEMENT

States originally funded wildlife management through the sale of hunting and fishing licenses.⁹¹ However, license fees proved insufficient to adequately finance management.⁹² To make matters worse, states often diverted license revenue to programs unrelated to wildlife or conservation.⁹³ To stabilize funding, the federal government passed a series of funding laws that directed money to the states, on the condition that states used revenue they generated from license sales for wildlife management.

A. *Hunting and Angling License Fees*

Today, most states fund wildlife management through a combination of revenue sources. However, for years, hunting and fishing licenses were the single greatest contributor to wildlife management. In 1864, New York became the first state in the Union to issue a resident hunting license when it issued a permit to hunt deer.⁹⁴ Later, states began recognizing the value in selling non-resident licenses, because they could charge non-residents more to hunt in their respective states. In 1875, Florida issued the first nonresident license.⁹⁵ Soon after, other states followed suit. Wyoming issued its first licenses in 1903.⁹⁶

Although this revenue stream was for wildlife conservation, for decades, many states diverted game license revenue to programs unrelated to game management, such as funding highway agencies or school budgets.⁹⁷ States were able to do this because they lacked the laws necessary to prevent diverting license revenue to other agencies. That all changed in 1937, however, when the Federal government began developing funding mechanisms for wildlife management that required states to use their license revenue to manage wildlife in order to receive federal funding.⁹⁸

B. *Federal Aid in Wildlife Restoration Act and Federal Aid in Fisheries Restoration Act*

On September 2, 1937, President Franklin Roosevelt signed into law the Federal Aid in Wildlife Restoration Act, more widely known as the Pittman-

⁹¹ Lueck, *supra* note 53, at 4, 8.

⁹² Brown, *supra* note 17, at 14–17.

⁹³ Lueck, *supra* note 53, at 4.

⁹⁴ N.J. BD. OF FISH AND GAME COMM'RS, *Annual Report* 53 (1900).

⁹⁵ Lueck, *supra* note 53, at 4.

⁹⁶ WYO. GAME WARDENS ASS'N, *History of Wyoming Wildlife Law Enforcement*, <http://www.wyominggamewardens.com/history.asp> (last visited Apr. 23, 2014).

⁹⁷ Lueck, *supra* note 53, at 4.

⁹⁸ *See generally* 16 U.S.C. §§ 669-669i (2012).

Robertson Act.⁹⁹ Congress intended the Pittman-Robertson Act to provide a stable source of funding for wildlife conservation, financed through a ten-percent excise tax on firearms and ammunition.¹⁰⁰ Under the Pittman-Robertson Act, the federal government annually distributes excise tax dollars to each state.¹⁰¹ States then spend their portion of the total excise tax funding wildlife conservation projects.¹⁰² Originally, state projects were evaluated only for their ability to promote wildlife conservation through species and habitat restoration, land acquisitions, and scientific research and management.¹⁰³ However, amendments in 1970 and 1972 generated additional revenue, and permitted expenditure of the funds in new areas.¹⁰⁴

In 1970, Congress amended the Act to capture a pre-existing ten percent excise tax on handguns and handgun ammunition.¹⁰⁵ Then, in 1972, Congress brought archers under the Act through an eleven percent excise tax on archery equipment.¹⁰⁶ Additionally, these amendments allow states to assign a specific percentage of the money they receive from the Pittman-Robertson Act to sportsmen education and safety programs,¹⁰⁷ provided states furnish at least twenty-five percent of the project's cost.¹⁰⁸ Due to the structure of the federal account, federal funds can only pay for seventy-five percent of a state conservation project.¹⁰⁹

One of the most critical provisions of the Pittman-Robertson Act, and the reason for its success in contributing to management programs, is that states must dedicate all hunting license revenue to state wildlife management programs as a predicate to federal funding.¹¹⁰ Because of this, states stopped diverting license dollars to other purposes, and the basic funding mechanism of the North American Model solidified—license fees and federal funds distributed under the Pittman-Robertson Act fund wildlife management.¹¹¹ Stated more simply, sportsmen fund wildlife management.

⁹⁹ *Id.*

¹⁰⁰ *Id.*

¹⁰¹ *Id.*; Spidalieri, *supra* note 45, at 776.

¹⁰² Spidalieri, *supra* note 45, at 776.

¹⁰³ *Id.*

¹⁰⁴ Pub. L. No. 91-501, 84 Stat. 1097; Pub. L. No. 92-558, 86 Stat. 1172.

¹⁰⁵ Pub. L. No. 91-501, 84 Stat. 1097.

¹⁰⁶ Pub. L. No. 92-558, 86 Stat. 1172.

¹⁰⁷ Spidalieri, *supra* note 45, at 776.

¹⁰⁸ U.S. FISH AND WILDLIFE SERVICE, *Federal Aid Division: The Pittman-Robertson Federal Aid in Wildlife Restoration Act*, <http://www.fws.gov/southeast/federalaid/pittmanrobertson.html> (last visited Apr. 25, 2014).

¹⁰⁹ *Id.*

¹¹⁰ 16 U.S.C. § 669 (2012).

¹¹¹ Lueck, *supra* note 53, at 3.

In 1950, the Federal Aid in Fisheries Restoration Act (Dingell-Johnson Act) similarly allocated federal tax dollars on fishing equipment to states for fisheries programs.¹¹² The Federal Government collects funds distributed to states for the programs the Dingell-Johnson Act in an account called the Sport Fish Restoration Account. The funds in this account come from: (1) a ten percent excise tax on certain sport fishing tackle items, (2) a three-percent excise tax on fish finders and electric trolling motors, (3) import duties on fishing tackle, yachts, and pleasure craft, (4) interest on the account, and (5) a portion of motorboat fuel tax revenues and small engine fuel taxes.¹¹³

Like the Pittman-Robertson Act, eligibility for distributions from the Sport Fish Restoration Account are premised on states prohibiting diversion of fishing license fees to any other purpose but the administration of the state fish department. Funds are then appropriated to states on a formula basis that pays up to seventy-five percent of the cost of approved projects like improving sport fish habitat, stocking fish, research into fishery resource problems, surveys and inventories of sport fish populations, and acquisition and development of public access.¹¹⁴ The Pittman-Robertson and Dingle-Johnson Acts are critically important in comprising the funding model for states, but an Act passed three years before the Pittman-Robertson Act signaled the Federal government's first foray into creating a funding mechanism for the benefit of wildlife.¹¹⁵

C. *Migratory Bird Hunting Stamp Act*

In 1934, Congress passed the Migratory Bird Hunting Stamp Act¹¹⁶—the first major federal statute establishing a fund with the principle purpose of wildlife conservation.¹¹⁷ It arose out of a widespread concern over the rapid decrease in wild ducks and geese. The decrease came about by overshooting and a prolonged drought in the heart of waterfowl breeding areas.¹¹⁸ It was also due to early

¹¹² See 26 U.S.C. § 9504 (2012) (setting up the Sport Fish Restoration Account, which provides the source of funds for the Dingle-Johnson Act. The Sport Fish Restoration Account consists of revenue generated from two sources), 26 U.S.C. § 4161 imposes a 10% tax on the sale of “any article of sport fishing equipment” and a 3% tax on the sale of “electric outboard motors and sonar devices suitable for finding fish.” The second source of revenue is import duties on fishing tackle, yachts and “pleasure craft.” *Id.* § 9504(b)(1)(B).

¹¹³ *Id.*

¹¹⁴ Eugene H. Buck, *The Sport Fish Restoration and Boating Trust Fund*, CONGRESSIONAL RESEARCH SERVICE 5 (2009), available at <http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1072&context=crsdocs> (last visited Apr. 25, 2014).

¹¹⁵ See generally 16 U.S.C. § 718–718j, 48 Stat. 452 (1934).

¹¹⁶ 16 U.S.C. § 718–718j, 48 Stat. 452 (1934).

¹¹⁷ Ike C. Sugg, *Caught in the Act: Evaluating The Endangered Species Act, Its Effects on Man and Prospects for Reform*, 24 CUMB. L. REV. 1, 8 (1993).

¹¹⁸ *History of Migratory Bird Hunting Stamp Act*, MD. DEP'T OF NATURAL RES., http://www.dnr.state.md.us/wildlife/Hunt_Trap/waterfowl/federal_duck_stamp.asp (last visited Apr. 25, 2014).

settlers draining millions of acres of marshy areas critical for breeding to create additional land for cultivation.¹¹⁹ The Federal government responded by setting up a system under the Migratory Bird Hunting Stamp Act where any person hunting ducks, geese, swans or brant and of sixteen years of age or older must carry a current duck stamp.¹²⁰

The federal government uses money raised from the sale of these stamps to buy land for the National Wildlife Refuge System.¹²¹ Funds from stamp sales have protected more than six million acres of waterfowl habitat in the United States.¹²² These funding sources provide further support for the North American Model, and in conjunction with license sales contribute to the majority of conservation funding in nearly every state. Wyoming is no exception.

V. ORIGINS OF THE NORTH AMERICAN MODEL IN WYOMING

Just as in other states, overharvest and commercial hunting plagued Wyoming, and ultimately led to Wyoming adopting the North American Model. Wyoming's First Territorial Legislature passed a 233-word "Act for the Protection for Game and Fish in the Territory of Wyoming," which offered some protection and regulation over the sale of fish and game, but set no harvest limits.¹²³ The bill was highly ineffective, and contained no enforcement provisions for the taking of wildlife.¹²⁴ Consequently, throughout the 1870s and 1880s, Wyoming's territorial legislature passed several other laws attempting to protect wildlife, though to little avail.¹²⁵

Beginning with statehood in 1890, the public and legislature spent the next several decades generating interest in protecting wildlife and developing means for managing wildlife.¹²⁶ However, even with this increased interest, market hunters continued decimating Wyoming's wildlife because the legislation was

¹¹⁹ *Id.*

¹²⁰ *Id.*

¹²¹ *What are Duck Stamps*, U.S. FISH & WILDLIFE SERVICE FEDERAL DUCK STAMP OFFICE, www.fws.gov/duckstamps/info/stamps/stampinfo.htm (last visited Apr. 23, 2014).

¹²² *Id.* Since 1934, the Migratory Bird Hunting Stamp Act has generated more than \$800 million for wetland conservation. *Id.*

¹²³ *Parker Land & Cattle Co. v. Wyo. Game and Fish Comm'n*, 845 P.2d 1040, 1054 (Wyo. 1993) (citing COMPILED LAWS OF WYOMING 59 (1869)).

¹²⁴ *Id.* For example, the bill made it unlawful to any person to "offer for sale any elk, deer, antelope, mountain sheep, or young of their kind, between the first day of February, and the fifteenth day of August in each year." *Id.*

¹²⁵ *Id.* (citing 1882 Wyo. Sess. Laws 127–29; 1884 Wyo. Sess. Laws 63–66; 14 WYO. STAT. §§ 1233–1237 (1887); 16 WYO. STAT. §§ 1455–1459 (1887); 1886 Wyo. Sess. Laws 413–15; Neal Blair, *THE HISTORY OF WILDLIFE MANAGEMENT IN WYOMING*, 15–27 (1987)).

