

2019

THE PUBLIC TRUST IN WILDLIFE: IMPLEMENTATION IN 13 WESTERN STATES

Nyssa Landres

Let us know how access to this document benefits you.

Follow this and additional works at: <https://scholarworks.umt.edu/etd>

Recommended Citation

Landres, Nyssa, "THE PUBLIC TRUST IN WILDLIFE: IMPLEMENTATION IN 13 WESTERN STATES" (2019). *Graduate Student Theses, Dissertations, & Professional Papers*. 11358.
<https://scholarworks.umt.edu/etd/11358>

This Thesis is brought to you for free and open access by the Graduate School at ScholarWorks at University of Montana. It has been accepted for inclusion in Graduate Student Theses, Dissertations, & Professional Papers by an authorized administrator of ScholarWorks at University of Montana. For more information, please contact scholarworks@mso.umt.edu.

THE PUBLIC TRUST IN WILDLIFE: IMPLEMENTATION IN 13 WESTERN
STATES

By

NYSSA LANDRES

B.A. Environmental Studies, Westminster College, Salt Lake City, UT, 2013

Thesis

presented in partial fulfillment of the requirements
for the degree of

Masters of Science
in Resource Conservation

The University of Montana
Missoula, MT

April 2019

Approved By:

Martin Nie, chair
Department of Society and Conservation

Sandi Zellmer
Alexander Blewett III School of Law

Laurie Yung
Department of Society and Conservation

ABSTRACT

The public trust doctrine asserts that certain natural resources, including wildlife, must be managed in trust for the benefit of current and future generations of Americans. This thesis explores whether there is a discernable connection between the public trust in wildlife and state wildlife management in the thirteen western states (Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming). A review of 86 state decision documents was used to assess how states are implementing their trust responsibilities for wildlife management. My document review was supplemented by a literature and case law review, as well as an inquiry to the legal counsel for each state wildlife management agency to ask if there was additional documentation of the agency's position on the public trust in wildlife that should be included in my review.

My findings suggest that the public trust is not the pillar of state wildlife management in the western U.S. that it is claimed to be. References to the public trust in wildlife are inconsistent and vague. Only two of the 86 documents reviewed used the public trust in wildlife to support the decision being made in the document. Principles identified in the literature as fundamental to the public trust in wildlife are almost completely absent from documentation on state decision-making, such as discussion on conservation duties imposed by the trust, discussion of limitations on management, how the trust is to be enforced, and discussion of alternatives and/or adverse impacts of the action. Similarly absent are concepts that states commonly reference in concert with the public trust during conflicts with the federal government regarding the authority to manage wildlife on federal lands, such as assertions of state sovereign ownership of wildlife, management authority over wildlife, use of the North American Model of Wildlife Conservation, and access to wildlife.

I conclude that states should either apply the public trust doctrine and its basic principles to wildlife management in a more serious fashion or stop claiming to the public and the courts that they manage wildlife in accordance with the public trust doctrine. If states choose to embrace the public trust in wildlife, I recommend codifying the public trust in statute or regulation by affirming that wildlife is held in the public trust, designating the trustee, establishing a clear standard of enforceability, and clarifying what species are included within the trust management framework. I additionally identify practices vital to implementing the public trust in wildlife, including transparency, use of information, and use of existing decision-making and management frameworks.

Table of Contents

Introduction.....	1
Research Objectives and Questions	2
Part I – Methods.....	4
Part II – Background on the Public Trust Doctrine and Its Origins	6
A. Defining the Public Trust	6
B. Case Law Review	11
C. On “State Ownership” of Wildlife	18
D. The Public Trust in Wildlife as Found in State Constitutions and Statutes	20
E. The North American Model of Wildlife Conservation.....	23
F. Significant Remaining Questions	25
Part III – Results	26
A. How the Public Trust in Wildlife is Referenced in the State Documents Reviewed	26
i. Passing References	26
ii. Incomplete References.....	27
B. How the Public Trust in Wildlife is Being Applied	29
i. Montana Bighorn Sheep Conservation Strategy	30
ii. Alaska Intensive Management Protocol	31
C. Relationship Between the Conceptual Foundations of the Public Trust and Its Use By State Wildlife Agencies.....	33
i. Public Trust Principles.....	33
ii. Concepts Asserted in Conflicts With the Federal Government	36
D. References by State Legal Counsel.....	37
Part IV – Implementing the Public Trust in Wildlife.....	40
A. Why States Need to Embrace the Public Trust Comprehensively or Not at All.....	40
B. Codifying Administrative Law and Best Practices to Implement State Public Trust in Wildlife	41
i. Codification as a Way to Implement the Public Trust in Wildlife.....	41
ii. Practices Vital to Implementing the Public Trust in Wildlife.....	47
C. What Implementing the Public Trust Would Look Like in State Decision-Making	51
Part V – Conclusion	55
Appendices and tables.....	57
Appendix A. Evaluative rubric	57
Appendix B. Summary of findings from document review	58
Appendix C. List of documents reviewed.....	62

Introduction

States manage wildlife in their sovereign capacity for the benefit of the people and as a common good that is owned by no one.¹ The public trust doctrine is central to sovereign ownership of wildlife, and asserts that certain natural resources, including wildlife, are to be held in trust for the benefit of current and future generations.² Courts have invoked the public trust in wildlife since the early 1800s,³ and scholarly literature has similarly supported that states must manage wildlife in the public trust.⁴

The majority of U.S. states claim to manage wildlife in the public trust.⁵ Less emphasized, and less well-understood, are what duties and obligations go along with the trust responsibility over wildlife. In other words, what must a state do, and not do, to meet the responsibilities of this wildlife trust? There is relatively little case law on this matter and few details have been filled in by the states.⁶

This thesis explores the current implementation of the public trust in wildlife in the thirteen western states (Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming).⁷ Specifically, this thesis explores whether there is a discernable connection between the public trust in wildlife and state decision-making regarding wildlife management. A clear connection between the public trust and decision-making is important because states claim to manage wildlife in the public trust.⁸ The public trust is a legal concept with specific meanings

¹ See *infra* Part II.C.

² See *infra* Part II.A.

³ See *infra* Part II.B.

⁴ See *infra* Part II.A.

⁵ See *infra* Part II.C.

⁶ Eric T. Freyfogle & Dale D. Goble, *Wildlife Law: A Primer* (2009), at 33-34 (“The problem with taking the [wildlife] trust language literally is that there is no trust document that sets forth the precise terms of the trust.” Freyfogle and Goble assert that so far, “[C]ourts have had little or no occasion to struggle with these issues” and “[t]he duties states have and the limits they face in managing wildlife remain largely undecided”). See also *infra* Part II.B.

⁷ Robin Kundis Craig, *A Comparative Guide to the Eastern Public Trust Doctrines: Classification of States, Property Rights, and State Summaries*, 16 PENN ST. ENVTL. L. REV. 1, 2-3 (2007) (asserting that scholars tend to either generalize all public trust law into a single doctrine, or to view each state’s public trust doctrine as unique. To bridge this gap, comparative awareness of what individual states actually do is needed.).

⁸ Michael C. Blumm & Aurora Paulsen, *The Public Trust in Wildlife*, 6 UTAH L. REV., 1437, 1471, 1490 (2013) (summarizing that a total of forty-eight states claim to manage wildlife in the public trust, including all thirteen western states. Blumm & Paulsen further provide a summary of language in state constitutions, statutes, and case law to support this assertion). See also *infra* Part II.D.

and is judicially enforceable.⁹ How states use the public trust in wildlife management decision-making indicates whether states are managing wildlife as claimed. References to the public trust doctrine in this thesis specifically refer to the public trust in wildlife unless otherwise specified. Additionally, “states” as used in thesis, refers specifically to the thirteen western states, unless otherwise specified.

My findings show that state decision-making documents do not clearly articulate the public trust in wildlife and further, use of the public trust in wildlife is unsubstantiated and inconsistent. The vast majority of state decision-making makes no discernable connection between the public trust in wildlife and state wildlife management.

This thesis does not advocate for implementation or abdication of the public trust in wildlife. Rather, my primary recommendation is that states need to better align their wildlife management claims pertaining to the public trust doctrine with their management actions. In other words, if states do not intend to fulfill the responsibilities that accompany the public trust, they should not assert it as the basis for state wildlife management.

Part I describes the methods and research steps used to evaluate how, and whether, the public trust is being applied to wildlife management by the thirteen western states. Part II provides background discussion on the literature and reviews case law regarding the public trust doctrine. This section analyzes the history and context of the public trust, how it has been applied to wildlife, and how the public trust relates to other state wildlife management assertions such as sovereign ownership. Part III presents my results on how the public trust in wildlife has been put into operation by state agencies. Part IV posits what implementation of the public trust in wildlife would look like, including specific recommendations for how state wildlife management could more fully implement this public trust. Part V presents my conclusions.

Research Objectives and Questions

⁹ See *infra* notes 90-92 and accompanying text for an example of the application of the trust to water.

This thesis is based on three primary research objectives. My first objective is to analyze the public trust doctrine and how has it been applied to state wildlife management. Four research questions are asked in the context of this objective. First, what state constitutional and statutory provisions direct wildlife to be managed in the public trust, and what parameters and requirements are provided? Second, how have state governments claimed to own wildlife and manage it as a public trust? Third, how has case law on the public trust doctrine applied to wildlife management in the past? Fourth, what are the most significant questions that have not been sufficiently answered regarding the public trust in wildlife and its application to management? Part II of this thesis answers this research objective and its associated research questions.

My second objective is to evaluate how the public trust in wildlife has been put into operation by state agencies and the role of the public trust in wildlife in decision-making. Three research questions are asked in the context of this objective. First, how is the public trust in wildlife being referenced and used? Second, how is the public trust in wildlife being applied? Third, what is the relationship between the conceptual foundations of the public trust in wildlife and its use by state agencies, and how does this use relate to conflicts with the federal government? Part III of this thesis answers this research objective and its associated research questions.

My third objective to evaluate whether the public trust in wildlife can meaningfully inform state wildlife management and identify best practices for implementation. Two research questions are asked in the context of this objective. First, what does effectuating the public trust in wildlife look like? Second, what specific actions can states take to better achieve public trust needs, and what are “best practices” for implementing the public trust? Part IV of this thesis answers this research objective and its associated research questions.

Part I – Methods

A literature review was used to establish the background on the public trust in wildlife, including its origins, its context in state constitutions and statutes, and its relationship to state claims of wildlife ownership and the North American Model of Wildlife Conservation. My literature review included sources that were both law-focused and wildlife management focused. My review was supplemented by reviewing case law on the public trust in wildlife. This review addressed my first research objective to analyze the public trust doctrine and how has it been applied to state wildlife management.

A document review was used to ascertain how states are implementing their trust responsibilities for wildlife management. The websites of state wildlife management agencies were searched for publically available decision documents that reference the public trust in wildlife. The documents found include species management plans, State Wildlife Action Plans, strategic plans, and press releases, depending on what documentation was available for each state. The review examined documents released between 2000 and 2018.¹⁰ Documents were found by searching each agency's website using keywords in search functions and by browsing state wildlife agency websites for documents that contain the same keywords.¹¹

Documents that made no reference to the public trust or its principles were eliminated from the analysis. For example, a Programmatic Evaluation of the Wyoming Game and Fish Department assessing the efficiency and effectiveness of certain programs within the Department included some keywords from

¹⁰ In some cases, agencies released a substantively similar, annual document. For example, Idaho releases an annual plan for the Department of Game and Fish which use similar language year-to-year with minimal variation as it relates to how the document addresses the public trust. In these instances, I randomly selected two of the documents to include in my review. For example, in the case of Idaho annual plan, I included the reports from 2014 and 2018 in my review, and omitted the reports from the years 2000-2013 and 2015-2017. I omitted the reports from the majority of years because it would have skewed my results.

