The North American Model of Wildlife Conservation in Wyoming: Understanding It, Preserving It, and Funding Its Future

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

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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)
formally described that same year. Through a resolution, the AFWA identified seven elements best articulating the means of managing wildlife in the United States. Each of these tenants is part of the overarching, guiding principle of the North American Model—hunters and anglers 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.

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. 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

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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.


dollars notwithstanding the fact that, every year, fewer people hunt and fish 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. 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. 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. The focus
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.\footnote{11}{See infra Part II.B.}

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.\footnote{12}{See infra Parts VI–VII.} 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.\footnote{13}{See infra Part VIII.}

\section{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 innumerably across the continent.\footnote{14}{See infra notes 12–15 and accompanying text.} 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.\footnote{15}{See infra Part II.A.} 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.\footnote{16}{See infra Part II.B.}

\subsection{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,\footnote{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).} while billions of passenger pigeons filled the sky.\footnote{18}{Id. at 2.} In the west lived millions of bison and pronghorn antelope, as well as thousands of grizzly bears, elk, big horn sheep, and moose.\footnote{19}{Id. at 2.}

These early American settlers viewed wildlife regulation as “profit a prendre”—those capturing the wildlife retain the right to possess or own what they
Early settlers freely hunted and trapped wildlife primarily for subsistence and commercial purposes, rather than the recreational purposes of today’s hunters. 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. 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. 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. The railroad made shipping of bison hides, meat, and tongues economical, leading to unparalleled slaughter. In 1865, commercial hunters killed one million bison, and by 1871, that number increased to five million per year. Just fifteen years later, a census revealed that only 540 bison remained in the entire United States—nearly all in Yellowstone National Park.

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

21 Brown, supra note 17, at 5.
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.
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.\textsuperscript{34} Due to the unregulated slaughter of pigeons, by 1900, no pigeons remained in the wild.\textsuperscript{35} The last passenger pigeon died in captivity in 1914.\textsuperscript{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.\textsuperscript{37}

\textbf{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.\textsuperscript{38} In 1842, the United States Supreme Court first explored the relationship between the government, its citizens, and wildlife.\textsuperscript{39} In \textit{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.\textsuperscript{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.\textsuperscript{41} This decision, coupled with the widespread over-harvest of animals, provided the needed impetus for states to begin enacting laws and regulations governing the harvest of game animals.\textsuperscript{42}

In 1848, Orange and Rockland Counties of New York adopted some of the nation’s first game laws\textsuperscript{43} in an effort to regulate trout fishing and the hunting of woodcock, quail, and deer.\textsuperscript{44} Other jurisdictions followed suit,\textsuperscript{45} but simply having regulations did not stem the tide of commercial hunting or exploitation

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\textsuperscript{34} \textit{Smithsonian Information}, \textit{supra} note 28.
\textsuperscript{35} \textit{Smithsonian Information}, \textit{supra} note 28.
\textsuperscript{36} \textit{Smithsonian Information}, \textit{supra} note 28.
\textsuperscript{37} \textit{Brown}, \textit{supra} note 17, at 4–6.
\textsuperscript{38} \textit{Martin v. Waddell’s Lessee}, 41 U.S. 367 (1842).
\textsuperscript{39} \textit{Id.} at 380–90.
\textsuperscript{40} \textit{Id.} at 406–18.
\textsuperscript{41} \textit{Id.}
\textsuperscript{42} \textit{Mark Damien Duda, Martin F. Jones & Andrea Criscione, The Sportsman’s Voice: Hunting and Fishing in America} 1–4 (2010).
\textsuperscript{43} \textit{Brown}, \textit{supra} note 17, at 5.
\textsuperscript{44} \textit{Brown}, \textit{supra} note 22, at 29.
\textsuperscript{45} Katie Spidalieri, \textit{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.\(^\text{46}\)

Despite these early efforts, people continued commercially hunting wildlife
at alarming rates.\(^\text{47}\) Recognizing the great strain on the nation’s wildlife caused by
commercial hunting, dozens of hunting, conservation, and scientific organizations
formed in the 1880s.\(^\text{48}\) These organizations lobbied for stricter laws to prevent
market hunting\(^\text{49}\) and wasteful sport hunting.\(^\text{50}\)