¹²⁶ *Id.* at 1056.

very difficult, if not impossible, to enforce.¹²⁷ With bison teetering on the brink of extinction, Wyoming's third state legislature passed a law making killing a bison punishable by three to ten years in prison.¹²⁸ To enforce these new laws, the legislature authorized the fish commissioner to act as a state game warden.¹²⁹ Later, the legislature created the office of the State Game Warden, which Albert Nelson first held in 1899.¹³⁰ About this time, the legislature created a three-month hunting season in which hunters could take only male elk, deer, antelope, mountain sheep, and moose.¹³¹

In 1903, the Wyoming legislature enacted the hunting license system¹³² and put mechanisms in place in an effort to make game law enforcement more effective.¹³³ In 1911, the legislature established the State Game Commission,¹³⁴ which in 1921, became the Game and Fish Commission (Commission). The legislature created the Commission to remove an element of politics from wildlife management, and to provide an adequate and flexible system of control, propagation, management and protection, and regulation of all wildlife in Wyoming.¹³⁵ The Commission provided oversight for the Game and Fish Department.¹³⁶ Members of the Commission included the Governor, Secretary of State, and State Auditor.¹³⁷ The Governor typically appointed a game and fish commissioner to act as the chief executive officer and report the Commission's activities to the Governor.¹³⁸ In 1929, the legislature established the Game and Fish Fund, and mandated that the Commission control the fund.¹³⁹ The fund

¹²⁷ *Id.*

¹²⁸ *Id.* (citing James P. Blaisdell, *A History of the Conservation Effort in Wyoming and the Wyoming Game and Fish Commission to 1950*, 30 (June 1964) (unpublished) (on file with the University of Wyoming)). The legislature passed the law criminalizing killing bison in 1895. *Id.*

¹²⁹ *Id.*

¹³⁰ *History of Wyoming Wildlife Law Enforcement*, WYO. GAME WARDENS ASS'N, <http://www.wyominggamewardens.com/history.asp> (last visited May 4, 2014). Mr. Nelson served for three years, and was given a salary of \$1,200/year from which he had to pay \$3/day to deputy state game wardens. *Id.*

¹³¹ *Parker Land & Cattle Co.*, 845 P.2d at 1056.

¹³² *Id.*

¹³³ *Id.*

¹³⁴ *Id.* The legislature created the Commission in part because “[p]rinciples of scientific game and fish management were slowly beginning to influence wildlife policy.” *Id.* (citation omitted). The legislature viewed the commission as a way to use science, instead of political ideologies to manage wildlife.

¹³⁵ WYO. STAT. ANN. §§ 23-1-301 to -303 (2013); WYO. STAT. ANN. § 23-1-401 (2013).

¹³⁶ *Parker Land & Cattle Co.*, 845 P.2d at 1059.

¹³⁷ *Id.*

¹³⁸ *Id.*

¹³⁹ WYO. STAT. ANN. § 23-1-501 (2013).

requires the Department and Commission receive all income for purposes of carrying out the wildlife management requirements of the State.¹⁴⁰

Furthermore, in 1929, the legislature gave the Commission the autonomy to open and close hunting and fishing seasons and set bag limits.¹⁴¹ The Legislature took all these actions to remove political influence and allow science to drive wildlife management decisions. Instead of politicians making decisions about season length, harvest quotas, or which species to hunt, biologists are able to work with the Commission to set seasons that both provide adequate hunting opportunities, but ensure species viability for future generations.

Though the state made some early efforts to manage wildlife by issuing licenses, collecting fees, and hiring game wardens to enforce game laws, it was not until 1939 that the Wyoming legislature adopted a comprehensive set of laws addressing the scope of Wyoming's responsibility to manage wildlife within its boundaries.¹⁴² Though this set of laws contained many important provisions, the single most important provision relating to wildlife management was Wyo. Stat. Ann. § 23-1-103—providing that all wildlife in Wyoming is property of the State.¹⁴³ Additionally, § 23-1-103 established the State policy of managing more than just the animals people hunt and fish. This law requires the Game and Fish Department to manage all wildlife.¹⁴⁴ Though *Geer* suggests states do not own wildlife, but rather hold wildlife in trust for the public,¹⁴⁵ Wyoming's simple recognition of its obligation to manage all wildlife species within its boundaries was the first statutory acknowledgement of the public trust doctrine regarding wildlife in Wyoming.

Despite statutorily recognizing the state's obligation to manage all wildlife, the legislature did not create a separate funding mechanism addressing this paradigm shift from managing game species¹⁴⁶ to managing all species. Instead, nearly all revenue continued to come from license sales, and federal excise taxes under the

¹⁴⁰ See WYO. STAT. ANN. § 23-1-501 (2013).

¹⁴¹ WYO. STAT. ANN. § 23-1-501 (2013).

¹⁴² See generally 1939 Wyo. Sess. Laws 83–116.

¹⁴³ WYO. STAT. ANN. § 23-1-103 (2013).

¹⁴⁴ WYO. STAT. ANN. § 23-1-103 (2013) (“For the purposes of this act, all wildlife in Wyoming is the property of the state. It is the purpose of this act and the policy of the state to provide an adequate and flexible system for control, propagation, management, protection and regulation of all Wyoming wildlife. There shall be no private ownership of live animals classified in this act as big or trophy game animals or of any wolf or wolf hybrid.”); see also 1939 Wyo. Sess. Laws 83–116; WYO. STAT. ANN. § 23-1-101 (2013).

¹⁴⁵ *Geer v. Connecticut*, 161 U.S. 519, 529 (1896).

¹⁴⁶ Game species refers to only those species that can legally be taken into possession by hunting, trapping, or fishing.

Pittman-Robertson Act.¹⁴⁷ This new mandate to manage and protect all wildlife without additional funding from non-sportsmen led to funding strains when sportsmen dollars initially meant to conserve elk, deer, and antelope were used to conserve black-footed ferrets, frogs, non-game fish, birds, and bats. Over the years, this and other state and federal laws increased the strain on managing wildlife in Wyoming.¹⁴⁸

VI. FUNDING STRAINS ON WYOMING WILDLIFE MANAGEMENT

Three things generally cause Wyoming's funding challenges. First, through both State legislative action and threats of State legislative action, the Department redirects sportsmen dollars to programs not traditionally associated with wildlife management.¹⁴⁹ Second, federal laws and regulations created over the past forty-five years force the Department to expend great money and resources managing species sportsmen do not pursue.¹⁵⁰ Third, as the population becomes increasingly urban and moves away from rural areas, the number of hunters and anglers decreases, reducing the revenue available for wildlife management.¹⁵¹

A. *Programs not traditionally associated with wildlife management*

The Department manages a variety of programs for the exclusive benefit of sportsmen, such as the hunter education programs, fish and pheasant rearing programs, and outdoor camps.¹⁵² Very few people would likely argue that sportsmen should not bear the burden for funding these particular programs. However, sportsmen are also funding programs that, though of value to sportsmen, also benefit other segments of the population. As the public and policy makers move forward to secure long-term funding for the Department, they must decide which of these programs sportsmen should continue to fund, and which programs other groups should fund.

¹⁴⁷ *Budget Reduction and Cost-Saving Measures*, WYO. GAME AND FISH DEP'T (Dec. 19 2012) http://wgfd.wyo.gov/web2011/Departments/WGFD/pdfs/WGDFUNDING_FINANCIALFACTSHEET0005216.pdf (last visited Apr. 23, 2014).

¹⁴⁸ Although the remainder of this article is dedicated to addressing the funding strains particularly facing the Wyoming Game and Fish Department's mandate to manage all Wyoming's wildlife, funding strains resonate around the country. Like Wyoming, nearly every state in the country recognizes the public trust doctrine, declares ownership over the wildlife within its boundaries, and tasks its state wildlife agency with wildlife management. These states also have many of the same challenges associated with managing all wildlife with revenue originally meant to fund only game species.

¹⁴⁹ See *infra* Part VI.A.

¹⁵⁰ See *infra* Part VI.B.

¹⁵¹ See *infra* Part VI.C.

¹⁵² See generally *2012 Annual Report*, WYO. GAME AND FISH DEP'T, http://wgfd.wyo.gov/web2011/Departments/WGFD/pdfs/WGFDANNUALREPORT_20120003850.pdf (last visited Apr. 25, 2014).

The largest non-sportsmen benefactor of sportsmen dollars is Wyoming's agriculture industry, which receives funding or benefits from no fewer than half a dozen Department programs.¹⁵³ The Department and legislature established these programs largely to encourage landowners' support of wildlife on their private property, and to thank them for providing hunting opportunities to sportsmen. For example, one of the Department's most popular programs is the Private Lands, Public Wildlife program, which compensates landowners for allowing public access for hunting and fishing on their private lands.¹⁵⁴ Another program, established by statute is the landowner coupon program, which provides financial incentives if members of the public successfully harvest a big game animal on private property.¹⁵⁵ Certainly, sportsmen should bear the responsibility for funding programs like these because they are programs driven by the wishes of and for the benefit of sportsmen.

However, putting the entire burden on sportsmen to fund programs not created specifically for the benefit of sportsmen, and that provide at least equal benefit to non-sportsmen, weakens the Department's ability to fulfill its trust obligation to manage all Wyoming wildlife. Two prime examples of costly programs greatly benefiting others, in addition to sportsmen, and thus where sportsmen should not bear the entire funding burden, are the elk feedground program and the wildlife damage program.

Wyoming's elk feedground program arose because extensive fencing, livestock grazing, and growing of hay in the Green River area nearly eliminated traditional elk winter ranges, causing elk to begin wintering in and near Jackson Hole—the site of their traditional summer range.¹⁵⁶ Because of their inability to migrate, elk faced potential starvation—a reality during a severe winter from 1909–1910 when thousands of elk that descended on Jackson Hole perished.¹⁵⁷ To protect the remainder of the herd, the 1910 Wyoming Legislature appropriated \$5,000 to purchase all available hay in the Jackson Hole valley to feed elk.¹⁵⁸

¹⁵³ See, e.g., WYO. STAT. ANN. § 23-1-901 (2013) (covering damage caused by game animals or game Birds); WYO. STAT. ANN. § 23-3-105(b) (2013) ("Antelope, deer and elk coupons; payment to landowner . . ."); *Private Lands Public Wildlife Access Program: Hunting and Fishing Programs Home*, WYO. GAME AND FISH DEP'T, <http://wgfd.wyo.gov/plpwhmprogram/default.aspx> (last visited Apr. 25, 2014); Ron Dean et al., *Elk Feedgrounds in Wyoming*, WYO. GAME AND FISH DEP'T (AUG. 30, 2004), available at http://wgfd.wyo.gov/web2011/Departments/Wildlife/pdfs/WY_ELKFEEDGROUNDS0001685.pdf (last visited Apr. 23, 2014).

¹⁵⁴ *Private Lands Public Wildlife Access Program: Hunting and Fishing Programs Home*, WYO. GAME AND FISH DEP'T, <http://wgfd.wyo.gov/plpwhmprogram/default.aspx> (last visited Apr. 25, 2014).

¹⁵⁵ WYO. STAT. ANN. § 23-5-105(b) (2013).

¹⁵⁶ Dean et al., *supra* note 153, at 2.

¹⁵⁷ Dean et al., *supra* note 153, at 2.

¹⁵⁸ Dean et al., *supra* note 153, at 2.

In 1911, the Wyoming Legislature requested Congressional appropriation for “feeding, protecting, and otherwise preserving the big game which winters in great numbers within the confines of the State of Wyoming.”¹⁵⁹ One month later, Congress appropriated \$20,000 for feeding, protecting, and transplanting elk and ordered an investigation into the Wyoming elk situation.¹⁶⁰ Following the assessment, Congress appropriated another \$45,000, on August 10, 1912, for purchasing land and maintaining a wintering elk refuge.¹⁶¹ While this feeding program helped stabilize the elk population and decreased winter losses of the Jackson Hole elk herd by compensating for winter range lost due to human development, similar problems developed throughout Northwest Wyoming.