¹¹ Keywords used were: public trust, public trust doctrine, trustee, wildlife trust, benefit, beneficiary, sovereign ownership.

my search, but the document was omitted because it did not articulate an official agency position or decision.¹²

An evaluative rubric was developed to organize my analysis of how state wildlife agencies define, conceptualize, and use the public trust doctrine in documentation. The rubric is based on key principles of the public trust doctrine, as articulated in case law and the literature. The rubric is included in Appendix A.

How state documentation uses the public trust in wildlife occurs along a spectrum. Correspondingly, my review used three categories to tabulate the findings; “yes,” “no,” and “tangentially.” If the document did not connect the public trust in wildlife to the decision at hand, or use the public trust beyond a passing reference, it was marked in the “no” column. If the document clearly connected the public trust in wildlife to the decision at hand, it was marked in the “yes” column. If the document used the public trust, but didn’t create a clear connection between the trust and the decision, it was marked in the “tangentially” column.^{13 14} To ensure consistent application of the rubric, my academic advisor and I independently reviewed three documents and then compared our results.

Following the document review, the legal counsel for each state’s wildlife management agency was contacted via email to ask if any relevant documents had been missed in my online search or if there

¹² Wildlife Management Institute. Programmatic Evaluation of the Wyoming Game and Fish Department. 2016. Accessed March 22, 2019. <http://wyominguntrapped.org/wp-content/uploads/2017/03/WGFD-Programmatic-Evaluation-921.16-WMI-Report.pdf>

¹³ This methodology is similar to that taken in Dave Owen, *The Mono Lake Case, the Public Trust Doctrine, and the Administrative State*, 45 U.C. Davis L. Rev. 1099, (2012) (reviewing implementation of the public trust in water by California’s State Water Rights Control Board [SWRCB]) and Kyle A. Artelle, et al., *Hallmarks of science missing from North American wildlife management*. Science Advances 1, (2018) (reviewing use of scientific research in wildlife management decision-making). Both scholars tabulated their review into two categories: presence or absence of the public trust. Both scholars also took an inclusive review of the documents. For example, Owen states “there are some decisions and orders that mention the public trust doctrine and impose environmental restrictions, but that do not clearly indicate whether the public trust doctrine was a basis for those restrictions. To address those ambiguities, I erred on the side of inclusiveness.” My review differs from their approach by using a third category, “tangentially,” and aims to be as precise as possible.

¹⁴ A decision-making document did not need to exhibit every principle of the public trust in my rubric to substantively use the public trust to inform the decision being made. Rather, the rubric provided a mechanism to tabulate and assess which principles were being used and in what contexts. Based on this, I made an assessment of whether use of the public trust in wildlife was being used to substantively inform the decision being made (this finding is tabulated in question 15 of the evaluative rubric, “Does the document explain the connection/relationship between the public trust and the decision made or the position taken by the agency?”).

was additional documentation of the agency's position on the public trust in wildlife that should be included in my review. The emails were sent to the individual identified as the primary legal counsel for each state's wildlife management agency. Two follow-up emails were sent to individuals who did not respond.

Part II – Background on the Public Trust Doctrine and Its Origins

This section begins by laying the conceptual foundation of the public trust doctrine and outlines fundamental principles of the public trust in wildlife. The section goes on to review prominent case law that has shaped the public trust over time and its application to wildlife. This is followed by a discussion of state claims of wildlife ownership. How, and if, the public trust in wildlife, is found in state constitutions and statutes are then reviewed. Next, I examine the North American Model of Wildlife Conservation to establish its relevance to examining the public trust in wildlife and to this thesis. This section concludes with a discussion about what significant questions remain to operationalize the public trust in wildlife.

A. Defining the Public Trust

The public trust doctrine is the legal concept that certain natural resources are fundamental to society and as such, it is the responsibility of the state to manage these resources in the public interest and prevent impairment of these resources.¹⁵ The public trust in wildlife directly relates to state claims of sovereign ownership of wildlife.¹⁶

¹⁵ Joseph L. Sax, *The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention*, 68 MICH. L. REV. 471, 489 (1970). See also Blumm & Paulsen, *supra* note 8, and Patrick Redmond, *The Public Trust in Wildlife: Two Steps Forward, Two Steps Back*, 49 NAT. RESOURCES J. 249, 259 (2009).

¹⁶ See *infra* notes 99-116 and accompanying text for additional discussion on state claims of sovereign ownership of wildlife and implications for managing wildlife in the public trust.

Similar to a private trust,¹⁷ there are three components to a public trust. First, there is a “res,” the object or thing that is the subject of the trust.¹⁸ In the public trust, this “res” is any element that cannot be owned by individuals, such as water, air, and wildlife. Second, there is a trustee who is charged with the responsibility of acting in the best interest of the res.¹⁹ The trustee’s duty is to manage the assets to further the purposes of the trust and has a duty to prevent impairment of the resource.²⁰ In a public trust, the trustee is the government. The third element of a trust is the beneficiary, who holds the real title to the assets of the trust.²¹ The needs and interests of the beneficiary are what drive management of the trust resource.²² In a public trust, the beneficiary of the trust is the public, including current and future generations. Intergenerational equity and providing voice to the silent majority, as opposed to an influential minority, are key concepts in modern application of the public trust.²³ If the “res” is not

¹⁷ Anna R. C. Caspersen, *The Public Trust Doctrine and the Impossibility of “Takings” by Wildlife*, 23 B.C. ENVTL. AFF. L. REV. 357, 358-362 (1996).

¹⁸ Zygmunt J. B. Plater et al., *Environmental Law and Policy: Nature, Law, And Society* 374-75 (1992) (explaining how the public trust doctrine is related to the concept of a private trust).

¹⁹ *Id.* at 374.

²⁰ *Illinois Central Railroad Co. v. Illinois*, 146 U.S. 387, 455-466 (1892) (holding that the state has a duty to prevent substantial impairment of the resource and the public trust doctrine can be a limitation on state authority to act in ways that are against the broader public interest. In general, a trustee cannot impair the rights of future users by destroying or impairing the resources. *See also* Richard J. Lazarus, *Changing Conceptions of Property and Sovereignty in Natural Resources: Questioning the Public Trust Doctrine*, 71 IOWA L. REV. 631, 650-656, 685 (1986) (discussing instances when courts have applied the public trust doctrine to restrict state actions that may harm the trust resource and discussing how the concern for the interests of future generations is evident in many environmental cases).

²¹ Zygmunt J. B. Plater et al. *supra* note 18, at 374.

²² Eric Pearson, *Illinois Central and the Public Trust Doctrine in State Law*, 15 Va. Env'tl. L.J. 713, 714 (1995) (summarizing that the public trust doctrine is “analogous to a conventional real property trust: the state, as title holder, assumes the role of trustee and must honor the interest of the trust's beneficiaries, the public, in its management decisions.”).

²³ Mary Christina Wood, *Advancing the sovereign trust of government to safeguard the environment for present and future generations (Part I): Ecological realism and the need for a paradigm shift*, 39 Env'tl. L. 43 (2009); and Gerald Torres & Nathan Bellingerti, *The Public Trust: The Law's DNA*, 4 Wake Forest J. of L. & Policy 281 (2014). *See also* Daniel J. Decker et al., *Impacts Management: An Approach to Fulfilling Public Trust Responsibilities of Wildlife Agencies*, 38 Wildlife Society Bulletin 2, 3 (2014) (discussing agencies fulfill their public trust responsibilities by managing wildlife for all citizens, because they are all legitimate beneficiaries of the trust, including future generations). *For example*, *Owsichek v. State*, 763 P.2d 488, 496 (Alaska 1988) (finding that the public trust duty prohibits the state from awarding any monopolistic grants or special privileges); *Mouton v. Department of Wildlife & Fish for State of La*, 657 So.2d 622 (1995) (“The general public is the recipient/target of the public trust, not specific, individual citizens”); *Brooks v. Wright*, 971 P.2d 1025 (1999) (the state's role as a trustee for wildlife *does not* give it exclusive law-making or decision-making authority over wildlife management decisions when state management over wildlife management diverges from the broader public interest, as indicated by ballot initiatives).

managed in the interests of the beneficiary, the public trust provides a mechanism by which to hold the trustee accountable.²⁴ This enforceability is a key element of the public trust.

The origins of the public trust doctrine are in Roman law, which established resources such as air, water, and wildlife to be held in trust by the government for the use and enjoyment by everyone due to the inability of these resources to be readily possessed by individuals.²⁵ The concepts of *res nullius* and *res communis* were fundamental to this Roman tenet, describing things which were common property and without an owner.²⁶ Under these principles, wildlife is collectively owned by the people. Medieval England adopted a similar principle, where the king owned wildlife in trust for the people. In other words, the king served as a proprietor over wildlife as a common good that is owned by no one.²⁷

As America gained its independence, the responsibility to manage certain natural resources in the public interest passed to the states. The public trust doctrine was subsequently integrated, to varying degrees, into state constitutions²⁸ and statutes.²⁹ Lacking a single controlling statute however, the public

²⁴ Sax, *supra* note 15, at 521 (“under the public trust doctrine, the courts place checks on the other branches of government. When the legislature or an administrative agency fails to fully consider the public interest in making a decision that affects a trust resource, or engages in dubious conduct, the public trust doctrine provides a mechanism by which the courts may intervene to protect the resource. General applications of the public trust doctrine include instances in which the government favors narrow, private uses over broad, public ones.”).

²⁵ See generally Caspersen, *supra* note 17, and Sax, *supra* note 15.

²⁶ *Id.* and Susan Morrison Horner, *Embryo, Not Fossil: Breathing Life into the Public Trust in Wildlife*, 35 LAND & WATER L. REV. 23, 27–28 (2000).

²⁷ See generally James L. Huffman, *Speaking of Inconvenient Truths - A History of the Public Trust Doctrine*, 18 Duke Envtl. L. & Pol’y F. 1 (2007) (positing that the history of the public doctrine in Roman and Medieval English law has been misinterpreted and does not establish precedent for the public trust). See also Hope M. Babcock, *The Public Trust Doctrine: What a Tall Tale They Tell*, 61 S.C. L. Rev. 393, 397-405 (2009) (responding to the premise put forth by Huffman and asserting that even if this history is not universally agreed upon, “legal fictions” often form the basis of case proceedings and can play a substantive role in shaping law and policy. In other words, even if this history has been misinterpreted, the public trust doctrine has developed a life of its own in American jurisprudence), and Caspersen, *supra* note 17, at 364 (asserting that the social purpose the public trust doctrine continues to serve is more important than its provenance).

²⁸ See *infra* notes 117-121 and accompanying text; e.g., ALASKA CONST. art. VIII, § 3 (“Wherever occurring in their natural state, fish, wildlife, and waters are reserved to the people for common use.”); MASS. CONST. amend. art. XLIX (“The people shall have the right to clean air and water, freedom from excessive and unnecessary noise, and the natural, scenic, historic, and esthetic qualities of their environment; and the protection of the people in their right to the conservation, development and utilization of the agricultural, mineral, forest, water, air and other natural resources is hereby declared to be a public purpose.”).