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.\(^\text{51}\) By 1910, every state in the union had some sort
of commission to protect wild game and fisheries.\(^\text{52}\) Additionally, states created
wildlife agencies whose sole purpose was managing the taking of species and
enforcing hunting seasons and bag limits.\(^\text{53}\) 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.\(^\text{54}\) However, later decisions eroded this belief through
assertions of federal supremacy over the state’s wildlife management authority.\(^\text{55}\)
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, \textit{supra} note 17, at 5.

\(^{47}\) Brown, \textit{supra} note 17, at 5–8.

\(^{48}\) Brown, \textit{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

\(^{49}\) Market hunting is a commercial form of hunting where animals are harvested for both

\(^{50}\) Brown, \textit{supra} note 17, at 6–7.

\(^{51}\) Brown, \textit{supra} note 17, at 8–9.

\(^{52}\) Brown, \textit{supra} note 17, at 8.

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

\(^{54}\) \textit{See generally} Geer v. Connecticut, 161 U.S. 519, 529 (1896), \textit{overruled by} Hughes v.

\(^{55}\) \textit{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. 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. 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.” 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.

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. 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. Accordingly, the Court confirmed that the federal government could take actions to protect wildlife, despite the state ownership doctrine. Subsequent state challenges to federal oversight of wildlife were similarly unsuccessful.

In 1976, the State of New Mexico challenged the 1971 Wild and Free-Roaming Burros Act. 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.
61 Id. at 434.
62 Id.
63 See supra notes 64–71 and accompanying text (discussing other cases confirming federal authority to manage wildlife).
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 \textit{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 \textit{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 \textit{Geer} to support state regulation of wildlife, but in a trust capacity rather than an ownership capacity.\(^{72}\) Ultimately, the cases following \textit{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.

\textbf{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

\(^{65}\) \textit{Id.} at 531 (quoting 16 U.S.C. §§ 1331, 1332(b) (1970 ed., Supp. IV)).

\(^{66}\) \textit{Id.} at 536–41.


\(^{68}\) \textit{Id.}

\(^{69}\) \textit{Id.} at 337–38.

\(^{70}\) \textit{Id.} at 335.

\(^{71}\) \textit{Id.} at 335–36.

\(^{72}\) \textit{E.g.}, \textit{Pullen v. Ulmer}, 923 P.2d 54, 60 (Alaska 1996) (“nothing in [\textit{Hughes} . . . indicated any retreat from the state’s public trust duty discussed in \textit{Geer}”); \textit{State v. Fertterer}, 841 P.2d 467, 470–71 (Mont. 1992) (noting that \textit{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.\textsuperscript{73} Congress therefore passed the Forest Reserve Act,\textsuperscript{74} which led to the creation of Shoshone National Forest in northwest Wyoming—the nation’s first federally managed forest reserve.\textsuperscript{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.\textsuperscript{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.\textsuperscript{77} Feeding his passion, Roosevelt launched a habitat conservation agenda unmatched by other leaders.\textsuperscript{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.\textsuperscript{79} In all, Roosevelt set aside 148 million acres—more than 50,000 for each day he was in office.\textsuperscript{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

\textsuperscript{73} Management of Public Land Resources, 60 Yale L.J. 455, 460 (1951).


\textsuperscript{78} Brown, supra note 17, at 7–8.

\textsuperscript{79} Brown, supra note 17, at 7–8.

\textsuperscript{80} Brown, supra note 17, at 8.

In 1918, Congress entered the foray of regulating the harvest of wildlife by enacting the Migratory Bird Treaty Act.\footnote{16 U.S.C. §§ 703−713 (1918).} 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.\footnote{Id.; see James Lockhart, Annotation, \textit{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).} 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.\footnote{16 U.S.C. §§ 703−713 (1918).}

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.\footnote{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-
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.

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99 Id.
100 Id.
101 Id.; Spidalieri, supra note 45, at 776.
102 Spidalieri, supra note 45, at 776.
103 Id.
107 Spidalieri, supra note 45, at 776.
109 Id.
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. 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.