State game wardens submitted reports to the Governor beginning in the early 1900s highlighting problems associated with the co-existence of wildlife and livestock on ever shrinking ranges.¹⁶² These problems included wildlife damaging private property and elk starving due to livestock heavily grazing lands that historically comprised elk winter range. For example, in a game and fish commissioner’s report to Governor Robert A. Carey in 1927–1928, the commissioner noted a preference to establish permanent feeding grounds in an effort to prevent elk from straying “onto other ranches and [causing] considerable damage to hay, fences and pastures.”¹⁶³ He also noted that “winter ranges now used by elk are becoming scarce and are grazed very short in the fall by stock.”¹⁶⁴ Subsequently, in 1929 the Department responded to landowners’ concerns; and to prevent mass starvation of elk, the Department left supplemental feed in metal sheds in the drainages of the Upper Green River, Gros Ventre, and Greys River.¹⁶⁵ This marked the beginning of the Department’s elk feedground program.¹⁶⁶

To complement the elk feedground program, the Wyoming Legislature began addressing wildlife damage to private property and crops in other ways as well. First, in 1915, the legislature passed a law authorizing game wardens to kill any elk damaging personal property.¹⁶⁷ Following enactment, in 1921 the legislature appropriated \$10,000 to “liquidate claims for damages occasioned by

¹⁵⁹ Dean et al., *supra* note 153, at 2.

¹⁶⁰ *Parker Land & Cattle Co. v. Wyo. Game and Fish Comm’n*, 845 P.2d 1040, 1057 (Wyo. 1993) (citing Blaisdell, *supra* note 128, at 45).

¹⁶¹ *Id.* The purchased land makes up a portion of what is known as the National Elk Refuge. Congress made several additions to the National Elk Refuge over the years, and today it contains nearly 25,000 acres, which support thousands of elk each year. Dean, *supra* note 153, at 3.

¹⁶² *Parker Land & Cattle Co.*, 845 P.2d at 1057–58.

¹⁶³ *Id.* at 1060.

¹⁶⁴ *Id.*

¹⁶⁵ Dean, *supra* note 153, at 4.

¹⁶⁶ Dean, *supra* note 153, at 4.

¹⁶⁷ 1915 Wyo. Sess. Laws 87–88; WYO. STAT. ANN. § 3268 (1920).

the depredations of game animals of this state.”¹⁶⁸ Until the Legislature passed its first damage law, it annually passed special appropriations partially compensating landowners for damage caused by game animals to fences, crops, and hay.¹⁶⁹

After a decade of special appropriations and reporting the damage levels caused by elk and other game species, in 1929 the legislature passed the first law authorizing the filing of claims against the State for destruction of property by game animals or game birds.¹⁷⁰ The legislature loaned the Department \$100,000 that year, a portion of which the Department used to pay some of the animal damage claims.¹⁷¹ This legislation created a significant financial burden on the Department,¹⁷² ultimately contributing to the permanent and expanded establishment of elk feedgrounds in Wyoming.¹⁷³ Wildlife managers found it easier and less expensive to feed elk in key problem areas rather than continually try to keep elk out of haystacks. Indeed, the Game and Fish commissioner commented that men had to herd elk around Sheridan County to prevent damage to ranchers.¹⁷⁴ He also went on to say that “the settlement of damage claims causes the department more grief than all other duties assigned to it by the statutes.”¹⁷⁵ As a result, the Department established new, additional feedgrounds.¹⁷⁶ The Department continued adding feedgrounds until the 1970s, when it reached the current total of twenty-two Department-operated feedgrounds.¹⁷⁷

The feedground program began as a way to reduce damage to private lands while maintaining sportsmen preferences for higher elk numbers.¹⁷⁸ However, it now serves a second purpose—reducing and preventing transmission of diseases between wildlife and livestock.¹⁷⁹ Brucellosis, a highly contagious bacterial

¹⁶⁸ 1921 Wyo. Sess. Laws 286.

¹⁶⁹ *Parker Land & Cattle Co.*, at 1056.

¹⁷⁰ 1929 Wyo. Sess. Laws 107; WYO. STAT. ANN. § 49-215 (1931).

¹⁷¹ *Parker Land & Cattle Co.*, 845 P.2d at 1056.

¹⁷² See *supra* note 169.

¹⁷³ Dean, *supra* note 153, at 4–5.

¹⁷⁴ *Parker Land & Cattle Co.*, 845 P.2d at 1056.

¹⁷⁵ *Id.*

¹⁷⁶ *Id.*

¹⁷⁷ Dean, *supra* note 153, at 4. In addition to the twenty-two Department operated feedgrounds, the U.S. Fish and Wildlife Service manages the National Elk Refuge near Grand Teton National Park, which the Wyoming Game and Fish Department shares in the cost of feeding the elk that winter there. Dean, *supra* note 153, at 4.

¹⁷⁸ Debra L. Donahue, *Trampling the Public Trust*, 37 B.C. ENVTL. AFF. L. REV. 257, 280 (2010).

¹⁷⁹ Dean, *supra* note 153, at 10. Explaining that feedgrounds provide one of the best ways to prevent co-mingling of elk and livestock in the winter. Dean, *supra* note 153, at 7. However, the authors note that through it prevents co-mingling, feedgrounds actually increase the likelihood of disease transmission among elk. Dean, *supra* note 153, at 7–10.

disease currently found in elk and bison throughout northwest Wyoming,¹⁸⁰ was introduced to the area in the early 1900s.¹⁸¹ When a female animal is infected, it usually aborts its young.¹⁸² The disease easily transmits between animals when an animal comes into contact with the contents of an aborted animal.¹⁸³ Elk can transmit brucellosis to livestock,¹⁸⁴ so the feedground program aims to prevent elk from co-mingling with livestock during the time of year when brucellosis transmission is most likely to occur.¹⁸⁵

Many environmental, and some sportsmen groups want to end the elk feedground program—for reasons this article will not address—while, many others like the agriculture community and certain sportsmen groups continue pressuring the Department and legislature to continue the program.¹⁸⁶ Sportsmen want to see elk numbers maintained at high levels to allow for greater hunting opportunities in the fall.¹⁸⁷ Ranchers want to protect their livestock from disease transmission that could create enormous financial ramifications.¹⁸⁸ Further, agriculturalists do not want elk damaging their rangeland or crops. Consequently, if the Department ceases the elk feedground program, Wyoming's economy could, at least in the short term, be negatively impacted because elk herds may decrease and the risks of disease transmission between livestock and elk may increase. This could lead to a decrease in the number of elk licenses issued, and any positive test for brucellosis in livestock could severely impair the livestock industry.¹⁸⁹ Therefore, neither the Department, nor the legislature has incentive to eliminate the program. Nevertheless, the program costs sportsmen millions of dollars each year, to the direct benefit of other industries and the State.¹⁹⁰ To make matters worse, the costs of maintaining this, and other programs are rising at alarming rates.

¹⁸⁰ Dean, *supra* note 153, at 9.

¹⁸¹ Dean, *supra* note 153, at 9.

¹⁸² Dean, *supra* note 153, at 9.

¹⁸³ Dean, *supra* note 153, at 9.

¹⁸⁴ Dean, *supra* note 153, at 13.

¹⁸⁵ Dean, *supra* note 153, at 9.

¹⁸⁶ See Donahue, *supra* note 178, at 286.

¹⁸⁷ *Id.*

¹⁸⁸ States cannot have cattle herds test positive for brucellosis. Brucellosis can present a significant health risk to humans, so the federal government heavily regulates diseased livestock. Peter Morrisette, *Is There Room for Free-Roaming Bison in Greater Yellowstone?*, 27 *ECOLOGY L.Q.* 476, 283 (2000). Federal law permits the Secretary of Agriculture to seize, quarantine, and destroy brucellosis-infected livestock that are moved in interstate commerce. *Id.* (citing 21 U.S.C. § 134a(a) (1994)). The law also permits export restrictions on any beef produced in states where brucellosis is discovered in livestock. *Id.*

¹⁸⁹ Dean, *supra* note 153, at 14, 24–25.

¹⁹⁰ See *supra* notes 191–92 and accompanying text.

For example, in fiscal year 2012, Wyoming spent \$2,905,548 on the feedground program,¹⁹¹ a more than one hundred percent increase over the \$1.36 million spent just eight years prior, in 2004.¹⁹² The legislatively mandated animal damage program is also costly. In fiscal year 2013, the Game and Fish Commission paid \$1,163,075 to landowners for damage claims,¹⁹³ which is nearly double the \$571,113 it paid landowners in fiscal year 2011.¹⁹⁴ The \$571,113 that the Game and Fish Commission paid in fiscal year 2011, was a \$150,000 increase over the previous year.¹⁹⁵ The costs of operating both these programs will likely continue rising year in and year out. With sportsmen picking up the tab, that means fewer dollars directed toward managing other wildlife in Wyoming. Instead of burdening sportsmen with funding programs like these in their entirety, sportsmen should share the cost of funding these programs with others who benefit from them.

B. Federal Laws creating financial burdens—The Endangered Species Act

Besides the state mandates and political pressures that require spending sportsmen's dollars in ways not contemplated at statehood, a veritable cornucopia of federal laws changed the way the Department and similar agencies in other states allocate their limited financial resources. A small sampling of these laws include acts such as the National Environmental Policy Act,¹⁹⁶ Federal Land Planning Management Act,¹⁹⁷ the National Forest Management Act,¹⁹⁸ the Multiple Use-Sustained Yield Act,¹⁹⁹ the Wilderness Act,²⁰⁰ and the Clean Water Act.²⁰¹ However, one law probably impacted state wildlife management decisions and budgets more than any other—the Endangered Species Act.²⁰²

¹⁹¹ *WGFD FY 14 Approved Budget Summary (all funds)*, WYO. GAME AND FISH DEP'T, <http://wgfd.wyo.gov/web2011/Departments/WGFD/pdfs/FY14BUDGETAPPROVED0004347.pdf> (last visited Apr. 23, 2014).

¹⁹² Dean, *supra* note 153, at 4.

¹⁹³ *2013 Annual Report*, WYO. GAME AND FISH DEP'T 20 (2013), http://wgfd.wyo.gov/web2011/Departments/WGFD/pdfs/WGFDANNUALREPORT_20130005237.pdf (last visited Apr. 23, 2014).

¹⁹⁴ *2011 Annual Report*, WYO. GAME AND FISH DEP'T 27 (2011), http://wgfd.wyo.gov/web2011/Departments/WGFD/pdfs/WGFDANNUALREPORT_20110001745.pdf (last visited Apr. 24, 2014).

¹⁹⁵ *2012 Annual Report*, WYO. GAME AND FISH DEP'T 88 (2012), http://wgfd.wyo.gov/web2011/Departments/WGFD/pdfs/WGFDANNUALREPORT_20120003850.pdf (last visited Apr. 25, 2014).

¹⁹⁶ 42 U.S.C. §§ 4321–4370(f) (2012).

¹⁹⁷ 43 U.S.C. §§ 1701–1784 (2012).

¹⁹⁸ 16 U.S.C. §§ 1600–1614 (2012). This act requires that viable populations of all native species of vertebrates remain well distributed throughout their range.

¹⁹⁹ 16 U.S.C. §§ 528–531 (2012).

²⁰⁰ 16 U.S.C. §§ 1131–1136 (2012).

²⁰¹ 33 U.S.C. §§ 1251–1387 (2012).

²⁰² 16 U.S.C. §§ 1531–1543 (2012).