²⁹ See *infra* notes 122-125 and accompanying text; e.g., CONN. GEN. STAT. ANN. § 22a-15 (“It is hereby found and declared that there is a public trust in the air, water and other natural resources of the state of Connecticut and that each person is entitled to protection, preservation and enhancement of the same.”).

trust is a common law doctrine, meaning that the judiciary has played a prominent role in shaping the scope and substance of the public trust doctrine.³⁰

The original conception and adoption of the public trust doctrine in the U.S. focused on navigable waterways and submerged lands.³¹ These early applications of the public trust clearly articulated that certain resources were of such widespread interest to the citizenry that they needed to be managed in the common good.³² The public trust was subsequently expanded to include water resources more generally, including non-navigable waterways,³³ wetlands,³⁴ groundwater,³⁵ instream flows,³⁶ and tidelands.³⁷ This train of thought has continued in modern application of the public trust and has also been used to apply the public trust doctrine to parks,³⁸ the atmosphere,³⁹ and beaches.⁴⁰

Extending back to the 1800s, the public trust doctrine has been applied to wildlife.⁴¹ Access to wildlife was the premise of many Nineteenth Century cases first establishing the American public trust

³⁰ Babcock, *supra* note 27 (describing how the public trust as common law fills gaps in the legal framework, citing *Avenal v. State*, 886 So. 2d 1085, 1101-02, 1106 (La. 2004) (invoking the public trust doctrine to defeat a takings claim against a state water diversion project even though it destroyed oyster leases' value and finding that the state did not owe compensation when its actions were consistent with the background principles of state property law because the owner had no vested right to undertake those uses in the first place); *Raleigh Ave. Beach Ass'n v. Atlantis Beach Club, Inc.*, 879 A.2d 112, 113 (N.J. 2005) (applying the public trust doctrine to allow public access to a private beach for a fee)). *See also* Blake Hudson, *The Public and Wildlife Trust Doctrines and the Untold Story of the Lucas Remand*, 34 COLUM. J. ENVTL. L. 99, 105–09 (2009) (summarizing how public and wildlife trust doctrines are inherent background principles of common law property vested in each and every state upon its creation).

³¹ *Arnold v. Mundy*, 6 N.J.L. 1 (1821); *Martin v. Waddell's Lessee*, 41 U.S. 367 (1842); *Pollard v. Hagan*, 44 U.S. 212 (1845).

³² *Arnold v. Mundy*, 6 N.J.L. 1, 71 (N.J. 1821) (“[certain natural resources] are called common property. Of this [] kind . . . are the air, the running water, the sea, the fish, and the wild beasts. But inasmuch as the things which constitute this common property are things in which a sort of transient usufructuary possession, only, can be had; and inasmuch as the title to them and to the soil by which they are supported, and to which they are appurtenant, cannot well, according to the common law notion of the title, be vested in all the people; therefore, the wisdom of that law has placed it in the hands of the sovereign power, to be held, protected, and regulated for the common use and benefit.”)

³³ *Galt v. State*, 731 P.2d 912, 915 (Mont. 1987); *Parks v. Cooper*, 676 N.W.2d 823, 839 (S.D. 2004).

³⁴ *Just v. Marinette County*, 201 N.W.2d 761 (Wis. 1972).

³⁵ *In re Water Use Permit Applications (Waiāhole Ditch)*, 9 P.3d 409 (Haw. 2000).

³⁶ *Adjudication of the Existing Rights to Use of all Water in the Missouri Drainage*, 55 P.3d 396, 340 (Mont. 2002).

³⁷ *Phillips Petroleum Co. v. Mississippi*, 484 U.S. 469 (1988); *Marks v. Whitney*, 491 P.2d 374 (Cal. 1971).

³⁸ *Gould v. Greylock Reservation Comm'n*, 215 N.E.2d 114 (Mass. 1966); *Friends of Van Cortlandt Park v. City of New York*, 750 N.E.2d 1050 (N.Y. 2001).

³⁹ *Bonser-Lain v. Texas Comm'n on Env'tl. Quality*, No. D-1-GN-11-002194, 2012 WL 2940641 (Tex. 201st Dist. Aug. 2, 2012); *Parks v. Cooper*, 676 N.W.2d 823, 838 (S.D. 2004).

⁴⁰ *Matthews v. Bay Head Improvement Ass'n*, 471 A.2d 355 (N.J. 1984).

⁴¹ *Geer v. Connecticut*, 161 U.S. 519 (1896). *See infra* notes 58-66, and accompanying text.

doctrine, as the public trust in navigable waters was necessary to support fishing.⁴² In contrast to other historical trust resources, such as submerged lands and navigable waterways, the scope and exact contours of the public trust in wildlife are less defined. A more detailed discussion on the evolution of case law on the public trust in general, and wildlife in particular, is provided in a following section.⁴³

In summary, principles of the public trust include both substantive and procedural responsibilities, as follows:

Substantive responsibilities:

- (1) Trust managers have an active and affirmative duty to protect and preserve the resource.⁴⁴
- (2) Management cannot impair the resource⁴⁵ and cannot act in ways as would infringe on the rights of future beneficiaries of the resource (i.e., future generations).⁴⁶
- (3) Management is for the diversity of interests held by the beneficiaries and cannot serve a subgroup or influential minority of the populace.⁴⁷
- (4) Management must ensure that public purposes are given priority over private purposes.⁴⁸

⁴² *Arnold v. Mundy*, 6 N.J.L. 1 (N.J. 1821); *Martin v. Waddell*, 41 U.S. 367 (1842); *Smith v. Maryland*, 59 U.S. 71 (1855); *McCready v. Virginia*, 94 U.S. 391 (1876); *Manchester v. Massachusetts*, 139 U.S. 240 (1891).

⁴³ *See infra* Part II.B.

⁴⁴ Douglas Quirke, *The Public Trust Doctrine: A Primer*. White Paper of the University of Oregon School of Law Environmental and Natural Resources Law Center. 2016, at 13 (“the trustee has an obligation to take the steps required to protect and preserve trust resources from ‘substantial impairment.’”(citations omitted); *Geer v. Connecticut*, 161 U.S. 519, 534 (1896) (“it is the duty of the legislature to enact such laws as will best preserve the subject of the trust, and secure its beneficial use in the future to the people of the state.”). The state must act to protect the rights of the public in the corpus of the natural resource trust. *See, e.g., Selma Pressure Treating Co. v. Osmose Wood Preserving, Inc.*, 271 Cal. Rptr. 596, 606 (Cal. Ct. App. 1990). Further, courts have found that the state has not only the ability, but also the obligation to bring suit when its resources are imperiled. *See In re Steuart Transp. Co.*, 495 F. Supp. 38, 40 (E.D. Va. 1980); *State v. S.S. Bournemouth*, 307 F. Supp. 922, 929 (C.D. Cal. 1969); *State v. Jersey Cent. Power*, 308 A.2d 671, 674 (N.J. Super. Ct. Law Div. 1973); *State v. Bowling Green*, 313 N.E.2d 409, 411 (Ohio 1974).

⁴⁵ *Id.* at 14 (“Analogizing the public trust to a private trust, the duty against waste dictates that the “interest” of natural resources may be utilized, but the “principal” cannot be spent.”).

⁴⁶ *Id.* and *Torres & Bellingerti*, *supra* note 23, at 283.

⁴⁷ *Id.* at 311 (“While courts are frequently called on to protect the rights of minorities, in public trust cases they are actually being called on to protect the rights of the majority.”). *See also Sax*, *supra* note 15, at 560 (“[S]elf-interested and powerful minorities often have an undue influence on the public resource decisions of legislative and administrative bodies and cause those bodies to ignore more broadly based public interests.”).

⁴⁸ Quirke, *supra* note 44, at 15.

- (5) Trust resources cannot be privatized⁴⁹ and management responsibilities cannot be abdicated.⁵⁰

Procedural responsibilities:

- (6) Management is by a trustee on behalf of a beneficiary.⁵¹
- (7) Management must ensure that trust responsibilities are not abdicated.⁵²
- (8) Management must occur in good faith and be carried out with competence.⁵³
- (9) The trustees must provide the beneficiaries with information to demonstrate that the corpus of the trust is being upheld.⁵⁴

Enforceability is inherent within the trust and the trustee can be held accountable via the judiciary if these principles are not being upheld.⁵⁵ Some scholars additionally include that management must consider adverse impacts⁵⁶ and access⁵⁷ as principles of trust management.

B. Case Law Review

⁴⁹ See *infra* note 19 and accompanying text.

⁵⁰ *Illinois Central Railroad v. Illinois*, 146 U.S. 387, 453 (1892) (“[t]he State can no more abdicate its trust over property in which the whole people are interested . . . than it can abdicate its police powers in the administration of government and the preservation of peace”).

⁵¹ *Quirke*, *supra* note 44, at 17 (“[the duty of loyalty] is the duty the trustee owes to the beneficiaries to administer the affairs of the trust solely for the interests of the beneficiaries, and not for the trustee’s own benefit or for the benefit of third parties.”).

⁵² *Quirke*, *supra* note 44, at 19 (“[w]hile the legislature is the primary trustee, the executive branch of government (at both the state and federal levels) acts as the agent of the legislature through various administrative agencies created by legislation to implement laws passed by the legislature. The legislature does not (and cannot) shed its fiduciary duties as a trustee as a result of delegating authority to executive agencies.”).

⁵³ *Quirke*, *supra* note 44, at 19 (“trust law imposes “basic standards of competence” for management of trust resources. Trustees have a duty to “act in good faith and employ such vigilance, sagacity, diligence and prudence” as people would in managing their own affairs.”) (citations omitted).

⁵⁴ *Quirke*, *supra* note 44, at 20 (“In the public trust law context, this equates to information about the health of the natural resources protected by the trust.”).

⁵⁵ *Sax*, *supra* note 15, and *supra* note 24.

⁵⁶ Deborah G. Musiker, Tom France, & Lisa A. Hallenbeck, *The Public Trust and Parens Patriae Doctrines: Protecting Wildlife in Uncertain Political Times*, 16 PUB. LAND L. REV. 87, 96 (1995) (summarizing that “[s]tates may not permit private activities that will prejudice the public’s sovereign interest without a compelling government public purpose. To fulfill this obligation, the government necessarily must consider the adverse impacts of a proposed action on trust resources to determine whether these activities would cause “substantial impairment” of the trust resource.”) (citations omitted).

⁵⁷ The Wildlife Society, *The Public Trust Doctrine: Implications for Wildlife Management and Conservation in the United States and Canada*: Tech. Review 10-01, Sept. 2010, at 17.

The American public trust doctrine was principally established in *Arnold v. Mundy* (1821)⁵⁸ when the New Jersey Supreme Court ruled that New Jersey's navigable waters and the lands submerged beneath them were “common to all the citizens, and... the property is ... vested in the sovereign... not for his own use, but for the use of the citizens.”⁵⁹ The court explained that the ownership interest previously held by the King of England had transferred to New Jersey as a result of the revolution and provided the state authority to regulate the resource for the benefit of its citizens.⁶⁰ *Arnold* established that there is a public trust in tidal waters and fishing rights. *Arnold* was also the beginning of addressing the public trust as inherently entwined with sovereign ownership of the resource in question.

In 1842, the Supreme Court adopted the approach taken by *Arnold* in *Martin v. Waddell*.⁶¹ At issue was whether a private oyster fishery could operate on submerged lands in New Jersey's Raritan Bay.⁶² The Court declared that “dominion and property in navigable waters, and in the lands under them, [were] held by the king as a public trust[...].”⁶³ and as such, a private proprietor could not exclude the public from use of a public trust resource, in this case, the submerged lands in the bay. *Martin* expanded the public trust to include navigable inland waters.

Arnold and *Martin* became the cornerstones of the public trust in navigable waters and submerged lands. The cases also became the foundation of a line of cases that extended public trust principles to wildlife and other natural resources. In 1855, both *Smith v. Maryland*⁶⁴ and *Dunham v. Lamphere*⁶⁵ expanded the public trust concept to specifically include oysters and fish. Into the 1890s, a string of cases affirmed the application of the public trust to aquatic wildlife species.⁶⁶

⁵⁸ 6 N.J.L. 1 (N.J. Sup. Ct. 1821).