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. 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.

C. Migratory Bird Hunting Stamp Act

In 1934, Congress passed the Migratory Bird Hunting Stamp Act—the first major federal statute establishing a fund with the principle purpose of wildlife conservation. 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. It was also due to early

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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.


settlers draining millions of acres of marshy areas critical for breeding to create additional land for cultivation. 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.

The federal government uses money raised from the sale of these stamps to buy land for the National Wildlife Refuge System. Funds from stamp sales have protected more than six million acres of waterfowl habitat in the United States. 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. The bill was highly ineffective, and contained no enforcement provisions for the taking of wildlife. Consequently, throughout the 1870s and 1880s, Wyoming’s territorial legislature passed several other laws attempting to protect wildlife, though to little avail.

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. However, even with this increased interest, market hunters continued decimating Wyoming’s wildlife because the legislation was

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119 Id.
120 Id.
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.
126 Id. at 1056.
very difficult, if not impossible, to enforce.\textsuperscript{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.\textsuperscript{128} To enforce these new laws, the legislature authorized the fish commissioner to act as a state game warden.\textsuperscript{129} Later, the legislature created the office of the State Game Warden, which Albert Nelson first held in 1899.\textsuperscript{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.\textsuperscript{131}

In 1903, the Wyoming legislature enacted the hunting license system\textsuperscript{132} and put mechanisms in place in an effort to make game law enforcement more effective.\textsuperscript{133} In 1911, the legislature established the State Game Commission,\textsuperscript{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.\textsuperscript{135} The Commission provided oversight for the Game and Fish Department.\textsuperscript{136} Members of the Commission included the Governor, Secretary of State, and State Auditor.\textsuperscript{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.\textsuperscript{138} In 1929, the legislature established the Game and Fish Fund, and mandated that the Commission control the fund.\textsuperscript{139} The fund

\textsuperscript{127} Id.
\textsuperscript{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.
\textsuperscript{129} Id.
\textsuperscript{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.
\textsuperscript{131} Parker Land & Cattle Co., 845 P.2d at 1056.
\textsuperscript{132} Id.
\textsuperscript{133} Id.
\textsuperscript{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.
\textsuperscript{136} Parker Land & Cattle Co., 845 P.2d at 1059.
\textsuperscript{137} Id.
\textsuperscript{138} Id.
\textsuperscript{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 species 146 to managing all species. Instead, nearly all revenue continued to come from license sales, and federal excise taxes under the

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).
146 Game species refers to only those species that can legally be taken into possession by hunting, trapping, or fishing.
Pittman-Robertson Act.\textsuperscript{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 and increased the strain on managing wildlife in Wyoming.\textsuperscript{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.\textsuperscript{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.\textsuperscript{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.\textsuperscript{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.\textsuperscript{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.


\textsuperscript{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.

\textsuperscript{149} See infra Part VI.A.

\textsuperscript{150} See infra Part VI.B.

\textsuperscript{151} See infra Part VI.C.

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. 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. 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. 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. 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. 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.
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.”\(^\text{159}\) One month later, Congress appropriated $20,000 for feeding, protecting, and transplanting elk and ordered an investigation into the Wyoming elk situation.\(^\text{160}\) Following the assessment, Congress appropriated another $45,000, on August 10, 1912, for purchasing land and maintaining a wintering elk refuge.\(^\text{161}\) 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.\(^\text{162}\) 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.”\(^\text{163}\) He also noted that “winter ranges now used by elk are becoming scarce and are grazed very short in the fall by stock.”\(^\text{164}\) 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.\(^\text{165}\) This marked the beginning of the Department’s elk feedground program.\(^\text{166}\)

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.\(^\text{167}\) Following enactment, in 1921 the legislature appropriated $10,000 to “liquidate claims for damages occasioned by

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\(^{159}\) Dean et al., supra note 153, at 2.


\(^{161}\) 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.