Congress passed the Endangered Species Act (ESA) to protect our nation's plant and animal species from extinction.²⁰³ Section 4 of the ESA is the listing function, authorizing the United States Fish and Wildlife Service (FWS) to identify "endangered" and "threatened" species and also designate "endangered" and "threatened" species' "critical habitat."²⁰⁴ Perhaps more than any other federal environmental statute, the ESA highlights the tension between economic development and conservation. Pursuant to the ESA, courts halted a multimillion-dollar dam in Tennessee to protect the snail darter;²⁰⁵ radically modified or prohibited logging practices in west Texas to preserve the red-cockaded woodpecker;²⁰⁶ banned hunting of the timber wolf by sheep ranchers in Minnesota;²⁰⁷ ordered removal of nonnative sheep in Hawaii whose grazing was destroying the habitat of the palila;²⁰⁸ and nearly shut down the logging industry in parts of the Pacific Northwest containing critical habitat for the northern spotted owl.²⁰⁹ Designation of a species' critical habitat under ESA can lead to great expenses for people or industries wishing to do business in those identified areas, if they can continue doing business at all.

Due to the potentially devastating impacts to local and state economies from the FWS listing a species under the ESA, states spend millions of dollars every year working to prevent listing or trying to remove species from the protections of ESA. For example, Wyoming spent hundreds of thousands of dollars on research, habitat improvement, non-native fish removal, and other mitigation to prevent listing of the Colorado River cutthroat trout.²¹⁰ Wyoming also spends several

²⁰³ *Id.*

²⁰⁴ 16 U.S.C. § 1533(a)(3) (2012). The ESA also authorizes the National Marine Fisheries Service to make listing decisions for marine species.

²⁰⁵ *Tenn. Valley Auth. v. Hill*, 437 U.S. 153 (1978). Congress later passed a law allowing completion of the dam because the economic consequences of not completing the project were extreme.

²⁰⁶ *Sierra Club v. Lyng*, 964 F. Supp. 1260 (E.D. Tex. 1988).

²⁰⁷ *See Sierra Club v. Clark*, 577 F. Supp. 783, 789 (D. Minn. 1984), *rev'd in part*, 755 F.3d 608 (8th Cir. 1985).

²⁰⁸ *Pilila v. Haw. Dep't of Land & Natural Res*, 852 F.2d 1106, 1110 (9th Cir. 1988).

²⁰⁹ The ESA requires that the Fish and Wildlife Service ("FWS" and the National Marine Fisheries Service (NMFS) designate a listed species' "critical habitat." 16 U.S.C. § 1533(a)(3) (2012). "Critical habitat" is defined as: (1) specific areas within the geographical area occupied by the species at the time of listing, if they contain physical or biological features essential to conservation, and those features may require special management considerations or protection; and (2) specific areas outside the geographical area occupied by the species if the agency determines that the area itself is essential for species conservation. 16 U.S.C. § 1532(5)(A) (2012).

²¹⁰ For a description of Wyoming's efforts to protect the Colorado River cutthroat trout please see the discussion in Brief *Amicus Curiae* of the State of Wyoming in Opposition to Plaintiffs' Motion for Summary Judgment and in Support of Defendants' Cross Motion for Summary Judgment, p. 3–5 in *Colo. River Cutthroat Trout v. Salazar*, 898 F. Supp. 2d 191 (D.D.C. 2012).

million dollars each year on the listed grizzly bear.²¹¹ This includes population surveys, habitat improvement projects, relocation of problem bears, and education programs to prevent the taking of grizzly bears.²¹² Each of these expenses aims to help return management of the grizzly bear from the federal government to the State of Wyoming.

In addition to spending money on game species like grizzly bears and Colorado River cutthroat trout, which have been petitioned for listing²¹³ or listed under the ESA, wildlife agencies appropriate large sums of money to study and manage non-game species.²¹⁴ This money is spent in hopes of preventing future ESA listings because the risks associated with an ESA decision listing any species are too great to ignore. Critical habitat designations for these species could include areas of the State that are high in energy production, the lifeblood of Wyoming's economy. An adverse decision could halt or greatly reduce production in areas designated critical habitat, which in turn could reduce revenue to the State from severance taxes on mineral production, and have a detrimental impact on Wyoming's economy. For this reason, Wyoming spends over nine million dollars each year on non-game research, largely to avoid an adverse ESA listing decision that could carry with it severe economic ramifications.²¹⁵

State and federal laws have caused the Department to use limited sportsmen dollars on managing more than game species, and have contributed to long-term funding concerns. However, state and federal laws are not the only cause for concern for Department funding. Geopolitical and sociological shifts in population, as well as geographical shifts from rural to urban environments also contribute to concerns about the long-term viability of the North American Model in its present form.

²¹¹ 2013 Annual Report, WYO. GAME AND FISH DEP'T A-10 (2013), http://wgfd.wyo.gov/web2011/Departments/WGFD/pdfs/WGFDANNUALREPORT_20130005237.pdf (last visited Apr. 23, 2014). Wyoming spent \$1,746,787 on grizzly bear management in fiscal year 2009, \$1,917,167 in 2010, \$1,927,556 in 2011, \$1,694,477 in 2012, and \$1,940,610 in 2013. *Id.*

²¹² *Id.* at 23. Notably, during the 2014 legislative session, the Wyoming Legislature passed a bill authorizing the state to fund grizzly bear management out of its general fund, instead of through sportsmen dollars as long as the grizzly bear remains on the Endangered Species List. 2014 Wyo. Sess. Laws 174. However, once the FWS delists the bear, sportsmen dollars will again have to fund grizzly bear actions.

²¹³ Colorado River Cutthroat were petitioned for listing, but the FWS determined listing was not warranted, and thus declined to list the trout under the ESA. 72 Fed. Reg. 32589 (June 13, 2007).

²¹⁴ Non-game species are those animals that people cannot legally harvest through hunting or fishing.

²¹⁵ John Emmerich, *Funding Non-Game and Sensitive Species Programs*, WYO. GAME AND FISH DEP'T (2011), available at http://wgfd.wyo.gov/web2011/Departments/WGFD/pdfs/WGFD-FUNDING_FUNDINGNONGAME0003475.pdf (last visited Apr. 23, 2014).

C. *Reduction of Hunters and Anglers*

One of the greatest challenges facing wildlife management agencies under the current funding model is the overwhelming evidence that the number of hunters and anglers are declining. Every five years, the FWS conducts a survey of fishing, hunting, and wildlife associated recreation.²¹⁶ The survey quantifies the number of hunters and wildlife watchers, as well as the amount of time each spends on wildlife recreation.²¹⁷ The FWS completed a survey in 2006, with results showing that 12.5 million people, age sixteen and older, hunted in the United States, indicating a ten percent drop in the number of licensed hunters from 1980–2006.²¹⁸ Although the 2011 survey indicated a slight increase in hunters and anglers over the 2006 numbers, the long-term trend is still disturbing.²¹⁹

The FWS survey also shows that sportsmen are spending less on hunting equipment. Between 1996 and 2006, spending by sportsmen declined 24%, from \$7.1 billion to \$5.4 billion.²²⁰ Since taxes on outdoor equipment are the source for federal distributions to state wildlife agencies under both the Pittman-Robertson and Dingell-Johnson Acts, this reduction in spending reduces the tax revenue available to the federal government for distribution to states. States depend on this federal funding to comprise a significant part of their wildlife agency budgets, so those agencies will feel declining revenues immediately.

To make matters worse, this loss of federal funding, combined with losses from decreased license revenue from fewer hunters, puts states in the unenviable position of trying to fulfill obligations to satisfy the state's trust obligation to their wildlife resource with an ever diminishing revenue source. The fact that these funding sources are decreasing at a time when the call for broad, effective wildlife management has never been stronger further exacerbates the situation. Consequently, it is imperative we develop innovative new ways to fund wildlife management in the future, both for the wellbeing of our wildlife and that of our economy.

²¹⁶ Spidalieri, *supra* note 45, at 782 (citing U.S. Dep't of the Interior, U.S. Fish and Wildlife Serv., U.S. Dep't of Com. & U.S. Census Bureau, 2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation vii (2006)).

²¹⁷ *Id.*

²¹⁸ *Id.*

²¹⁹ 2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation, U.S. DEP'T OF THE INTERIOR, U.S. FISH AND WILDLIFE SERV., U.S. DEP'T OF COMMERCE, & U.S. CENSUS BUREAU 5 (2012), available at <http://www.census.gov/prod/2012pubs/fhw11-nat.pdf> (last visited Apr. 23, 2014); see also *infra* Part VI.C.

²²⁰ 2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation, U.S. DEP'T OF THE INTERIOR, U.S. FISH AND WILDLIFE SERV., U.S. DEP'T OF COMMERCE, & U.S. CENSUS BUREAU 23–24 (2007), available at <https://www.census.gov/prod/2008pubs/fhw06-nat.pdf> (last visited Apr. 23, 2014).

VII. THE ECONOMIC NECESSITY OF ADEQUATELY FUNDING WILDLIFE MANAGEMENT IN WYOMING.

In light of federal laws exerting more control over wildlife—especially the Endangered Species Act—maintaining a vibrant wildlife population that remains under state control is critical to Wyoming’s economic future.

The top three revenue generating industries in Wyoming are energy, agriculture, and tourism—each inextricably linked to wildlife.²²¹ The energy industry contributed \$10.9 billion to Wyoming’s economy in 2012.²²² Energy companies explore for and extract renewable and nonrenewable resources across Wyoming’s landscape. The companies’ activities are often cited as a threat to wildlife. The total value of agricultural production in 2012 exceeded one billion dollars.²²³ Nearly forty percent of land within Wyoming’s boundaries is privately owned, and wildlife often competes with livestock for available resources.²²⁴ Travel spending, which includes hunters, anglers, and wildlife watchers, was approximately \$3.1 billion in 2012.²²⁵ Sportsmen contribute a large portion of the travel dollars to the State’s economy.

According to a 2011 FWS survey, between 2006 and 2011, hunters, anglers, and wildlife watchers spent \$1,137,200,000 dollars per year in Wyoming.²²⁶ Of that total, \$874,268,000 was trip related, \$180,927,000 was equipment

²²¹ See generally Part VI.

²²² U.S. DEP’T OF COMMERCE, BUREAU OF ECON. ANALYSIS, <http://www.bea.gov>, (last visited Apr. 23, 2014). User must create a new table each time they access the site to search for economic data. Creating the table is a multi-step process. First, from the main webpage, the author clicked on the “GDP by State and Metropolitan Area” hyperlink within the “Regional” section. From there, the author clicked the “Gross Domestic Product by State” under the “Data” subheading. Next, the author selected “Gross Domestic Product” and selected “NAICS (1997 forward).” Under the industry filter, the author selected “Mining” then “Wyoming,” and finally year “2012.” This produced a table with the result of \$10,913,000,000.

²²³ WYOMING 2012 AGRICULTURAL STATISTICS (2012), available at http://www.nass.usda.gov/Statistics_by_State/Wyoming/Publications/Annual_Statistical_Bulletin/bulletin2012.pdf (last visited Apr. 23, 2014).

²²⁴ Jeffrey D. Hamerlinck, Scott N. Lieske & William J. Gribb, *Understanding Wyoming’s Land Resources: Land-Use Patterns and Development Trends*, UNIVERSITY OF WYOMING 2 (2013) available at http://www.uwyo.edu/haub/ruckelshaus-institute/_files/docs/open-spaces/2013-land-use-patterns.pdf (last visited Apr. 23, 2014).