⁵⁹ *Id.* at 52 (Kilpatrick, C.J.).

⁶⁰ *Id.* at 53.

⁶¹ 41 U.S. 367 (1842).

⁶² *Id.*

⁶³ *Id.* at 411.

⁶⁴ 59 U.S. 71 (1855) (ruling that Maryland's proprietary interest in submerged lands conferred the state with the authority to regulate the taking of oysters embedded within its tidelands. In 1876, the Court reached a similar conclusion and relied on a public trust rationale to uphold a Virginia statute forbidding citizens of other states from planting oysters in Virginia tidewaters).

⁶⁵ 69 Mass. 268 (1855) (ruling that swimming fish, as well as shellfish, belonged to the state in trust for its citizens).

⁶⁶ *McCready v. Virginia*, 94 U. S. 395 (upholding the power of the state of Virginia to prohibit citizens of other states from planting oysters within the tide waters of that state); *Manchester v. Massachusetts*, 139 U. S. 240, 11

Illinois Central Railroad Co. v. Illinois (1892)⁶⁷ is a seminal case in establishing the relevance of public trust principles to American natural resources. At issue was whether state of Illinois could transfer the title for submerged lands under Chicago Harbor to a private entity, the Illinois Central Railroad. Drawing on state obligations under the public trust doctrine, the Supreme Court asserted that the state must protect public trust resources because of its trustee relationship to the resource in question, and that the state may not abdicate that duty.⁶⁸ In other words, *Illinois Central* prohibited the alienation or privatization of public trust assets.

Illinois Central established key attributes of state management of natural resources in the public trust, including that states must regulate the use of some resources, such as beds of navigable waterways, in a sovereign capacity,⁶⁹ and that states' powers to manage natural resources may be exercised only to further the public interest.⁷⁰ Moreover, the public trust concepts established in *Illinois Central* have subsequently been widely applied to delineate the public trust in other natural resources.⁷¹

Four years later, in *Geer v. Connecticut* (1896),⁷² the Supreme Court again addressed the public trust doctrine, this time specifically addressing the public trust in wildlife and state ownership of wildlife. In *Geer*, the Supreme Court outlined the history of sovereign control of wildlife and recognized states' right to regulate wild animals. The court observed that the state owns wildlife as a "trust for the benefit of

Sup. Ct. 559 (affirming the authority of the state of Massachusetts to control and regulate the catching of fish within the bays of that state). See also *Phelps v. Racey*, 60 N. Y. 10; *Magner v. People*, 97 Ill. 320; *American Exp. Co. v. People*, 133 Ill. 649, 24 N. E. 758; *State v. Northern Pac. Exp. Co.*, 58 Minn. 403, 59 N. W. 1100; *State v. Rodman*, 58 Minn. 393, 59 N. W. 1098; *Ex parte Maier*, 103 Cal. 476, 37 Pac. 402; *Organ v. State*, 56 Ark. 270, 19 S. W. 840; *Allen v. Wyckoff*, 48 N. J. Law, 93, 2 Atl. 659; *Roth v. State*, 51 Ohio St. 209, 37 N. E. 259; *Gentile v. State*, 29 Ind. 415; *State v. Farrell*, 23 Mo. App. 176, and cases there cited; *State v. Saunders*, 19 Kan. 127 (1877); *Territory v. Evans*, 23 P. 115 (Idaho 1890).

⁶⁷ 146 U.S. 387 (1892).

⁶⁸ *Sax*, *supra* note 15.

⁶⁹ *Illinois Central*, 146 U.S. 387, (determining that Illinois held the lakebed in its sovereign capacity).

⁷⁰ *Id.* at 458 (claiming that the state could not convey property if doing so was contrary to the public interest).

⁷¹ Johanna Searle, *Private Property Rights Yield to The Environmental Crisis: Perspectives on the Public Trust Doctrine*, 41 S.C. L. REV. 897, 901 (1990) (describing how the principles of *Illinois Central* are the essentials of modern day public trust litigation, citing *Wade v. Kramer*, 121 Ill.App.3d 377, 459 N.E.2d 1025 (1984) (applying the public trust to wildlife and archaeological relics); *Paepcke v. Public Bldg. Comm'n*, 46 Ill.2d 330, 263 N.E.2d 11 (1970) (applying the public trust to parklands), *Commonwealth v. National Gettysburg Battlefield Tower, Inc.*, 454 Pa. 193, 311 A.2d 588 (1973) (applying the public trust to a historic battlefield site)).

⁷² *Geer v. State of Conn.*, 161 U.S. 519 (1896).

the people”⁷³ and that “it is the duty of the legislature to enact such laws as will best preserve the subject of the trust, and secure its beneficial use in the future to the people of the state.”⁷⁴ In other words, *Geer* confirmed that states own wildlife in their sovereign capacity and that the authority to ensure conservation of wildlife is inherent in state ownership. While *Geer* was ultimately overruled,⁷⁵ states continue to rely on *Geer* in support of state regulation of wildlife on the rationale that the state “owns” wildlife in a sovereign capacity and in trust for its citizens.⁷⁶

Following *Geer*, the public trust in wildlife was largely affirmed,⁷⁷ but a line of case law began to clarify that state ownership over wildlife is not absolute, and but is rather constrained by federal constitutional powers provided in the Treaty Clause, Property Clause, Supremacy Clause, and Interstate Commerce Clause. For example, *Missouri v. Holland* (1920) established the federal government’s right to carry out wildlife protection, despite state sovereign ownership.⁷⁸ Subsequent state challenges to federal oversight of wildlife were similarly unsuccessful. In *Hunt v. United States* (1928), the Supreme Court again affirmed federal power over wildlife by dismissing state objections to the U.S. Forest Service’s

⁷³ *Id.* at 529.

⁷⁴ *Id.* at 534.

⁷⁵ See *infra* notes 83-85 and accompanying text.

⁷⁶ Pullen v. Ulmer, 923 P.2d 54, 60 (Alaska 1996) (finding that “[n]othing in [Hughes] . . . indicated any retreat from the state’s public trust duty discussed in *Geer*”); State v. Fertterer, 841 P.2d 467, 470–71 (Mont. 1992) (noting that Hughes abandoned title ownership, but that the state continues to have sovereign ownership over wildlife). See also Horner, *supra* note 26, at 40 (noting that “[i]n the century that has passed since *Geer*, the courts have not backed off from the recognition of [the] trust relationship”); Wood, *supra* note 23, at 64 (arguing that “while the state ownership doctrine has fallen sway to greater constitutional interests, the core property-based principles of sovereign trusteeship over *ferae naturae* underlying the doctrine endure to add a critical dimension to modern wildlife issues”).

⁷⁷ Farris v. Ark. State Game & Fish Comm’n, 310 S.W.2d 231, 235–36 (Ark. 1958) (“The [State Game and Fish] Commission is a trustee for the people of this State, charged with the duty of conserving the wildlife resources,” and “[t]he Commission, as trustee for the people of this state, has the responsibility and is charged with the duty to take whatever steps it deems necessary to promote the interest of the Game and Fish Conservation Program of this state; subject only to constitutional provisions against discrimination, and to any valid exercise of authority under the provisions of the Federal Constitution.”); Iowa v. Sorensen, 436 N.W.2d 358, 362 (Iowa 1989) (“The public trust doctrine is said to have evolved to the point that it now has ‘emerged from the watery depths [of navigable waterways] to embrace the dry sand area of a beach, rural parklands, a historic battlefield, wildlife, archaeological remains, and even a downtown area.’”) (citation omitted); State v. McHugh, 630 So. 2d 1259, 1265 (La. 1994) (The Louisiana Constitution “establishes a public trust doctrine requiring the state to protect, conserve and replenish all natural resources, including the wildlife and fish of the state, for the benefit of its people.”); Aikens v. Conservation Dep’t, 184 N.W.2d 222, 223 (Mich. Ct. App. 1970) (“It has long been recognized that animals *ferae naturae* are not objects of private ownership, but rather belong to the State, which in effect holds the fish in a trust for all of the people of the State in their collective capacity.”).

⁷⁸ 252 U.S. 416 (1920).

decision to kill what it deemed excess deer, in violation of state law.⁷⁹ In *Kleppe v. New Mexico* (1976), the Supreme Court addressed whether the federal government had the authority to manage wild burros and horses on federal land under the Wild Free-Roaming Horses and Burros Act.⁸⁰ The state of New Mexico objected on the basis that the animals were state property, but the Court held that federal power over wildlife on federal land was plenary, limited only by the U.S. Constitution.⁸¹ The *Kleppe* Court also acknowledged, however, that states have “broad trustee and police powers over wild animals within their jurisdictions.”⁸²

The sweeping authority *Geer* had given to state ownership of wildlife was formally overturned in *Hughes v. Oklahoma* (1979),⁸³ though it had already been largely eroded during a series of preceding cases.⁸⁴ Specifically, the *Hughes* Court established that the state may not exercise its ownership of wildlife in a manner that conflicts with federal prerogatives protected by the Constitution. In other words, state ownership is not a viable way to assert that wildlife was immune from Commerce Clause restrictions. *Hughes* did not, however, change the states’ trustee relationship with wildlife that had been principally established in *Geer*. *Hughes* explained that “the overruling of *Geer* does not leave the States powerless to protect and conserve wild animal life within their borders.”⁸⁵

In the Twentieth Century, the courts continued to apply the public trust doctrine to the management of natural resources. . In 1983, in *National Audubon Society v. Superior Court of Alpine County (Mono Lake)*,⁸⁶ the California Supreme Court drew on *Illinois Central* to clarify that the public

⁷⁹ 278 U.S. 96 (1928).

⁸⁰ 426 U.S. 529 (1976).

⁸¹ *Id.* at 536–41.

⁸² *Id.* at 545.

⁸³ 441 U.S. 322 (1979).

⁸⁴ *Kleppe v. New Mexico*, 426 U.S. 529 (1976); *New Mexico State Game Commission v. Udall*, 281 F. Supp. 627 (D.N.M. 1968), *rev'd.*, 410 F.2d 1197 (10th Cir.), *motion for leave to file petition for writ of mandamus denied*, 396 U.S. 953, *cert. denied*, 396 U.S. 961 (1969); *Hunt v. United States*, 278 U.S. 96 100 (1928). *See also* *Toomer v. Witsell*, 334 U.S. 385 (1948); *Takahashi v. Fish & Game Commission*, 334 U.S. 410 (1948). *Toomer* and *Takashi* made explicit that states' proprietary interests in wildlife did not immunize state wildlife regulations from the checks on state power imposed by the Equal Protection and the Privileges and Immunities Clauses of the United States Constitution.

⁸⁵ 441 U.S. 322 (1979), at 338.

⁸⁶ 658 P.2d 709 (Cal. 1983).

trust applied to California water law and that certain duties accompanied that responsibility. The Court ruled that the state of California must: 1) consider public trust values before approving actions affecting trust resources,⁸⁷ 2) preserve trust values where feasible to do so,⁸⁸ and 3) continually supervise actions that affect trust resources.⁸⁹ *Mono Lake* correspondingly established a clear public trust in Californian natural resources, and identified both substantive and procedural responsibilities that accompanied the trust.

In addition to the general significance of *Mono Lake* in public trust law, the case also has implications specific to wildlife. While *Mono Lake* did not rule on whether wildlife is subject to the public trust, it did provide that conservation of the lake “for nesting and feeding by birds” fell under the protection afforded by the public trust doctrine in navigable waters.⁹⁰ Indeed, as summarized by Professor Michael Blumm and Lucas Ritchie, “the primary beneficiaries of the altered water flows required as a result of the *Mono Lake* decision were birds on the Pacific flyway.”⁹¹ Combined with the duties imposed by *Illinois Central*, *Mono Lake* implies that to fulfill the public trust duty articulated by these two cases, states must consider the potential adverse effects of an action affecting trust resources in order to avoid actions that could cause substantial impairment.⁹² In addition, states must take steps to prevent harm to the wildlife trust where feasible and continually supervise actions that may jeopardize wildlife as a public trust resource.