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
disease currently found in elk and bison throughout northwest Wyoming, was introduced to the area in the early 1900s. When a female animal is infected, it usually aborts its young. The disease easily transmits between animals when an animal comes into contact with the contents of an aborted animal. Elk can transmit brucellosis to livestock, 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.

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. Sportsmen want to see elk numbers maintained at high levels to allow for greater hunting opportunities in the fall. Ranchers want to protect their livestock from disease transmission that could create enormous financial ramifications. 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. 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. To make matters worse, the costs of maintaining the, 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, a more than one hundred percent increase over the $1.36 million spent just eight years prior, in 2004. 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, which is nearly double the $571,113 it paid landowners in fiscal year 2011. The $571,113 that the Game and Fish Commission paid in fiscal year 2011, was a $150,000 increase over the previous year. 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, Federal Land Planning Management Act, the National Forest Management Act, the Multiple Use-Sustained Yield Act, the Wilderness Act, and the Clean Water Act. However, one law probably impacted state wildlife management decisions and budgets more than any other—the Endangered Species Act.

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192 Dean, supra note 153, at 4.


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.


Congress passed the Endangered Species Act (ESA) to protect our nation’s plant and animal species from extinction. 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.” 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; radically modified or prohibited logging practices in west Texas to preserve the red-cockaded woodpecker; banned hunting of the timber wolf by sheep ranchers in Minnesota; ordered removal of nonnative sheep in Hawaii whose grazing was destroying the habitat of the palila; and nearly shut down the logging industry in parts of the Pacific Northwest containing critical habitat for the northern spotted owl. 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. Wyoming also spends several

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203 Id.


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.


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).

million dollars each year on the listed grizzly bear. This includes population surveys, habitat improvement projects, relocation of problem bears, and education programs to prevent the taking of grizzly bears. 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 listing or listed under the ESA, wildlife agencies appropriate large sums of money to study and manage non-game species. 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.

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.

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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.

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. The survey quantifies the number of hunters and wildlife watchers, as well as the amount of time each spends on wildlife recreation. 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. Although the 2011 survey indicated a slight increase in hunters and anglers over the 2006 numbers, the long-term trend is still disturbing.

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. 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.

217 Id.
218 Id.
219 Id.
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. The energy industry contributed $10.9 billion to Wyoming’s economy in 2012. 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. Nearly forty percent of land within Wyoming’s boundaries is privately owned, and wildlife often competes with livestock for available resources. Travel spending, which includes hunters, anglers, and wildlife watchers, was approximately $3.1 billion in 2012. 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. Of that total, $874,268,000 was trip related, $180,927,000 was equipment...
related, and $82,005,000 was attributed to other expenses.\footnote{227} All of this activity creates 9,500 jobs in Wyoming, and contributes $75 million in State and local taxes.\footnote{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.\footnote{229}

\section*{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.\footnote{230} They depend on a variety of shrub-steppe habitats, and their geographic distribution strongly correlates with sagebrush habitats.\footnote{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.\footnote{232} They are currently found in eleven western states and Canada with an estimated population of 535,542.\footnote{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.\footnote{234} Because of the rather rapid decline in sage grouse numbers in certain areas, many individuals and organizations sought ESA protection for this species.\footnote{235}
On July 2, 2002, FWS received its first petition requesting listing the greater sage grouse as endangered across its entire range. 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. 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. Following a legal challenge holding the 2005 finding arbitrary and capricious, the FWS conducted a new twelve-month finding in 2010. The FWS’s 2010 finding concluded that listing the greater sage grouse was warranted, but precluded for listing by higher priority listings.

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. 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.

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. The current core area strategy protects 84% of Wyoming sage-grouse attended leks 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.

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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.
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.
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. 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. It also suggested that the core area strategy could “ameliorate some threats to the greater sage-grouse.”

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. 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. 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. 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. 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. Those industries directly or indirectly generated $5.1 billion in labor income for Wyoming, and contributed enormously to Wyoming’s tax base.