²²⁵ Dean Runyan Associates, *The Economic Impact of Travel on Wyoming: 1998–2012p Detailed State and County Estimates* (Apr. 2013), available at http://www.deanrunyan.com/doc_library/WYImp.pdf (last visited Apr. 23, 2014) (equating to approximately \$8.5 million dollars per day). The travel sector supported over 30,500 jobs with earnings of approximately \$759 million, and local and state tax revenues of about \$128 million. *Id.* This number does not include property tax. See *id.* Without these travel generated tax revenues, each household in Wyoming would have to pay an additional \$560 in taxes to maintain current state and local tax revenues. *Id.*

²²⁶ 2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation, *supra* note 219, at 96.

related, and \$82,005,000 was attributed to other expenses.²²⁷ All of this activity creates 9,500 jobs in Wyoming, and contributes \$75 million in State and local taxes.²²⁸ In short, a thriving wildlife population correlates to a thriving tourism industry, lower unemployment, and a reliable revenue source for government, benefitting everyone in Wyoming—including Wyoming's important agriculture and energy industries.

Much of Wyoming's wildlife value lies in maintaining state control over its management. Maintaining state control allows the State to effectively manage wildlife while allowing energy companies to continue responsible resource development, and agricultural producers to maintain complete control over their private lands—thus perpetuating their nearly twelve billion dollar contribution to Wyoming's gross domestic product. Contrarily, losing control over management of even one species could have catastrophic consequences to Wyoming's economy, as the next section of this article articulates. Wyoming is staring down the barrel of this dire scenario as the FWS considers listing the greater sage grouse as either threatened or endangered under the ESA.²²⁹

A. *Economic Impact to Wyoming if the FWS Lists Sage Grouse under the Endangered Species Act.*

Sage grouse are the largest North American grouse species, weighing between four and seven pounds.²³⁰ They depend on a variety of shrub-steppe habitats, and their geographic distribution strongly correlates with sagebrush habitats.²³¹ Scientists believe that sage grouse were once abundant throughout their range, with historic population estimates ranging from 1,600,000 to 16,000,000 birds.²³² They are currently found in eleven western states and Canada with an estimated population of 535,542.²³³ Scientists attribute much of the decrease in sage grouse numbers to human alteration of their habitat, including grazing, energy development, and subdivision of lands to name a few.²³⁴ Because of the rather rapid decline in sage grouse numbers in certain areas, many individuals and organizations sought ESA protection for this species.²³⁵

²²⁷ 2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation, *supra* note 219, at 96.

²²⁸ *Wyoming Sportsmen: 113,000 Hunters and Anglers Spending \$1.8 Million a Day*, CONGRESSIONAL SPORTSMEN'S FOUNDATION (2006), available at <http://member.scifirstforhunters.org/docs/static/EconomicImpactReport/WY.pdf> (last visited Apr. 23, 2014).

²²⁹ See *infra* Part VII.A.

²³⁰ 75 Fed. Reg. 55, 13,912 (Mar. 23, 2010).

²³¹ *Id.* at 13,915.

²³² *Id.* at 13,920.

²³³ *Id.* at 13,921.

²³⁴ *Id.* at 13,924–962.

²³⁵ See *id.* at 13,920.

On July 2, 2002, FWS received its first petition requesting listing the greater sage grouse as endangered across its entire range.²³⁶ The Institute for Wildlife Protection submitted a similar petition on March 24, 2003, and the American Lands Alliance and twenty other organizations petitioned on December 29, 2003.²³⁷ After considering the petitions, the FWS issued a not warranted finding on January 12, 2005, thus declining to list the sage grouse as either a threatened or endangered species under the ESA.²³⁸ Following a legal challenge holding the 2005 finding arbitrary and capricious, the FWS conducted a new twelve-month finding in 2010.²³⁹ The FWS's 2010 finding concluded that listing the greater sage grouse was warranted, but precluded for listing by higher priority listings.²⁴⁰

In response to the warranted, but precluded finding, the State of Wyoming developed a comprehensive model for sage grouse management using the Governor's Executive Order authority. On, August 1, 2008, the Governor of Wyoming issued an Executive Order establishing sage grouse habitat that biologists deemed as "core", or essential, for the continued vitality of the sage grouse.²⁴¹ In these core areas, the Executive Order grandfathered previously authorized or developed projects, but limited habitat disturbance for future development, and established restrictions on certain activities within core areas during sage grouse breeding and brooding season.²⁴²

Those who created the core area strategy viewed the Executive Order as a means of retaining State control over wildlife management decisions and avoiding a listing of the sage grouse under the ESA.²⁴³ The current core area strategy protects 84% of Wyoming sage-grouse attended leks²⁴⁴ within core habitat areas. It also protects the energy industry because over 95% of currently producing oil and gas wells occur outside the restricted core habitat areas.²⁴⁵

²³⁶ 75 Fed. Reg. 55, 13910 (Mar. 23, 2010).

²³⁷ *Id.*

²³⁸ *Id.* (citations omitted).

²³⁹ *Id.*

²⁴⁰ *Id.* Though a warranted, but precluded finding does not invoke any ESA protections, it does require the FWS to conduct annual 12-month findings to determine whether it should either list the bird, maintain the "but precluded" status, or find that listing is not warranted.

²⁴¹ Governor Fruedenthal Exec. Order No. 2008-2, *amended by* 2010-4, *rescinded by* 2011-1; Governor Mead Exec. Order No. 2011-5, *replacing* 2010-4.

²⁴² *Id.* Generally, these restrictions occur during the breeding and nesting season when sage grouse are most sensitive to human activity.

²⁴³ *Id.*

²⁴⁴ A lek is a traditional place where male sage grouse assemble during the mating season and engage in competitive displays to attract females.

²⁴⁵ *The BLM's Balancing Act: Managing the Needs of People and Sage-grouse on Public Lands*, U.S. DEP'T OF THE INTERIOR BUREAU OF LAND MGMT., http://www.blm.gov/wo/st/en/prog/more/fish_wildlife_and/sage-grouse-conservation/energy.print.html (last visited Apr. 23, 2014).

The FWS noted Wyoming's efforts in its 2010, twelve-month finding indicating that listing the greater sage grouse under the ESA was warranted, but precluded by higher priority listings.²⁴⁶ In that finding, the FWS noted that the core area strategy, if properly implemented, would provide adequate protection for sage grouse and their habitat in the State.²⁴⁷ It also suggested that the core area strategy could "ameliorate some threats to the greater sage-grouse."²⁴⁸

Despite Wyoming and other state's efforts to focus on increasing sage grouse numbers, the bird still faces potential ESA listing. Through a global settlement with the group Wild Earth Guardians, the FWS agreed to make a final determination on whether or not to list the greater sage grouse by September 2015.²⁴⁹ Consequently, the future of Wyoming's energy and agricultural industries, and ultimately a large portion of its tax base, hinge on that decision. Listing the sage grouse could have catastrophic impacts on Wyoming's economy by severely limiting Wyoming's agricultural and energy industries.²⁵⁰ Agriculture rangeland and oil and gas reserves both occur within sage grouse habitat. If the FWS lists the sage grouse, it could designate much of Wyoming's rangeland and extractive energy sources as critical habitat. This, in turn, could limit grazing and mining on federal, State, and private land, and reduce employment opportunities and tax revenues.

According to an American Petroleum Institute analysis of the oil and gas industry's impact on Wyoming, oil and gas industry activity accounted for over 8% of direct employment and over 20% of total employment impacts in the state in 2012.²⁵¹ Oil and gas activity also accounted for over 11% of direct wage income in the state, and over 21% of total labor income came from their operations in 2012.²⁵² Nearly 33,000 jobs in 2012 came from oil and gas operations, and over 80,000 jobs total were either directly or indirectly associated with their operations.²⁵³ Those industries directly or indirectly generated \$5.1 billion in labor income for Wyoming, and contributed enormously to Wyoming's tax base.²⁵⁴

²⁴⁶ 50 CFR § 17, 75 Fed. Reg. 55, 13,910 (Mar. 23, 2010).

²⁴⁷ *Id.*

²⁴⁸ *Id.* at 13,974.

²⁴⁹ Stipulated Settlement Agreement at 6, In Re Endangered Species Act Section 4 Deadline Litigation, Stipulated Settlement Agreement, 277 F.R.D. 1 (2011) (No. 10-377 (EGS)), available at http://www.fws.gov/endangered/improving_ESA/exh_1_re_joint_motion_FILED.PDF (last visited Apr. 23, 2014).

²⁵⁰ See *infra* notes 251–87 and accompanying text.

²⁵¹ *Economic Impacts of the Oil and Natural Gas Industry on the US Economy in 2011*, AM. PETROLEUM INST., (July 2013), available at http://www.api.org/-/media/Files/Policy/Jobs/Economic_impacts_Ong_2011.pdf. [hereinafter *Economic Impacts*].

²⁵² *Economic Impacts*, *supra* note 251.

²⁵³ *Economic Impacts*, *supra* note 251.

²⁵⁴ *Economic Impacts*, *supra* note 251.

The Consensus Revenue Estimating Group (CREG) is the official estimating body for all revenues received by the government of the State of Wyoming.²⁵⁵ According to the CREG, oil mineral severance taxes for Wyoming totaled nearly \$237 million in Biennium 2011–12,²⁵⁶ while natural gas severance taxes totaled over \$346 million.²⁵⁷ Assuming that around 15% of sales and use taxes are also attributable to the oil and gas industries, which amounted to \$969 million for the 2011–2012 biennium, then roughly \$145 million in sales and use taxes were collected from the oil and gas industry during that biennium.²⁵⁸ The coal industry also contributed over \$289 million in severance taxes to Wyoming in Biennium 2011–2012.²⁵⁹

In fact, the energy industry as a whole contributed \$1.839 billion in severance tax to the state of Wyoming in 2011–2012.²⁶⁰ Annually, Wyoming's energy sector contributes approximately seventy-five percent of the State's budget.²⁶¹ Consequently, anything negatively impacting the energy industry will have potentially significant impact on the operation of government, and the state's economy as a whole. Loss of jobs could mean emigration of workers and ultimately fewer hunters and anglers in the field—i.e. less revenue for the Department to manage wildlife.

Because sage grouse live largely where companies produce oil and gas, if the FWS lists the sage grouse as threatened or endangered under the ESA, it could impact the majority of Wyoming's oil and gas industry. However, a listing could hurt some places more than others. The areas Wyoming currently identifies as "core" are ones likely to face the most stringent restrictions upon listing.²⁶² Within just these core areas, a decision listing the sage grouse and stopping energy activity could translate into over 1,600 jobs lost directly related to oil and gas and nearly

²⁵⁵ CONSENSUS REVENUE ESTIMATING GRP., available at <http://eadiv.state.wy.us/creg/CregWebPage.pdf>. The executive and legislative branches of government created the group in 1983 as "a means of providing a single consensus estimate of revenues to aid in the budgeting process." *Id.* at 1.

²⁵⁶ *Wyoming State Government Revenue Forecast Fiscal Year 2013—Fiscal Year 2018*, CONSENSUS REVENUE ESTIMATING GRP. 12 (2012), available at http://eadiv.state.wy.us/creg/GreenCREG_Oct12.pdf.

²⁵⁷ *Id.*

²⁵⁸ The author calculated the \$145 million figure by multiplying \$969 million by .15.

²⁵⁹ *Wyoming State Government Revenue Forecast Fiscal Year 2013—Fiscal Year 2018*, *supra* note 256, at 12.

²⁶⁰ *Id.*

²⁶¹ Eli Bebout & Steve Harshman, *Planning for Wyoming's Future*, WYOFILE, Feb. 14, 2008, <http://wyofiletest.com/wyofile-2/planning-wyomings-future-budget/> (last visited Apr. 23, 2014). For fiscal year 2015/2016, Wyoming's legislature appropriated \$3.32 billion of general funds, approximately 75% of which derived from mineral production.