In 2008, the California Court of Appeals issued a narrow ruling in *Center for Biological Diversity v. FPL Group, Inc. (CBD v. FPL)* regarding state permitting of wind turbines that killed birds. The court concluded that members of the public, the beneficiary of trust resources, have a right to enforce the

⁸⁷ *Id.* at 712.

⁸⁸ *Id.* at 728.

⁸⁹ *Id.* The *Mono Lake* court additionally recognized the right of state citizens to enforce the duties required by the public trust doctrine in state courts.

⁹⁰ *Mono Lake*, 658 P.2d at 719.

⁹¹ Michael C. Blumm & Lucas Ritchie, *The Pioneer Spirit and the Public Trust: The American Rule of Capture and State Ownership of Wildlife*, 35 ENVTL. L. 673, 715 (2005).

⁹² *Id.*

government's obligation to protect and conserve wildlife as a public trust resource.⁹³ The court cited Professor Joseph Sax for the assertion that "certain interests are so particularly the gifts of nature's bounty that they ought to be reserved for the whole of the populace."⁹⁴ Moreover, the court noted that the California Supreme Court had expanded the scope of the state's public trust doctrine well beyond public use of tidal and navigable water bodies for navigation, commerce, and fishing to include the right to swim and bathe and the preservation of lands in a natural state for study or wildlife habitat.⁹⁵ Concluding that the public trust in wildlife "has long been recognized" by scholars and California courts, the court declared that the state has a duty to preserve wildlife under the public trust doctrine.⁹⁶

As seen in *CBD v. FPL*, modern case law has generally supported the public trust as a flexible doctrine. This premise is most clearly articulated in *Matthews v. Bay Head Improvement Association* (1984), which described the public trust as responsive to "[meet] changing conditions and [the] needs of the public it was created to benefit."⁹⁷ This flexibility, however, can also cause confusion on how the public trust doctrine applies to different natural resources. Further, while courts generally support the public trust, there are also instances where courts appear to avoid ruling on the public trust in wildlife if possible.⁹⁸

Case law has provided some clarity on the contours of the public trust in wildlife, but also leaves many questions unanswered, as I discuss in subsequent sections. Perhaps most importantly, the body of case law is substantial enough to establish that the public trust and principles thereof are unmistakably part of the American legal landscape and can wield significant power.

⁹³ 166 Cal. App. 4th 1349, 83 Cal. Rptr. 3d 588 (2008), as modified on denial of reh'g (Oct. 9, 2008) at 600–01, ("The interests encompassed by the public trust undoubtedly are protected by public agencies acting pursuant to their police power and explicit statutory authorization. Nonetheless, the public retains the right to bring actions to enforce the trust when the public agencies fail to discharge their duties.").

⁹⁴ *Id.* at 596.

⁹⁵ *Id.* at 596.

⁹⁶ *Id.* at 597–99.

⁹⁷ *Matthews v. Bay Head Improvement Ass'n*, 471 A.2d 355, 365 (N.J. 1984).

⁹⁸ Redmond, *supra* note 15, at 305-307 (discussing how "the public trust doctrine is susceptible to judicial sidestepping" and categorizes such sidestepping as either the "deaf ear" approach, in which public trust claims fall on unresponsive ears, or the "bait and switch" approach, in which courts nominally recognize the public trust as a concept but fail to actually apply them to the case at hand and do nothing to clarify the public trust in wildlife) (citations omitted).

C. On “State Ownership” of Wildlife

Sovereign ownership and the public trust are deeply entwined concepts. States often call on these concepts in tandem, especially during conflicts with the federal government over wildlife management authority. The close relationship between these two concepts makes understanding state claims of sovereign ownership over wildlife relevant to this thesis.

Forty-eight states assert ownership of wildlife in their sovereign capacity, including all of the thirteen western states.⁹⁹ The assertions are found in state statutes and case law.¹⁰⁰ For example, Idaho statute articulates, “[a]ll wildlife, including all wild animals, wild birds, and fish, within the state of Idaho, is hereby declared to be the property of the state of Idaho.”¹⁰¹

To understand state sovereign ownership of wildlife, it is appropriate to examine the converse, which is proprietary ownership. Under proprietary ownership, resources may be managed for personal and private use and benefit.¹⁰² The courts have made it clear that this is not the paradigm of state wildlife management¹⁰³ and that wildlife management is based on the premise that wildlife cannot be privately held.¹⁰⁴ This distinction is generally discussed in terms of the title underpinning the sovereign’s trust

⁹⁹ Blumm & Paulsen, *supra* note 8, at 1462 (summarizing state claims of ownership over wildlife. Delaware and Nebraska are the only two states which have no documented claims of sovereign ownership over wildlife in constitution, statutes, or case law).

¹⁰⁰ Blumm & Paulsen, *supra* note 8, at 1488.

¹⁰¹ IDAHO CODE ANN. § 36-103(a).

¹⁰² Wood, *supra* note 23, at 65-66.

¹⁰³ *Geer v. Connecticut*, 161 U.S. 519, 529 (1896) (“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 the 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.”); *Schakel v. State*, 513 P.2d 412 (Wyoming 1973) (“[the] State is not free to attach any conditions to hunting of such wildlife as it desires but has only the power and duty to preserve, protect and nurture the wild game, not an arbitrary power to make discriminatory laws affecting the hunting thereof.”); *Arnold v. Mundy*, 6 N.J.L. 1 (1821), cited by the Court in *Martin v. Lessee of Waddell*, 41 U.S. (16 Pet.) at 417, (clarifying that the public possesses certain rights relative to natural resources and moreover, that the American public trust doctrine was founded on the principle of sovereign ownership). *See also* Devin Kenney, *A Goat Too Far?: State Authority to Translocate Species on and Off (and Around) Federal Land*, 8 Ky. J. Equine, Agric. & Nat. Resources L. 303, 313 (2016) (summarizing how states manage wildlife on behalf of their citizens and the role of science in supporting management that achieves that goal).

¹⁰⁴ *Martin v. Lessee of Waddell*, 41 U.S. 367, 413-414 (1846) (finding that the State of New Jersey could not assign the rights to collect shellfish in a particular area to a single individual because the people exercised the “public and common right of fishery in navigable waters.”); *Clajon Prod. Corp. v. Petera*, 854 F. Supp. 843, 852 (D. Wyo. 1994)

obligation (*jus publicum*) in contrast to the private interest (*jus privatum*).¹⁰⁵ Early case law clarified that state ownership of certain natural resources, including wildlife, is a result of state sovereignty.¹⁰⁶

Sovereign ownership imposes a public trust in wildlife. Professor Mary Christina Wood succinctly summarizes that “[t]he public trust is most appropriately viewed as a fundamental, organic attribute of sovereignty itself.”¹⁰⁷ In other words, claims of sovereign ownership over wildlife also assert public trust responsibilities in wildlife.¹⁰⁸

There is widespread affirmation that states manage wildlife in their sovereign capacity, and that this authority is subject to the confines of the United States Constitution.¹⁰⁹ Thus claims that states unilaterally and unconditionally own wildlife can be misleading and are not as clear-cut as assertions can imply. In practice, the lines of wildlife ownership between the states and federal government can be blurry and contentious.¹¹⁰ Questions frequently arise about primary management authority of wildlife between states or federal agencies. These questions center around which entity has authority on what land ownerships and under what circumstances. Wildlife is further a transboundary resource, which can be problematic if different wildlife managers have different management objectives across adjacent jurisdictions.

(citing the "ancient property doctrine dating back to the earliest days of the common law" which holds that animals are owned by no one).

¹⁰⁵ Caspersen, *supra* note 17.

¹⁰⁶ *McCready v. Virginia*, 94 U.S. 391, 394 (1876) (“[E]ach State owns the beds of all tide-waters within its jurisdiction, unless they have been granted away. In like manner, the States own the tide-waters themselves, and the fish in them, so far as they are capable of ownership while running. For this purpose the State represents its people, and the ownership is that of the people in their united sovereignty.”) (citations omitted).

¹⁰⁷ Wood, *supra* note 23, at 69 (discussing how *Geer v. Connecticut* (161 U.S. 519, 525-28 (1896)) refers to the trust in wildlife as an “attribute of government” and tracing its historical manifestation “through all vicissitudes of government” and *United States v. 1.58 Acres of Land* (523 F. Supp. 120, 122-23 (D. Mass. 1981)) traces historical origins of the public trust doctrine and noting that the trust was applicable to all forms of government in developed western civilization).

¹⁰⁸ Blumm & Paulsen, *supra* note 8, at 1455-1457; Musiker, *supra* note 56, 108 at 91-92; and Dale D. Goble, *Three Cases/Four Tales: Commons, Capture, the Public Trust, and Property in Land*, 35 ENVTL. L. 807, 837 (2005).

¹⁰⁹ See *supra* notes 77-85 and accompanying text.

¹¹⁰ Martin Nie et. al., *Fish and Wildlife Management on Federal Lands: Debunking State Supremacy*, 47 Env'tl. L. 797 (2017); see also Kenney, *supra* note 103.

Wyoming v. United States (2002) typifies clashes between the states and federal government over the jurisdiction of wildlife and the arguments made on both sides.¹¹¹ In *Wyoming*, the state of Wyoming alleged the U.S. Fish & Wildlife Service was interfering with the state’s “sovereign right” to manage wildlife within its borders, including its right to vaccinate elk on the National Elk Refuge.¹¹² The Tenth Circuit Court of Appeals ruled that, “federal management and regulation of federal wildlife refuges preempts state management and regulation of such refuges to the extent the two actually conflict, or where state management and regulation stand as obstacle to accomplishment of full purposes and objectives of federal government.”¹¹³

Additional examples of clashes between the states and federal government regarding wildlife management proliferate, ranging from landmark case law,¹¹⁴ to lower profile squabbles that receive primarily local attention,¹¹⁵ to everything in between.¹¹⁶ In such disputes, state statutory and constitutional provisions are frequently referenced to support state ownership of wildlife and often, management of wildlife in the public trust.

D. The Public Trust in Wildlife as Found in State Constitutions and Statutes

The state public trust in wildlife is supported by language in state constitutions and statutes. Some states expressly employ the terms “trust,” “trustee,” and “public trust” relative to wildlife. Some states use

¹¹¹ *Wyoming v. U.S.*, 279 F.3d 1214 (2002).

¹¹² *Id.* at 1240.

¹¹³ *Id.*

¹¹⁴ *Kleppe v. New Mexico*, 426 U.S. 529 (1976) (wherein the state asserted that the federal government was wrongly infringing on the “State’s traditional trustee powers over wild animals” and correspondingly, that the animals were state property. The Court held that federal power over wildlife on federal land was plenary, limited only by the U.S. Constitution.).

¹¹⁵ *Wilderness Watch v. Vilsack*, 4:16-CV-12-BLW, 2017 WL 241320 (D. Id. Jan. 18, 2017) (which concluded that the state of Idaho must obtain approval from the Forest Service before undertaking its project in Frank Church River of No Return wilderness area, and that any action taken by Idaho without federal approval would be contrary to the Wilderness Act).