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247 Id.
248 Id. at 13,974.
250 See infra notes 251–87 and accompanying text.
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.\textsuperscript{255} According to the CREG, oil mineral severance taxes for Wyoming totaled nearly $237 million in Biennium 2011–12, while natural gas severance taxes totaled over $346 million.\textsuperscript{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.\textsuperscript{258} The coal industry also contributed over $289 million in severance taxes to Wyoming in Biennium 2011–2012.\textsuperscript{259}

In fact, the energy industry as a whole contributed $1.839 billion in severance tax to the state of Wyoming in 2011–2012.\textsuperscript{260} Annually, Wyoming’s energy sector contributes approximately seventy-five percent of the State’s budget.\textsuperscript{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.\textsuperscript{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


\textsuperscript{257} Id.

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

\textsuperscript{259} Wyoming State Government Revenue Forecast Fiscal Year 2013—Fiscal Year 2018, supra note 256, at 12.

\textsuperscript{260} Id.


\textsuperscript{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.\footnote{See Economic Impacts, supra note 251, at 78 (basing calculations on proportion of oil and gas activity in core areas).} The state could lose $135 million in direct labor income and over $255 million in total labor income.\footnote{See Economic Impacts, supra note 251, at 78.} 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.\footnote{See Economic Impacts, supra note 251, at 78.} 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.\footnote{78 Fed. Reg. 79,004 (Dec. 27, 2013).} 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.\footnote{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.} The BLM undertook these amendments in response to the March 2010, FWS determination that listing the sage grouse was warranted but precluded.\footnote{Id.} In the FWS finding, FWS noted that the BLM’s existing Resource Management Plans inadequately protected the bird.\footnote{Id.; 75 Fed. Reg. 55, 13, 974 (Mar. 23, 2010).} 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.\footnote{Baier & Segal, supra note 267, at 27.} The preferred alternative in each Resource Management
Plan is a surface disturbance cap of 5% per 640 acres within sage-grouse core habitat. 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. 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. In its 2010 finding, the FWS identified livestock grazing as a threat to sage grouse. 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. 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.

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. Shortly after listing, several economic impact analyses investigated the spotted owl recovery plans, painting a grim economic picture. One study estimated that an owl recovery

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271 Id.
272 Id. at 19.
273 See supra note 241 and accompanying text.
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.

280 See Shogren, supra note 279; Montgomery, Brown, Darius, supra note 279.
282 Id.
283 Id.
284 See id.; Montgomery, Brown, Darius, supra note 279.
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. 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.

If the number of hunting and fishing licenses issued decreases by ten percent, the Department would realize losses in revenue of $3,227,055.90. 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. 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.

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. 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. 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.

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.
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.\textsuperscript{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.\textsuperscript{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.\textsuperscript{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.\textsuperscript{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


\textsuperscript{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%.


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

The second rational 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. A listing could negatively impact the State’s economy, reducing the tax revenue available to the State for funding its operations. 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. Unlike the outdoor equipment option, however, there would be no decrease to other agencies operating budgets.

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

In 1968, Wyoming had a state bank balance of only $80. Fearing insolvency, in 1969, the Wyoming legislature established a severance tax on minerals for the first time. 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. The measure passed, and in 1975, Wyoming created

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307 See supra Part VII.
308 See supra Part VII.
309 See supra Part VIII.A.
310 See supra Part VIII.A.
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
severance tax diversion, the balance would be around $5,484,108,650. 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.

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.

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

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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.\footnote{See supra Part VII.} Therefore, the legislature should direct a portion of the money statutorily flowing to the PWMF 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 PWMF, 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.\footnote{See infra notes 329–30 and accompanying text.}

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 . . . .”\footnote{Colo. Const. art. XXVII, § 1.} Missouri and Arkansas adopted conservation sales taxes directing revenue to their respective game and fish department for managing each state’s wildlife resources.\footnote{Mo. Const. art. IV, § 43; Ark. Const. amend. 75, § 2.} 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.\footnote{See supra notes 142–45 and accompanying text.} 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.
Third, Wyoming citizens adopted a constitutional amendment in 2012 preserving Wyoming citizens’ opportunity to hunt, fish, and trap. In addition to preserving those opportunities, this constitutional amendment stated that it did not “alter the duty of the state to manage wildlife.” 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. 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. 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. 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.
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.