²⁶² See *infra* notes 263–65 and accompanying text; see *supra* note 241 and accompanying text.

4,000 total jobs lost related to the industry.²⁶³ The state could lose \$135 million in direct labor income and over \$255 million in total labor income.²⁶⁴ Associated with these losses, the State stands to lose nearly \$30 million in severance tax revenues and over \$3.6 million in state sales and use taxes annually.²⁶⁵ This does not even account for the losses of county and municipal taxes.

Of course, this is only a small sampling of the potential economic impacts on Wyoming since the numbers above only reflect the five percent of oil and gas development occurring in “core” areas. A significant proportion of the remaining ninety-five percent of oil and gas occurs in sagebrush habitat the FWS could designate as critical habitat if it chooses to list the sage grouse under the ESA. Although no economic data exists in an aggregate form to project the level of potential economic impact range wide in Wyoming from a listing decision, the Bureau of Land Management (BLM) is currently developing more restrictive land management practices on federal lands through amendments to Resource Management Plans to prevent a sage grouse listing in the first place.²⁶⁶ These new measures will negatively impact Wyoming’s economy whether or not the FWS lists the greater sage grouse.

In 2013, the Bureau of Land Management published drafts of four separate Resource Management Plan amendments and associated Environmental Impact Statements covering all federally owned land or minerals in Wyoming that contain greater sage grouse habitat—58.6 million acres.²⁶⁷ The BLM undertook these amendments in response to the March 2010, FWS determination that listing the sage grouse was warranted but precluded.²⁶⁸ In the FWS finding, FWS noted that the BLM’s existing Resource Management Plans inadequately protected the bird.²⁶⁹ The BLM is revising the plans to help avoid a listing of either threatened or endangered under the ESA.

In each EIS, the BLM laid out a series of development alternatives, and addressed impacts to jobs, as well as state and local revenue depending on which alternative they adopt.²⁷⁰ The preferred alternative in each Resource Management

²⁶³ See *Economic Impacts*, *supra* note 251, at 78 (basing calculations on proportion of oil and gas activity in core areas).

²⁶⁴ See *Economic Impacts*, *supra* note 251, at 78.

²⁶⁵ See *Economic Impacts*, *supra* note 251, at 78.

²⁶⁶ 78 Fed. Reg. 79,004 (Dec. 27, 2013).

²⁶⁷ Lowell E. Baier & Christopher E. Segal, *Economic Impact of 2013 BLM Sage Grouse Conservation Plan*, 27 (Mar. 1, 2014), available at <http://www.westernenergyalliance.org/sites/default/files/Sage%20Grouse%20Economic%20Report%20-%20Final%20from%20Minuteman%20Press.pdf>.

²⁶⁸ *Id.*

²⁶⁹ *Id.*; 75 Fed. Reg. 55, 13, 974 (Mar. 23, 2010).

²⁷⁰ Baier & Segal, *supra* note 267, at 27.

Plan is a surface disturbance cap of 5% per 640 acres within sage-grouse core habitat.²⁷¹ Using the BLM's preferred threshold will create significant economic impacts in Wyoming. A disturbance cap will result in a loss of nearly 4,100 jobs across multiple industries, and reduce energy extraction activities, costing the State and local governments over \$68 million a year in tax revenue.²⁷² Of course, all these impacts result from responding to a possible listing decision. An actual listing decision could have far greater impacts to the State's economy.

Other industries would feel the impact as well—most notably agriculture. The agriculture industry operates throughout Wyoming, including in nearly all sage grouse range.²⁷³ In its 2010 finding, the FWS identified livestock grazing as a threat to sage grouse.²⁷⁴ Because of this, any listing decision would likely impact grazing practices throughout Wyoming and consequently, the agriculture economy. The Draft BLM Resource Management Plans confirm that actions taken to protect sage grouse will negatively impact the agriculture industry. Under those plans, and assuming the BLM adopts its preferred alternative, even absent a sage grouse listing, the agriculture industry will face a two million dollar negative impact.²⁷⁵ The economic impacts created from the BLM taking land management steps on federal land to try and mitigate against a sage grouse listing are significant. However, the economic consequences of even greater restrictions of activities on federal and non-federal land as a result of the FWS listing the sage grouse as threatened or endangered under the ESA, are frightening to comprehend.²⁷⁶

This level of catastrophic economic impact is not without compare in the realm of ESA listing decisions. When the FWS listed the spotted owl in the Pacific Northwest, the timber industry, and whole towns associated with that industry, suffered immensely due to development prohibitions.²⁷⁷ Shortly after listing, several economic impact analyses investigated the spotted owl recovery plans, painting a grim economic picture.²⁷⁸ One study estimated that an owl recovery

²⁷¹ *Id.*

²⁷² *Id.* at 19.

²⁷³ See *supra* note 241 and accompanying text.

²⁷⁴ 75 Fed. Reg. 55, 13, 920 (Mar. 23, 2010).

²⁷⁵ Baier & Segal, *supra* note 267, at 13–14. The number jumps to a over \$53 million dollars if the BLM adopts its most restrictive alternative. *Id.* For purposes of assessing potential impact of a listing decision, it may make sense to assume the economic harm will more closely resemble the most restrictive alternative, rather than the preferred alternative.

²⁷⁶ It is worth noting that if FWS lists the sage grouse as threatened or endangered, there are certain mechanisms available under the ESA to allow for some limited development and incidental take. Three examples are Candidate Conservation Agreements, Candidate Conservation Agreements with Assurances, and protections under section 4(d) of the ESA (the 4(d) rule only applies to species listed as threatened, not endangered). These mechanisms do not eliminate negative economic impact, but they do serve a purpose in helping blunt the effects.

²⁷⁷ See *infra* notes 279–87 and accompanying text.

²⁷⁸ See *infra* notes 279–87 and accompanying text.

plan increasing the spotted owl's survival odds to 91% would decrease economic welfare by \$33 billion in 1990 dollars, with a disproportionate share of losses borne by the timber industry, a relatively small segment of the population.²⁷⁹ If the spotted owl plan targeted a 95% recovery rate, costs increased to \$46 billion.²⁸⁰ Another study estimated the short-run costs to the region of spotted owl protection as \$1.2 billion, and the long-run costs as \$450 billion.²⁸¹ The short-run cost calculation included the value of timber harvests foregone and the costs of displaced workers, whose numbers range from 13,272 to over 28,000 lost jobs.²⁸² Long-run costs included the value of lost future timber harvests while assuming displaced workers would eventually find similar jobs.²⁸³

Economists conducted another analysis in 1994, presenting immense and stark economic impacts of the FWS's spotted owl listing decision specific to Washington State.²⁸⁴ The reports estimated a loss of up to 31,000 jobs based on different restrictions laid out in the recovery plans.²⁸⁵ In a 2012, economic analysis for the spotted owl, the FWS appears to acknowledge that the estimates of 31,000 were closer to reality as it estimated that timber industry employment decreased by approximately 30,000 jobs.²⁸⁶ Though the economic impacts to Washington resulting from the spotted owl's listing were significant, it likely pales in comparison to the negative impacts a sage grouse listing would have on Wyoming. In Washington, timber does not contribute as much to employment, income, and tax revenue as natural gas and oil do in Wyoming. Oil and gas, and the energy sector as a whole, contribute seventy five percent of Wyoming's annual revenue.²⁸⁷ Anything negatively influencing this industry, such as a sage grouse listing, will profoundly impact the State's economy as a whole.

²⁷⁹ Jason Shogren, *Economics and the Endangered Species Act* (1997), <http://www.umich.edu/~esupdate/library/97.01-02/shogren.html>; C. Montgomery, G. Brown Jr., & M. Darius. *The marginal cost of species preservation: The northern spotted owl*, 26 J. ENTL. ECON. MGMT. 111, 111-128 (1994) (basing figures on sustaining a population of about 1,600 to 2,400 owl pairs).

²⁸⁰ See Shogren, *supra* note 279; Montgomery, Brown, Darius, *supra* note 279.

²⁸¹ Shogren, *supra* note 279; J. Rubin, G. Helfand, & J. Loomis, *A benefit-cost analysis of the northern spotted owl*, 89 J. OF FORESTRY 25, 25-30 (1991).

²⁸² *Id.*

²⁸³ *Id.*

²⁸⁴ See *id.*; Montgomery, Brown, Darius, *supra* note 279.

²⁸⁵ Erik Loomis & Ryan Edgington, *Lives Under the Canopy: Spotted Owls and Loggers in Western Forests*, 52 NAT. RESOURCES J. 99, 115 (2012).

²⁸⁶ *Economic Analysis of Critical Habitat Designation for the Northern Spotted Owl*, INDUS. ECON., INC., ES-6 (May 29, 2012), available at <http://www.fws.gov/oregonfwo/species/data/northernspottedowl/Documents/DraftEconAnalysis.5.29.12.3.pdf> (last visited Apr. 23, 2014).

²⁸⁷ Tony Ross & Kermit Brown, *Budget moves Wyo. forward*, WYO. TRIBUNE-EAGLE, Mar. 12, 2014, available at http://m.wyomingnews.com/articles/2014/03/19/opinion/guest_column/01column-03-13-14.txt#.U1Sbnf1OXIU (last visited Apr. 23, 2014).

Besides the threats to the economy from listing species under the ESA, a listing decision with such broad economic impacts could lead to inadequate funding for the Game and Fish Department to manage wildlife adequately. Lost jobs and lost annual earnings associated with a threatened or endangered listing decision for sage grouse could result in declining license sales, less money spent on outdoor equipment, and reduced travel. This in turn could mean less revenue flowing into the Department, and therefore less money directed toward wildlife management.

B. Economic Impact of Reducing the Number of Available Licenses by 10% or Selling ten percent Fewer Licenses.

Fewer resources for habitat improvement projects, fewer enforcement officers, a series of hard winters, recessions, or other factors could potentially reduce hunting and angling opportunities for people, or cause fewer people to go into the field in pursuit of game. Any reduction of sportsmen in the field would have some level of economic impact on both Wyoming and the Department's operations.

In 2011, the Department raised \$32,270,559 from the sale of hunting and fishing licenses.²⁸⁸ Aside from the license revenue going directly back to the Department to manage wildlife, hunters and anglers also spent a total of \$361,992,835 pursuing these animals in 2011, which went into the Wyoming economy.²⁸⁹

If the number of hunting and fishing licenses issued decreases by ten percent,²⁹⁰ the Department would realize losses in revenue of \$3,227,055.90.²⁹¹ The Department's ability to manage wildlife would immediately feel this impact, and the State as a whole would lose roughly \$36,199,283.50 of hunting and angling direct expenditures.²⁹² The loss of these direct expenditures would reduce available taxes by more than \$1.4 million dollars annually, taxes currently supporting everything from highways and schools to hospitals and prisons.²⁹³

²⁸⁸ The Department sold 269,008 hunting licenses totaling \$26,828,406 and 291,065 fishing licenses totaling \$5,442,153. *2012 Annual Report, WYO. GAME AND FISH DEP'T 88* (2012), http://wgfd.wyo.gov/web2011/Departments/WGFD/pdfs/WGFDANNUALREPORT_20120003850.pdf (last visited Apr. 25, 2014). The author compiled these numbers using the tables on A-28, B-1 and B-2. This does not account for people that purchased commissioner licenses, commercial fishing licenses, lifetime licenses, or governor's licenses.

²⁸⁹ *Id.* at B-2.