¹¹⁶ *Alaska v. Zinke et al*, 3:17-cv-00013-JWS, 25 (2017) (“[the actions by the NPS and FWS] infringe on the State’s sovereign authority to manage wildlife in Alaska”); *Alaska v. Gould*, 3:10-cv-00113-HRH (2010) (“Alaska is a sovereign state, which has a compelling interest in the management, conservation, and regulation of all wildlife and other natural resources within its jurisdiction, including the Unimak Caribou Herd and its habitat, for sustained yields and the maximum use and benefit of the of the Alaskan people.”). *See generally* Nie, *supra* note 110.

“trust-like” language. Trust-like language functionally describes what the public trust is, but does not expressly employ the words “public trust doctrine.” For example, the Alaska constitution states, “[w]herever occurring in their natural state, fish, wildlife, and waters are reserved to the people for common use.”¹¹⁷ This language isn’t saying that the state will manage wildlife in the public trust, but simultaneously, the language describes aspects of what trust management entails. The Alaska Supreme Court has supported this interpretation.¹¹⁸ Professor Michael Blumm and Aurora Paulsen have demonstrated how assessing trust-like language provides a meaningful way to assess the presence or absence of the public trust.¹¹⁹ The summary that follows of provisions in state constitutions and statutes that reference the public trust and associated principles is based on work by Professor Michael Blumm and Aurora Paulsen (2013).¹²⁰

Three of the thirteen western states have trust-like language relating to wildlife in their constitutions (Alaska, Hawaii, and Montana).¹²¹ Six states have trust-like language relating to wildlife in statute (Colorado, Idaho, Nevada, Oregon, and Washington).¹²² Of those six states, three (California, Montana, and Utah) expressly identify that wildlife is to be managed in the public trust.¹²³ For example, Utah statute provides that, “[t]he Division of Wildlife Resources is appointed as the trustee and custodian of protected wildlife...”¹²⁴ In comparison, Washington statute uses trust-like language and provides, “[w]ildlife, fish, and shellfish are the property of the state. The commission, director, and the department shall preserve, protect, perpetuate, and manage the wildlife and food fish, game fish, and shellfish in state waters and offshore waters. The department shall conserve the wildlife and food fish, game fish, and shellfish resources in a manner that does not impair the resource.”¹²⁵ Instances of both trust-like and express trust language provide support for the state public trust in wildlife.

¹¹⁷ ALASKA CONST. art. VIII, § 3.

¹¹⁸ *Owsichek v. State, Guide Licensing & Control Bd.*, 763 P.2d 488 (Alaska 1988).

¹¹⁹ Blumm & Paulsen, *supra* note 8, at 1473, 1488.

¹²⁰ *Id.*

¹²¹ *Id.* at 1493.

¹²² *Id.*

¹²³ *Id.*

¹²⁴ UTAH REV. CODE 23-14-1.

¹²⁵ WASH. REV. CODE 77.04.012.

The strongest support for the public trust in wildlife available in each western state is presented in

Table 1. The purpose of this summary is to clarify the robustness with which each state has, or has not, embraced the public trust in wildlife.

Table 1: Strongest support for the public trust in wildlife by state.

Alaska	ALASKA CONST. art. VIII, § 3 (common use clause) “Wherever occurring in their natural state, fish, wildlife, and waters are reserved to the people for common use.” Owsichek v. State, Guide Licensing, 763 P.2d 488 (Alaska 1988), interprets this clause to “impose upon the state a trust duty to manage the fish, wildlife and water resources of the state for the benefit of all the people.”
Arizona	AZ ST § 17-231, “The commission shall: [...] 2. Establish broad policies and long-range programs for the management, preservation and harvest of wildlife.”
California	CAL. FISH & GAME CODE § 711.7, “The fish and wildlife resources are held in trust for the people of the state by and through the department.”
Colorado	COLO. REV. STAT. § 33-1-101(1), “It is the policy of the state of Colorado that the wildlife and their environment are to be protected, preserved, enhanced, and managed for the use, benefit, and enjoyment of the people of this state and its visitors.”
Hawaii	HAW. CONST. art. XI, § 1, “For the benefit of present and future generations, the State and its political subdivisions shall conserve and protect Hawaii’s natural beauty and all natural resources, including land, water, air, minerals and energy sources, and shall promote the development and utilization of these resources in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State.”
Idaho	IDAHO CODE ANN. § 36-103(a), “All wildlife, including all wild animals, wild birds, and fish, within the state of Idaho, is hereby declared to be the property of the state of Idaho. It shall be preserved, protected, perpetuated, and managed.”
Montana	MONT. CODE ANN. § 75-1-103(2)(a), (b), “[The state must] fulfill the responsibilities of each generation as trustee of the environment for succeeding generations,” and “ensure for all Montanans safe, healthful, productive, and aesthetically and culturally pleasing surroundings.”
Nevada	NEV. REV. STAT. ANN. § 501.100, “1. Wildlife in this State not domesticated and in its natural habitat is part of the natural resources belonging to the people of the State of Nevada. 2. The preservation, protection, management and restoration of wildlife within the State contribute immeasurably to the aesthetic, recreational and economic aspects of these natural resources.”
New Mexico	N.M. STAT. ANN. § 17-1-1, “It is the purpose of this act and the policy of the state of New Mexico to provide an adequate and flexible system for the protection of the game and fish of New Mexico and for their use and development for public recreation and food supply, and to provide for their propagation, planting, protection, regulation and conservation to the extent necessary to provide and maintain an adequate supply of game and fish within the state of New Mexico.”
Oregon	OREGON REV. STAT. ANN. § 496.012, “It is the policy of the State of Oregon that wildlife shall be managed to prevent serious depletion of any indigenous species and to provide the optimum recreational and aesthetic benefits for present and future generations of the citizens of this state. In furtherance of this policy, the State Fish and Wildlife Commission shall represent the public interest of the State of Oregon and implement the following coequal goals of wildlife management: (1) To maintain all species of wildlife at optimum levels.

	(2) To develop and manage the lands and waters of this state in a manner that will enhance the production and public enjoyment of wildlife. (3) To permit an orderly and equitable utilization of available wildlife. (4) To develop and maintain public access to the lands and waters of the state and the wildlife resources thereon. (5) To regulate wildlife populations and the public enjoyment of wildlife in a manner that is compatible with primary uses of the lands and waters of the state. (6) To provide optimum recreational benefits. (7) To make decisions that affect wildlife resources of the state for the benefit of the wildlife resources and to make decisions that allow for the best social, economic and recreational utilization of wildlife resources by all user groups.”
Utah	UTAH REV. CODE § 23-14-1, “The Division of Wildlife Resources is appointed as the trustee and custodian of protected wildlife...”
Washington	WASH. REV. CODE § 77.04.012, “Wildlife, fish, and shellfish are the property of the state. The commission, director, and the department shall preserve, protect, perpetuate, and manage the wildlife and food fish, game fish, and shellfish in state waters and offshore waters. The department shall conserve the wildlife and food fish, game fish, and shellfish resources in a manner that does not impair the resource.”
Wyoming	WYO. STAT. ANN. § 23-1-103, “For the purpose 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.”

Ten of the thirteen western states have statements asserting the public trust in wildlife in statute or constitution (exceptions are Arizona, New Mexico, and Wyoming). These provisions however, offer only generalized statements about the public trust in wildlife. Namely, that the state is responsible for preserving wildlife for the public benefit. At their most detailed, the extent of these parameters is to establish that the state is the trustee, the public is the beneficiary, and management must protect the corpus of the trust, which in this case, is wildlife. Beyond these broad concepts, state statutes and constitutions provide no additional clarification as to what managing wildlife in the public trust means in practice. In other words, strong language in support of the public trust does not clarify *how* the public trust in wildlife must be administered or taken into consideration when making wildlife management decisions. Case law in some states has elaborated on substantive requirements,¹²⁶ but still leaves many questions unanswered.

E. The North American Model of Wildlife Conservation

¹²⁶ See *supra* Part II.B.

The North American Model of Wildlife Conservation (“North American Model”) has been asserted as “the basis for state wildlife law.”¹²⁷ The North American Model is a set of seven broadly stated principles that characterize wildlife management in the United States and Canada. The seven principles are: (1) Wildlife resources are a public trust; (2) Markets for game are eliminated; (3) Allocation of wildlife is by law; (4) Wildlife can be killed only for a legitimate purpose; (5) Wildlife is considered an international resource; (6) Science is the proper tool to discharge wildlife policy; and (7) Democracy of hunting is standard.¹²⁸

The North American Model is relevant to this thesis because the public trust is considered the “cornerstone” of the seven principles that comprise the model.¹²⁹ As such, examining how states are operationalizing the public trust is functionally assessing the premise of state wildlife management and the validity of state positions during conflicts with the federal government.¹³⁰

The Association of Fish and Wildlife Agencies (AFWA), whose membership includes the wildlife management agencies of all thirteen western states, strongly supports the North American Model as the foundation of state wildlife management. AFWA is active in lobbying the federal government on behalf of the wildlife management agencies and in negotiating agreements with federal land agencies,¹³¹ and often, is party to litigation between the states and federal government regarding wildlife management.¹³² The significant influence of AFWA makes the organization’s perspective on the North American Model and public trust doctrine relevant to my findings.

¹²⁷ Association of Fish and Wildlife Agencies, Wildlife Management Authority: The State Agencies’ Perspective 13 (Feb. 2014), at http://www.fishwildlife.org/files/AFWATaskForce_State_Authorities_v3-5-14.pdf

¹²⁸ J. F. Organ Et Al., *The North American Model of Wildlife Conservation: The Wildlife Society Tech. Review 12-04*, (Bethesda, MD: The Wildlife Society and Boone and Crockett Club 2012).

¹²⁹ V. Geist & J. F. Organ, *The public trust foundation of the North American Model of Wildlife Conservation*, 58 *Northeast Wildlife* 49, 50 (2004).

¹³⁰ See *infra* notes 132-133 and accompanying text for how states reference the North American Model and public trust in conflicts with the federal government.

¹³¹ Overview, Association of Fish and Wildlife Agencies. Accessed January 22, 2019.

<https://www.fishwildlife.org/landing/overview>; see also Nie, *supra* note 110, at 812-814 (discussing the role of AFWA relative to the federal government).

¹³² *Wisconsin v. Lac Courte Oreilles Band of Lake Superior Chippewa Indians of Wisconsin*, 2015 WL 527525 (U.S.), 2; *Herrera v. State of Wyoming*, 2018 WL 6168778 (U.S.), 1 (U.S., 2018) (both filings by AFWA as amicus curiae, asserting the public trust and North American Model in defense of primary state authority over wildlife).

The North American Model is frequently brought to bear during conflicts between state and federal governments and can exacerbate these conflicts. The North American Model plays a significant role in how states frame issues and conceptualize their political and legal authority over wildlife. As the cornerstone of the North American Model, the public trust in wildlife is frequently referenced in these conflicts and is called on to support states' rationale for their plenary management authority over wildlife.¹³³

The North American Model has been criticized as biased towards the interests of individuals who have traditionally had the most at stake in wildlife management – namely consumptive users such as hunters, trappers, and anglers – and does not adequately represent the diversity of views held towards wildlife by the American public.¹³⁴ As it relates to the public trust, this perceived bias can be problematic since the premise of the public trust is that the trust asset is managed for the diversity of interests held by the beneficiaries and not an influential minority.

F. Significant Remaining Questions

How the public trust in wildlife is actually applied and used in state wildlife management remains unclear. States have minimal guidance in statute, constitution, or regulation about how to effectuate the public trust in wildlife. Beginning to reconcile this chasm between claims of managing wildlife in the public trust and the murkiness of its actual implementation is the primary purpose of this thesis.