²⁹⁰ The author chose ten percent at random for illustrative purposes.

²⁹¹ *Id.* The author calculated this number by multiplying the total license sales of \$32,270,559 by 10%. Arriving at this number assumes that each license category would decrease equally.

²⁹² *Id.* The author calculated this number by multiplying the total of \$361,992,835 by 10%.

²⁹³ Calculation of the author based on a state sales tax rate of four percent, thus multiplying \$36,199,283.5 by 4%. This does not account for county or local taxes, or lodging, gasoline, or other special taxes, which would certainly increase this number.

In short, maintaining a healthy, sustainable, and diverse wildlife and fisheries population not only benefits sportsmen, but is valuable for business owners and local, county, and state governments that depend on revenue generated from sportsman activities.

We are clearly at a crossroads in wildlife management. Wyoming declares wildlife property of the state to manage for the benefit of all of its citizens, yet puts the onus of funding wildlife management operations almost exclusively on sportsmen.²⁹⁴ All of the new challenges and responsibilities facing wildlife managers make it no longer prudent to continue with the current user-pays model with sportsmen identified as the sole users. The North American Model of Wildlife Conservation must adapt to the new realities discussed in this article. Part of that adaptation involves discussing how policy makers define “users” of wildlife.

Currently, a user is one who consumes wildlife through hunting or angling.²⁹⁵ However, the energy industry, agriculture industry, land developers, or other industries indirectly consume Wyoming’s wildlife. Thus, these groups should bear more direct costs for funding the Game and Fish Department. Stated another way, industries indirectly consuming wildlife should be defined and treated as “users” under the North American Model. Others, like the hundreds of thousands of people who photograph wildlife, camp, hike, and otherwise tour Wyoming for the purpose of viewing Wyoming’s wildlife and natural wonders, do not consume wildlife in the same sense, but they still use the resource and likewise should be “users” sharing responsibility for wildlife management along with sportsmen.

VIII. RECOMMENDATIONS

The following section outlines a series of methods for more fairly distributing the Department’s funding sources, while maintaining the basic tenant of the North American Model of Wildlife Conservation that the user of the wildlife should bear the cost of its management. Principally, the Wyoming Legislature should present a proposed constitutional amendment to the voters to establish a long-term, reliable funding source for the Department free from legislative meddling and political influence. To ensure all “users” of wildlife contribute to funding its management, the constitutional amendment should re-direct a percentage of taxes currently collected from the sale of outdoor equipment and a percentage of money currently flowing by statutory directive into the Permanent Wyoming Mineral Trust Fund to the Department. These options allow the legislature to avoid raising taxes or license fees, while fulfilling Wyoming’s trust obligation to its wildlife and its people.

²⁹⁴ See *supra* Part IV.

²⁹⁵ Angling is another way to say fishing.

A. Diversion of Funds from Sales Tax Collected on Outdoor Equipment

States across the country have tried many different options to raise additional revenue to fund wildlife management. For example, Arizona, Colorado, and Maine require their state lotteries to distribute some of the revenue they generate to fund wildlife management.²⁹⁶ This is not an option for Wyoming, as the bulk of the revenue generated from Wyoming's newly formed lottery will go to support cities and towns.²⁹⁷ Other states, like Georgia and Pennsylvania, allow residents to purchase license plates that help fund wildlife.²⁹⁸ States like Arkansas and Missouri created a general sales tax directed to their wildlife management agencies.²⁹⁹

Though a general sales tax could generate enough revenue in Wyoming to provide significant funding relief to the Department, the State's current political climate would likely prevent such a law from passing. Wyoming politicians have been reluctant to raise taxes, and view government as both inefficient and ostentatious. Any legislator proposing an increase in sales tax during times of budget surpluses may put their political future at risk.

Instead of a general sales tax, Texas and Virginia have an outdoor equipment sales tax.³⁰⁰ The state tax is similar to the Pittman-Robertson Act in that revenues generated from the tax must return to identified wildlife and conservation programs.³⁰¹ However, like a general sales tax, a new tax on outdoor equipment would face significant, and potentially insurmountable, roadblocks in Wyoming's current political climate.

As a solution, the Wyoming legislature could adopt a modified version of Virginia and Texas' approach to provide additional revenue to the Game and Fish Department without raising taxes. Instead of raising taxes, Wyoming could divert funds generated by the sale of outdoor equipment under Wyoming's current sales tax structure to the Department. Since people purchasing outdoor equipment are likely wildlife users in either the traditional hunting or fishing sense, or as part of an indirect use such as camping, hiking, photographing, or other outdoor activity experiences, this approach meets the objective of having users besides sportsmen provide funding for wildlife management.

²⁹⁶ Cindy McKinney et al., *Investing in Wildlife: State Wildlife Funding Campaigns*, 209–10 (Apr. 2005), available at <http://www.snre.umich.edu/ecomgt/pubs/finalReport.pdf> (last viewed Apr. 23, 2014).

²⁹⁷ HEA 0028, 2014 Budget Session. The diversion of lottery funds to cities and towns must occur until June 30, 2019, at which point money may become available for appropriation to other purposes, such as wildlife management.

²⁹⁸ McKinney, *supra* note 296, at 209–10.

²⁹⁹ *Id.* at 246.

³⁰⁰ *Id.* at 253–54.

³⁰¹ *Id.* at 12–13.

Every year, people spend approximately \$148,000,000 on outdoor equipment for hunting, fishing, and wildlife watching in Wyoming.³⁰² They already pay a 4% state sales tax on those goods, which translates into \$5,920,000 of tax revenue diverted to the Department under this proposal.³⁰³ At this time, one cannot know if the revenue generated for the Department by diverting taxes collected on outdoor equipment will cover funding deficiencies long into the future. However, it may be sufficient to prevent the Legislature from raising license fees for hunters and anglers for a number of years—helping reverse the trend of declining interest in hunting and angling, and recruit a new generation of sportsmen.

Despite the obvious benefits of diverting existing tax revenue collected from the sale of outdoor equipment to help fund the Department, such a proposal faces numerous challenges. First, in 2001, the Wyoming legislature undertook a concerted effort to eliminate earmarking general fund dollars to retain the ability and flexibility to manage State resources on a year-to-year basis.³⁰⁴ Many legislators involved in the 2001 movement continue to serve in the Legislature, and may resist efforts to create a new earmark of general fund dollars.

Second, the Legislature uses general fund dollars to fund operations of nearly every State agency.³⁰⁵ Agency directors will almost certainly raise concerns that diverting these general fund dollars to the Department will negatively impact their ability to function as mandated. While these directors are correct that diverting funds would likely create a short-term decrease in revenue available to other agencies, explaining that a short-term decrease may effectively create long-term stability may ameliorate those concerns.

The rationale supporting a short-term decrease in agency funding can be explained two different ways. First, the existing constitutional and statutory structure in Wyoming directs the legislature to adequately fund wildlife management, i.e. the Department, where other agencies may not have the same mandate. For example, the legislature expressly stated that wildlife is the property of the state and imposed a duty to manage wildlife, which indicates that the State has a fiduciary responsibility to provide whatever funding is necessary to maintain a vibrant wildlife population for future generations. Additionally, Wyoming citizens adopted a Constitutional amendment in 2012 preserving

³⁰² 2011 Annual Report, WYO. GAME AND FISH DEP'T 8–12 (2011), http://wgfd.wyo.gov/web2011/Departments/WGFD/pdfs/WGFDANNUALREPORT_20110001745.pdf (last visited Apr. 24, 2014).

³⁰³ The author of this article arrived at this number by multiplying \$148,000,000 by .04. The result of this calculation equals the amount of tax revenue generated with a tax of 4%.

³⁰⁴ Trevor Brown, *Wyoming's roads are millions short on cash. Who's to blame?*, WYO. TRIBUNE-EAGLE, May 12, 2012, http://www.wyomingnews.com/articles/2012/05/13/news/19local_05-13-12.txt#.U1Shdf1OXIU (last viewed on Apr. 23, 2014).

³⁰⁵ See generally 2014 Wyo. Sess. Laws 65–74.

citizens' opportunity to hunt and fish.³⁰⁶ Implicit under this amendment, the State must manage wildlife in a way that ensures sufficient huntable populations for Wyoming citizens.

The second rationale for funding the Department to the detriment of other agencies is failing to adequately fund wildlife management could lead to the FWS listing species under the ESA.³⁰⁷ A listing could negatively impact the State's economy, reducing the tax revenue available to the State for funding its operations.³⁰⁸ As a result, less money would be available for all agencies. Conceivably, losses of tax revenue and impacts to other agencies under this scenario are far greater than reducing diversion of existing tax revenue to agencies. Consequently, one can argue that it may behoove directors of other State agencies to support diverting funds for the Department to avoid a more dramatic future agency funding decrease.

Diverting taxes generated by the sale of outdoor equipment creates a new revenue-stream for the Department and includes non-consumptive users in the North American Model. However, implementation challenges may arise because of the money diverted from other agencies. Therefore, the state should look at other options, either independently, or in conjunction with a diversion of outdoor equipment taxes. One such option involves the Legislature redistributing some portion of the funds statutorily directed to the Permanent Wyoming Mineral Trust Fund. As with an outdoor equipment tax diversion, the legislature would not have to raise taxes or license fees.³⁰⁹ Unlike the outdoor equipment option, however, there would be no decrease to other agencies operating budgets.³¹⁰

B. Redistributing Funds Statutorily Directed to the Permanent Wyoming Mineral Trust Fund

In 1968, Wyoming had a state bank balance of only \$80.³¹¹ Fearing insolvency, in 1969, the Wyoming legislature established a severance tax on minerals for the first time.³¹² In 1974, voters went to the polls to consider a constitutional amendment aimed at preparing for a day when minerals would no longer be available for extraction.³¹³ The measure passed, and in 1975, Wyoming created

³⁰⁶ WYO. CONST. art. 1, § 39.

³⁰⁷ See *supra* Part VII.

³⁰⁸ See *supra* Part VII.

³⁰⁹ See *supra* Part VIII.A.

³¹⁰ See *supra* Part VIII.A.

³¹¹ *Permanent Wyoming Mineral Trust Fund (PWMTF) FAQ: Why was the Permanent Wyoming Mineral Trust Fund (PWMTF) created?*, WYO. TAXPAYERS ASS'N, <http://www.wyotax.org/PMTF.aspx> (last visited Apr. 23, 2014) [hereinafter *PWMTF FAQ*].

³¹² *PWMTF FAQ*, *supra* note 311.

³¹³ *PWMTF FAQ*, *supra* note 311.

a stabilization account called the Permanent Wyoming Mineral Trust Fund (PWMTF).³¹⁴ Under the terms of the Wyoming Constitution, the state must contribute one and a half percent (1.5%) of the severance tax to the corpus of the PWMTF.³¹⁵ In turn, interest income from the PWMTF is placed into the state's general fund to support State operations. The yield on the PWMTF varies greatly, but in 2012, expendable funding directed toward the general fund was roughly four percent of the PWMTF balance.³¹⁶

Contributions to the PWMTF remained unchanged until 2005. That year, Wyoming was in the midst of a mineral boom, and the state had enormous revenue surpluses. Consequently, the Legislature passed a bill, signed by the Governor, requiring payment of an additional one percent (1%) of the severance tax into the PWMTF.³¹⁷ Consequently, today Wyoming diverts two and one half percent (2.5%) of severance taxes to the corpus of the PWMTF.³¹⁸ The PWMTF interest contributes significantly to the operations of state government.³¹⁹ The PWMTF contributed \$235,847,144, or nearly twenty percent (20%), of the general fund's revenues in the 2012 fiscal year.³²⁰

The CREG estimate for fiscal year 2013–2014 severance tax collections shows expected tax revenues of around \$1.731 billion.³²¹ Of this, two and one half percent (2.5%) would be diverted to the PWMTF, for a total of \$43,275,000, including \$25,965,000 in constitutionally mandated and \$17,310,000 in statutorily-mandated funds.³²² The ending balance of the PWMTF in the 2012 fiscal year was \$5,440,833,650.³²³ With the addition of the fiscal year 2013–2014

³¹⁴ *PWMTF FAQ*, *supra* note 311.