¹³³ Utah Native Plant Society v. United States Forest Service, 2017 WL 822098 (D. Utah March 2, 2017) regarding introducing mountain goats onto the Manti-La Sal National Forest. The States of Utah, Alaska, Colorado, Idaho, Kansas, Nebraska, and Wyoming, and the New Mexico filed a brief as Amici Curiae in Support of Appellees and Affirmance asserting, “[states have] sovereign interests in managing a public trust resource for their citizens' benefit” and “All wildlife in Utah, not held by private ownership and legally acquired, is a Utah public trust resource.” Utah Native Plant Society & Grand Canyon Trust, Plaintiffs -- Appellants, v. United States Forest Service & Tom Tidwell, Defendants -- Appellees., 2017 WL 5565477 (C.A.10), 1-3.

¹³⁴ Michael P. Nelson, et al., *An Inadequate Construct? North American Model: What's Flawed, What's Missing, What's Needed*, The Wildlife Professional, Summer 2011; and Cynthia A. Jacobson, et al., *A Conservation Institution for the 21st Century: Implications for State Wildlife Agencies*, 74 *Journal of Wildlife Management* 203, (2010).

Part III – Results

A total of 86 documents were identified and analyzed in my review.¹³⁵ Detailed results from my document analysis are tabulated in Appendix B. My inquiry to state legal counsel garnered responses from eleven states (Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Utah, Washington, and Wyoming; exceptions were Alaska and Oregon). In two instances, my email inquiry was forwarded to the state’s communication department (California and Wyoming). The responses received are still collectively referred to as the “legal counsel responses.” The findings from both my document review and the responses from state legal counsel inform my analysis.

My findings are examined below in the context of my research questions that address how the public trust in wildlife has been put into operation by state agencies and the role of the public trust in wildlife in decision-making. These research questions are, first, how the public trust in wildlife is being referenced and used. Second, how the public trust in wildlife is being applied. Third, the relationship between the conceptual foundations of the public trust in wildlife and its use by state agencies, including how this use relates to conflicts with the federal government. This section concludes with an overview of how state legal counsel responded to my inquiry.

A. How the Public Trust in Wildlife is Referenced in the State Documents Reviewed

References to the public trust in wildlife are inconsistent and vague. References to the public trust in wildlife generally fall into two overlapping categories. First, references are made in passing, without elaboration on how the public trust relates either to the document at hand or to state wildlife management in general. Second, in instances when the public trust in wildlife is more than a passing reference, the description is incomplete. Both categories of references are explained below.

i. Passing References

¹³⁵ See Appendix C for a list of all documents reviewed.

The words “public trust” or “trustee” occurred in approximately half of the documents reviewed (56%), spanning ten states (Alaska, Arizona, California, Colorado, Idaho, Montana, Oregon, Utah, Washington, and Wyoming; exceptions are Hawaii, Nevada, and New Mexico).¹³⁶ The majority of these references occur in passing without elaborating on what managing wildlife in the public trust entails or how it informs the document at hand. For example, Arizona’s Comprehensive Wildlife Conservation Strategy (2005) provides that “[the state’s wildlife] are a public trust, managed for the benefit of present and future generations.”¹³⁷ This excerpt from the introduction of the document provides clear support that wildlife in Arizona is managed in the public trust. However, no elaboration is provided as to how the public trust in wildlife informs or relates to the plan. The public trust in wildlife is not mentioned anywhere else in the document. This example is representative of the majority of references to the public trust in wildlife in state documentation.

ii. Incomplete References

When state documentation provides more than a passing mention of the public trust in wildlife, it generally provides an incomplete representation. Some documents did this by identifying the trustee and beneficiary of the public trust in wildlife, and others made weak conceptual ties between the document and public trust principles.

Identifying the trustee and beneficiary of the public trust in wildlife was one way that some documents provide important, but not particularly meaningful, elaboration on the public trust in wildlife. Forty-four documents (51%) spanning nine states (Alaska, Arizona, California, Colorado, Idaho, Montana, Nevada, Oregon, and Wyoming; exceptions are Hawaii, New Mexico, Utah, and Washington)

¹³⁶ This reference addresses documents that explicitly referenced these terms (the “yes” column of my evaluative rubric question 1; see *supra* note 13 for an explanation of the terminology and methods).

¹³⁷ Arizona Game and Fish Department. Arizona’s Comprehensive Wildlife Conservation Strategy: 2005-2015. 2005. Phoenix, Arizona. Accessed March 8, 2019. https://repository.asu.edu/attachments/74283/content/b_Core%20Plan%20Final%206-28-05.pdf

identified the trustee, usually as the wildlife management agency.¹³⁸ Similarly, forty-six documents (53%) spanning ten states (Alaska, Arizona, California, Colorado, Idaho, Montana, Nevada, Oregon, Washington, and Wyoming; exceptions are Hawaii, New Mexico, and Utah) define the beneficiary of the trust, usually as the citizens of the state, but sometimes as “present and future generations” or “citizens” more broadly.¹³⁹

For example, an Idaho Bighorn Sheep Plan (2010) states, “[t]he Department [of Fish and Game] serves as a trustee to protect and manage wildlife resources for all Idaho citizens.”¹⁴⁰ The excerpt clearly identifies the Idaho Department of Fish and Game as the trustee and Idaho citizens as the beneficiary, but the document does not provide substantive discussion as to what that role means in the context of the trust and the decision being made in this document. In the majority of instances, if a document identifies the beneficiary, it also identifies the trustee. The excerpt from the Idaho Bighorn Sheep Management Plan, above, provides a representative example of this.

Another way some state documentation references the public trust without actually using it to inform the document at hand is by providing scholarly definitions of the public trust in the framing of the document, including literature citations. For example, Oregon’s Wolf Conservation and Management Plan (2010) includes a brief scholarly discussion on the public trust, replete with citations on the philosophy of the public trust doctrine as applied to land and wildlife management.¹⁴¹ The document and decisions therein, however, make no connection back to the public trust described in the initial, comprehensive, definition of the trust.

Seventeen documents (20%) spanning nine states (Alaska, Arizona, California, Colorado Idaho, Montana, Oregon, Washington, and Wyoming) discussed the public trust or its principles beyond a

¹³⁸ This reference addresses documents that explicitly referenced these terms (the “yes” column of my evaluative rubric question 9; see *supra* note 13 for an explanation of the terminology and methods).

¹³⁹ This reference addresses documents that explicitly referenced the terms (the “yes” column of my evaluative rubric question 7; see *supra* note 13 for an explanation of the terminology and methods).

¹⁴⁰ Idaho Department of Fish and Game. Bighorn sheep management plan. 2010. Boise, ID. Accessed March 8, 2019. <https://idfg.idaho.gov/old-web/docs/wildlife/planBighorn.pdf>

¹⁴¹ Oregon Department of Fish and Wildlife. Wolf conservation and management plan. 2010. Salem, OR. Accessed March 8, 2019.

https://www.dfw.state.or.us/wolves/docs/Oregon_Wolf_Conservation_and_Management_Plan_2010.pdf

passing reference.¹⁴² These documents, however, did not substantively tie public trust principles to the decision being made. For example, California’s Spiny Lobster Fishery Management Plan (2016) states, “[a]s the public trust agency with direct management responsibility over the fishery, [the California Department of Fish and Wildlife] has prepared the draft [Fisheries Management Plan] and supported the regulatory amendment process, as well as assisted in the preparation of an analysis that complies with [the California Environmental Quality Act],”¹⁴³ among other express references to the public trust. As the plan goes on to describe the rationale behind proposed changes in the plan, it peripherally draws on public trust principles by discussing how providing for the public benefit and conservation relates to the decisions being made in the document. While this use of the public trust is more substantive than a passing reference, it does not expressly connect the decision being made to the public trust in wildlife. Such uses do not clarify how states are conceptualizing or operationalizing the public trust in wildlife.

B. How the Public Trust in Wildlife is Being Applied

In the vast majority of documents assessed, the public trust in wildlife is not applied in any meaningful fashion. Only two of the 86 documents reviewed used the public trust in wildlife to specifically support the decision being made in the document. The two documents that meaningfully tied the decision and document to public trust concepts were a Bighorn Sheep Conservation Strategy (2010)¹⁴⁴ from Montana and a controversial Intensive Management (Predator Control) Protocol (2011)¹⁴⁵ from

¹⁴² This reference addresses documents in the “tangentially” column of my evaluative rubric for question 15; see *supra* note 13 for an explanation of the terminology and methods.

¹⁴³ California Department of Fish and Wildlife. California Spiny Lobster Fishery Management Plan and Proposed Regulatory Amendments: Initial Study/Negative Declaration. 2016. Sacramento, CA. Accessed March 8 2019. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=121759&inline>

¹⁴⁴ Montana Fish, Wildlife, and Parks. Montana Bighorn Sheep Conservation Strategy. 2010. Wildlife Division of Montana Fish, Wildlife & Parks. Helena, MT. Accessed March 8, 2019. <http://fwp.mt.gov/fishAndWildlife/management/bighorn/plan.html>

¹⁴⁵ Alaska Department of Fish & Game. Intensive management protocol. 2011. Division of Wildlife Conservation, Alaska Department of Fish & Game. Juneau, AK. Accessed March 8 2019. https://www.adfg.alaska.gov/static/research/programs/intensivemanagement/pdfs/intensive_management_protocol.pdf

Alaska. These two documents are examined in more detail below. These were the two cases where there is a connection between the public trust and a decision being made by a state wildlife agency.

i. Montana Bighorn Sheep Conservation Strategy

The Montana Bighorn Sheep Conservation Strategy provides a comprehensive and thorough management plan for bighorn sheep in the state. The document makes a discernable connection between governing statutes, public trust in wildlife principles, and the objectives of the plan. The document begins by describing the context of bighorn sheep conservation in Montana, including how it relates to the objectives of the state wildlife management agency (Montana Fish, Wildlife, and Parks [FWP]) and the history of bighorn sheep management in the western United States. The plan goes on to identify what research is being conducted on bighorn sheep and how it informs management. The public trust is a thread of discussion carried throughout these sections.

For example, to frame the public trust, the document clearly articulates the trustee and beneficiary, respectively, as “FWP and the Commission” and “all citizens.”¹⁴⁶ The document further establishes goals that are directly in line with the public trust, for example, that “[w]e will serve as an advocate for responsible management and for equitable allocation of public use of the limited resources that we are entrusted to manage.”¹⁴⁷ This statement addresses that multiple stakeholder groups have an interest in bighorn sheep management, the presence of a trust relationship, and implies an affirmative conservation obligation. The plan concludes with guidance for individual hunting districts.

The plan subsequently connects the actions it proposes to public trust concepts by establishing criteria that must be met prior to transplanting sheep to a new area. One of the criteria is, “[a]pprove transplants only where there are significant public benefits outweighing any

¹⁴⁶ Montana Fish, Wildlife, and Parks, *supra* note 144, at 65.

¹⁴⁷ *Id.* at 4.

public concerns or issues”¹⁴⁸ and is accompanied by a description of what types of public feedback will accompany that decision. The document further provides that, “[e]xcept as otherwise provided, the importation for introduction or the transplantation of any wildlife is prohibited unless the commission determines, based on scientific investigation and after public hearing, that a species of wildlife poses no threat of harm to native wildlife and plants or to agricultural production and that the transplantation or introduction of a species has significant public benefits.”¹⁴⁹ While the document does not address every public trust principle I analyzed in my evaluative rubric,¹⁵⁰ the document explicitly emphasizes that the public interest is a primary factor driving bighorn sheep management and clearly articulates the means by which state wildlife management intends to implement its trust responsibilities.

ii. Alaska Intensive Management Protocol

The Alaska Intensive Management Protocol uses the public trust in wildlife to justify predator control. “Intensive management” refers to state predator control and habitat enhancement with the goal of enhancing ungulate populations.¹⁵¹ The document begins with a scholarly discussion on the public trust in Alaska, including citations to public trust literature¹⁵² and explicitly identifies the trustees of Alaskan wildlife as the governor, legislature, and Board of Game.¹⁵³ The document goes on to provide history and context on predator management in Alaska and discusses the process by which predator control decisions are made, including

¹⁴⁸ *Id.* at 65.