³¹⁵ WYO. CONST. art. 15, § 19.

³¹⁶ The author of this article calculated this number by dividing \$235,847,144 (the contribution from the PWMTF to the general fund in 2012) into the 2012 fiscal year ending balance of \$5,440,833,650. See *PWMTF FAQ*, *supra* note 311.

³¹⁷ *PWMTF FAQ*, *supra* note 311.

³¹⁸ *PWMTF FAQ*, *supra* note 311.

³¹⁹ For example, the PWMTF sent \$3,222,070,291 to the general fund as interest income from 1975–2012, including \$1,556,590,461 from 2002–2012, during record mineral production for the State. *PWMTF FAQ*, *supra* note 311.

³²⁰ *PWMTF FAQ*, *supra* note 311.

³²¹ *Wyoming State Government Revenue Forecast Fiscal Year 2014-Fiscal Year 2018*, CONSENSUS REVENUE ESTIMATING GRP., 10 (Oct. 2013), available at http://eadiv.state.wy.us/creg/GreenCREG_Oct13.pdf (last visited Apr. 23, 2014).

³²² *Id.* The author calculated the total diversion into the PWMTF by multiplying \$1,731,000,000 by .02; the Constitutionally mandated diversion into the PWMTF by multiplying \$1,731,000,000 by .015 and; the statutorily mandated diversion into the PWMTF by multiplying \$1,731,000,000 by .01.

³²³ *PWMTF FAQ*, *supra* note 311.

severance tax diversion, the balance would be around \$5,484,108,650.³²⁴ With a conservatively estimated one percent (1%) return on this corpus, the interest generated for purposes of supplementing the State's operating budget is around \$54,841,086.50.³²⁵

Instead of adding to the corpus of the PWMTF, the legislature should consider dedicating a portion of the statutorily mandated one percent (1%) diversion to supplement the Department budget for wildlife management. Though the legislature may want to consider dedicating the full one percent of severance taxes currently going to the PWMTF to the Department, for purposes of this article, we will analyze the economic realities of dedicating five million dollars of the Department.

Using the conservative one percent (1%) rate of return described above, the diversion of five million dollars to the Department would only minimally impact the PWMTF. In fact, it would result in a total of only \$50,000 less flowing into the general fund from interest off the PWMTF.³²⁶

This illustration shows that directing additional money to the Department may have greater value for the state as a whole than contributing such funds to the PWMTF for distribution to all state agencies. Directing five million dollars of the statutorily mandated PWMTF contributions to the Department at a 1% rate of return could cost other state agencies a combined \$50,000 in general fund appropriations. But failing to adequately fund the Department

³²⁴ *Wyoming State Government Revenue Forecast Fiscal Year 2014-Fiscal Year 2018*, CONSENSUS REVENUE ESTIMATING GRP., 10 (Oct. 2013), available at http://leadiv.state.wy.us/creg/GreenCREG_Oct13.pdf (last visited Apr. 23, 2014). The author calculated this total by adding the fiscal year 2013–2014 contribution of \$43,275,000 to the ending balance of the PWMTF in the 2012 fiscal year of \$5,440,833,650.

³²⁵ *Id.* The author calculated this number by multiplying \$5,481,108,650 by .01. It is worth noting that while this article uses a very conservative return of one percent, the actual returns have historically been much greater. For example, the PWMTF grew 7.7% in fiscal year 2012, and 20.3% in fiscal year 2006. Any returns greater than the 1% articulated in this example would increase the impact to the PWMTF. For example, a 2% return under this example would result in a roughly \$100,000 less flowing into the general fund from interest off the PWMTF. See also *PWMTF FAQ*, *supra* note 311.

³²⁶ *PWMTF FAQ*, *supra* note 311. To arrive at this number of \$52,000, the author subtracted five million dollars from the \$43,275,000 projected to flow into the PWMTF, which would mean a total of \$38,275,000 of severance taxes flowing into the PWMTF. This leaves an ending balance for the PWMTF of \$5,479,108,650, or five million less than if the money were not diverted. At a one percent (1%) return to the general fund, the state would still realize \$54,791,086.50. If the five million were included in the PWMTF, the total ending balance would have been \$5,484,108,650. At a one percent (1%) return to the general fund on this original amount, the state would realize \$54,841,086.50. Subtracting \$54,791,086.50 from \$54,841,086.50 equals the \$50,000 change to the interest generated from the general fund if the legislature directs five million dollars to the Department.

to the point that the FWS lists particular species under the ESA could cost the State hundreds of millions of dollars.³²⁷ Therefore, the legislature should direct a portion of the money statutorily flowing to the PWMTF to the Department. If done in conjunction with diverting tax revenue generated by outdoor equipment sales, the Department could manage wildlife well into the future. However, to avoid risks associated with legislative mandates, the legislature should propose a constitutional amendment firmly securing these funding options for the future.

C. *Constitutional Amendment*

Whether the State uses money currently going into the PWMTF, diverts a percentage of existing sales and use taxes attributable to outdoor equipment purchases, or a combination of the two, the Legislature should propose a Wyoming Constitutional amendment directing funding to the Department for wildlife management purposes. Though directly funding wildlife management through a Constitutional amendment is unprecedented in Wyoming, it occurs occasionally nationally.³²⁸

Colorado's Constitution directs the net proceeds of every state-supervised lottery game to the "preservation, protection, enhancement and management of the state's wildlife, park, river, trail and open space heritage . . ."³²⁹ Missouri and Arkansas adopted conservation sales taxes directing revenue to their respective game and fish department for managing each state's wildlife resources.³³⁰ These states recognized that conserving their wildlife resources required a secure and dedicated financial source that politicians could not dip into for other, unrelated programs. If the Wyoming legislature merely adopted a statute directing money to the Department, new legislatures could re-direct that money based on the political whims of the time. Besides the risks of the legislature removing funding in the future, there are at least four other compelling reasons to propose a constitutional amendment in Wyoming.

First, the legislature declared wildlife property of the State.³³¹ Inherent in that declaration is a recognition that the State must take care of its wildlife, including providing adequate funding to manage and preserve wildlife. Second, even if the state does not legally own the State's wildlife because of federal supremacy, the United States Supreme Court indicated that wildlife is held in trust by federal and state governments for the benefit of all people. Therefore, states have an obligation to preserve wildlife for people's benefit and must adequately fund such preservation to avoid becoming derelict on their duties.

³²⁷ See *supra* Part VII.

³²⁸ See *infra* notes 329–30 and accompanying text.

³²⁹ COLO. CONST. art. XXVII, § 1.

³³⁰ MO. CONST. art. IV, § 43; ARK. CONST. amend. 75, § 2.

³³¹ See *supra* notes 142–45 and accompanying text.

Third, Wyoming citizens adopted a constitutional amendment in 2012 preserving Wyoming citizens' opportunity to hunt, fish, and trap.³³² In addition to preserving those opportunities, this constitutional amendment stated that it did not "alter the duty of the state to manage wildlife."³³³ Preserving the opportunity to hunt, fish, and trap implies that there will be species available for future generations to hunt, fish and trap. Ensuring these species are available necessitates adequate funding for their preservation.

The second part of the 2012 amendment affirms that the state has a *duty* to manage wildlife. In fact, this language confers a moral and legal obligation to adequately fund wildlife management.³³⁴ Because the Constitution invokes a legal obligation to fund wildlife management, a constitutional amendment creating a funding mechanism should necessarily follow. A funding amendment would ensure the State adheres to its existing constitutional duty to manage wildlife, and avoids the temptation to violate the Constitution by underfunding wildlife management for the benefit of non-constitutionally mandated programs.

Finally, when the Legislature created the Game and Fish Commission and its associated licensing structure, it did so with a desire to keep politics out of wildlife management.³³⁵ Those leaders recognized the State had a duty to manage and protect wildlife populations for all people. They further recognized that the best means of accomplishing that goal required a certain degree of political autonomy for the Department. Presenting a constitutional amendment to the people is consistent with this long-articulated objective. An amendment would greatly restrict the Legislature's ability to respond to political whims and redirect funds previously allocated to wildlife management.

In conclusion, proposing a Constitutional amendment to implement either discussed funding alternative perfectly harmonizes with existing statutory and constitutional mandates for the State to fund wildlife management appropriately.³³⁶ Further, it would keep politics out of wildlife management by preventing politicians from influencing biology through granting or withholding appropriations.

³³² WYO. CONST. art. 1, § 39.

³³³ *Id.*

³³⁴ WEBSTER'S NEW WORLD COLLEGE DICTIONARY 422 (3d ed. 1997) (defining "duty").

³³⁵ Laura Hancock, *Governor wants to tap general fund to support Game and Fish: Governor Says Responsibility Lies with Entire State, Not Just Sportsmen*, CASPER STAR-TRIBUNE, Apr. 18, 2014, http://trib.com/news/state-and-regional/govt-and-politics/governor-wants-to-tap-general-fund-to-support-game-and/article_0de2d97d-400c-544e-afd6-5e78b8b06121.html (last visited Apr. 23, 2014).

³³⁶ See *supra* Part VIII.

IX. CONCLUSION

The North American Model of Wildlife Conservation is based upon a relatively basic and ingenious system—user pays. Therefore, if you hunt or fish you pay for managing these species so there is something for you to hunt and fish. During the early stages of wildlife management, this approach made perfect sense. Species such as elk, deer, antelope, moose, and bison were nearly eradicated during the late portions of the 19th century and early part of the 20th century. States established early laws to protect species that were being over-hunted. These laws worked astonishingly well.

However, political pressures on both a state and federal level have placed additional responsibilities and financial burdens on wildlife agencies—including the Wyoming Game and Fish Department. Where sportsmen dollars were once sufficient to manage the state's huntable and fishable species, they are now diverted to other programs, such as working to prevent the FWS from listing species under the ESA, compensating landowners for damage to their property caused by game animals, feeding elk to avoid co-mingling with livestock, and a host of other programs. However, sportsmen are not the only “users” of wildlife, or the only ones benefitting from these programs. The agriculture and energy industries both directly and indirectly “use” wildlife, and wildlife photographers, backpackers, hikers, bikers, and tourists also “use” wildlife. These groups should share in funding wildlife management along with sportsmen because without their help, through implementing new wildlife agency funding sources, sportsmen will no longer be able to shoulder the burden of funding wildlife management on their own. If sportsmen cannot adequately fund wildlife management, and no new funding sources are developed, our wildlife resource and economy will suffer.

To ensure all “users” contribute to funding wildlife management, the Wyoming legislature should propose a constitutional amendment doing two things. First it should propose to divert funds from taxes already paid on outdoor equipment to the Department. Second, it should propose to re-direct a portion of money currently statutorily deposited in the PWMTF to the Department. Such an amendment would secure a revenue stream largely free from re-allocation to non-wildlife related programs. It would also work in conjunction with an existing constitutional duty to manage wildlife. Though there may be political resistance to earmarking money for a particular agency, our wildlife and economy both stand to suffer if nothing is done—something no one wants to see happen.