¹⁴⁹ *Id.* at 64.

¹⁵⁰ The document does not explicitly address state sovereign ownership of wildlife referenced (evaluative rubric question 3), assert state management authority over wildlife (evaluative rubric question 4), discussion of the conservation obligations/duties of trust management (evaluative rubric question 5), references to what management limitations/constraints are imposed by trust management (evaluative rubric question 6), use of the North American Model of Wildlife Conservation (evaluative rubric question 12), discussion of adverse impacts of any proposed activity considered (evaluative rubric question 13).

¹⁵¹ Alaska Department of Fish & Game, *supra* note 145.

¹⁵² *Id.* at 2, citing Christian A. Smith, *The Role of State Wildlife Professionals Under the Public Trust Doctrine*, 75 *Journal of Wildlife Management* 1539, (2011).

¹⁵³ *Id.*

discussion on Alaska state law which requires a “positive determination” of whether harvest objectives are being met or not as the precursor to predator control.¹⁵⁴ The “positive determination” is framed as akin to an affirmative duty wherein the state must take action if ungulate populations aren’t at desired levels.

The document next discusses the protocol for intensive management, which uses tiered “principles,” “guidelines,” and “actions” to decide when predator control is appropriate. One “principle” is that “[i]ntensive management programs should be socially sustainable.”¹⁵⁵ Social sustainability, as explained in the document, refers to having widespread support for the state’s management actions by the people of the state of Alaska and asserts that education is one mechanism by which to achieve such support. This relates to the public trust because having majority public support for management actions is one of the substantive principles of trust management.¹⁵⁶ Additionally, the document summarizes the Alaska Department of Fish & Game’s approach to predator control as, “[o]nce the biological and management factors are presented by the Department, implementation is a policy decision by elected and appointed officials with public trust authority for wildlife that incorporates biological, social, and economic factors.”¹⁵⁷ As demonstrated from these excerpts, the public trust in wildlife is a theme that explicitly connects discussion in the document as it walks through a tiered decision-making approach.¹⁵⁸

While the document creates a clear connection between the public trust in wildlife and the decision being made, the document applies the public trust to justify predator control.

¹⁵⁴ *Id.* at 2.

¹⁵⁵ *Id.* at 5.

¹⁵⁶ *Supra* note 47 and accompanying text.

¹⁵⁷ *Id.* at 7.

¹⁵⁸ The document does not address all elements of the public trust analyzed in my evaluative rubric, including: address state sovereign ownership of wildlife referenced (evaluative rubric question 3), assert state management authority over wildlife (evaluative rubric question 4), references to what management limitations/constraints are imposed by trust management (evaluative rubric question 6), use of the North American Model of Wildlife Conservation (evaluative rubric question 12).

Predator control is extremely controversial and has a storied history in Alaska.¹⁵⁹ The citizens of Alaska do not universally support state predator control.¹⁶⁰ Notably, the state of Alaska has a long history of litigation surrounding predator control efforts, ballot initiatives being overturned by the legislature, and the Board of Game serving a vocal minority of hunting-based interests.¹⁶¹

C. Relationship Between the Conceptual Foundations of the Public Trust and Its Use By State Wildlife Agencies

Many principles identified in the literature as fundamental to the public trust in wildlife are absent from state documentation. Similarly absent are concepts that states commonly reference in concert with the public trust during conflicts with the federal government regarding the authority to manage wildlife on federal lands, which are explained below. The use, or lack thereof, of these principles and concepts represents a fundamental disconnect between rhetoric and the documentation of day-to-day state wildlife management.

i. Public Trust Principles

The documents reviewed do not generally go beyond a superficial reference to the public trust in wildlife. Fundamental trust principles, both substantive and procedural, were not incorporated into these documents in any meaningful fashion. Absent is any discussion on conservation duties imposed by the trust, discussion of limitations on management, how the trust is to be enforced, and discussion of alternatives and/or adverse impacts of the action. The exception is public participation, which is a principle of the public trust and is also frequently required in state decision making processes. Each of these principles is discussed below.

¹⁵⁹ Edward Fitzgerald, *The Alaskan Wolf War: The Public Trust Doctrine Missing in Action*, 15 Animal L. 193 (2009).

¹⁶⁰ *Id.* at 227-233 (summarizing that “wolf killing policies have not generally been supported by Alaska voters, who have resorted to ballot initiatives to influence [policy]” and presenting examples).

¹⁶¹ *Id.*

No documents expressly articulate the conservation duties and affirmative obligations related to the public trust.¹⁶² Many of the documents reference conservation more generally or in contexts external to the public trust in wildlife, though for the majority of documents, the reference is peripheral and made in passing. For example, an Idaho Mountain Lion Management Plan (2002) provides, “[t]he Idaho Department of Fish and Game will do its best to conserve Idaho’s mountain lion resource for the benefit of present and future Idahoans and visitors to the state.”¹⁶³ This excerpt references conservation and also public trust principles by identifying management for present and future generations. However, the remainder of the document does not clarify how this conservation obligation is to be applied in the context of trust management.

Only one reference to how the public trust in wildlife relates to limitations on state wildlife management was found in a policy statement from the Colorado state wildlife commission about requirements for conflict of interest disclosure by commissioners.¹⁶⁴¹⁶⁵ The document provides that “[t]he members of the Wildlife Commission recognize that service on the Commission is a public trust and that each commissioner is required to carry out the duties of a commissioner for the overall benefit of the people of the state of Colorado and in a fair and impartial manner” and generally references the public trust as the foundation of ethical behavior for the commission.¹⁶⁶ The reference is somewhat peripheral to implementing the public trust in wildlife, but is notable for its explicit mention of both the public trust and a limitation as it relates to wildlife management.

¹⁶² This reference addresses the “no” column of my evaluative rubric for questions 5 and 6; see *supra* note 13 for an explanation of the terminology and methods).

¹⁶³ Idaho Department of Fish and Game. Mountain lion management plan 2002-2010. 2002. Boise, ID. Accessed February 22, 2019. <https://idfg.idaho.gov/old-web/docs/wildlife/planMtnLion.pdf>

¹⁶⁴ Colorado Parks and Wildlife. Colorado Wildlife Commission Policy on Conflict of Interest Disclosure. 2009. Wildlife Commission, Colorado Parks and Wildlife. Denver, CO. Accessed February 11, 2019. https://cpw.state.co.us/Documents/Commission/policy_procedures/ConflictofInterestPolicy12-10-09.pdf

¹⁶⁵ This reference addresses the “yes” column of my evaluative rubric for questions 6; see *supra* note 13 for an explanation of the terminology and methods).

¹⁶⁶ *Id.* at 1. Additionally, this reference is notable given the composition of the Colorado Wildlife Commission, which has a history of representing the interests of extractive industry to the exclusion of other interests. See e.g., Paige Blankenbuehler, *Agricultural interests steer Colorado’s wildlife management*. High Country News (Aug. 31, 2018). Accessed February 22, 2019. <https://www.hcn.org/issues/50.15/wildlife-agricultural-interests-steer-colorados-wildlife-management>. Also consider the variable nature of the public trust in Colorado, summarized *infra* notes 193-199 and accompanying text.

No references to enforcement of the public trust were found in the documents evaluated.¹⁶⁷ The option to litigate the wildlife management agency may be available to outside individuals and organizations, but the context for enforcement and accountability of the trustee to the beneficiary is not expressly identified in any of the documentation reviewed.

Six documents (7%) examined potential adverse impacts of the decision at hand and/or identified alternative courses of action.¹⁶⁸ This type of reference was only found in the context of fulfilling other environmental statutory requirements. These statutory obligations are generally procedural in nature, requiring a certain process to be followed when making decisions that may affect the natural environment, including requiring examination of alternatives. These laws are sometimes referred to as “little NEPAs”¹⁶⁹ since they implement elements of the federal National Environmental Policy Act of 1970 (NEPA)¹⁷⁰ on the state level.

Public participation is a principle of the public trust that was implemented in state wildlife management documentation comparatively frequently. Opportunities for public participation were present in approximately half of the documents reviewed (45%), spanning eleven of the thirteen states (exceptions are Nevada and Utah).¹⁷¹ Opportunities for public participation in state wildlife management have generally been increasing over time¹⁷² so the widespread opportunities for public participation is not necessarily a result of the public trust but rather, a result of other environmental and state administrative decision making requirements. Still, the prevalence of opportunities is relevant to evaluating

¹⁶⁷ This reference addresses the “no” column of my evaluative rubric for question 10; see *supra* note 13 for an explanation of the terminology and methods).

¹⁶⁸ This reference addresses the “yes” column of my evaluative rubric for question 13; see *supra* note 13 for an explanation of the terminology and methods).

¹⁶⁹ Patrick Marchman, “Little NEPAs”: *State Equivalents to the National Environmental Policy Act in Indiana, Minnesota and Wisconsin*. 2012. Nicholas School of the Environment, Duke University.

¹⁷⁰ 42 U.S.C. § 4331-4347.

¹⁷¹ This reference addresses the “yes” column of my evaluative rubric for question 14; see *supra* note 13 for an explanation of the terminology and methods).

¹⁷² Jennifer K. Lord & Antony S. Cheng, *Public Involvement in State Fish and Wildlife Agencies in the U.S.: A Thumbnail Sketch of Techniques and Barriers*, 11 *Human Dimensions of Wildlife* 55, (2006); and Daniel J. Decker et al., *From Clients to Stakeholders*, 1 *Human Dimensions of Wildlife* 70, 71-73 (1996).

implementation of the public trust since state wildlife management can better address diverse stakeholder perspectives when there is an avenue for the diverse views to be shared.

ii. Concepts Asserted in Conflicts With the Federal Government

States frequently assert ownership of wildlife and invoke the public trust in wildlife in conflicts with federal or tribal governments. When the public trust is referenced in these conflicts, it is generally used in conjunction with assertions of state sovereign ownership of wildlife, management authority over wildlife, use of the North American Model of Wildlife Conservation, and access to wildlife.

Explicit references to state sovereign ownership of wildlife were found in three documents (3%), all of which were from Idaho.¹⁷³ A Idaho Strategic Plan for 2018-2021 is the only document to reference sovereign ownership in conjunction to the public trust in wildlife, stating, “[s]tate sovereignty to manage Idaho’s wildlife is critical to upholding the public trust and to uphold Article I, Section 23 of the Idaho Constitution...”¹⁷⁴ References to management authority or jurisdiction over wildlife occurred more frequently, occurring in thirty documents (35%), spanning eleven states (exceptions are Nevada, and Utah). As with references to sovereign ownership, the vast majority of these references to state management authority over wildlife occur without any connection to the public trust in wildlife. The single exception is Arizona’s Game and Fish Department’s Strategic Plan from 2006.¹⁷⁵

The North American Model of Wildlife Conservation is frequently mentioned in state documentation, but not in the context of the public trust. Specifically, the North American Model was referenced in thirteen documents (15%) across seven states (Arizona, California, Colorado, Idaho, New Mexico, Oregon, and Wyoming).¹⁷⁶ For example, the Idaho State Wildlife Action Plan (2015) states,

¹⁷³ This reference addresses the “yes” column of my evaluative rubric for question 3; see *supra* note 13 for an explanation of the terminology and methods).

¹⁷⁴ Idaho Fish and Game Department. FY 2018-2021 Annual Strategic Plan. 2017, at 5. Boise, ID. Accessed February 11, 2019. <https://idfg.idaho.gov/sites/default/files/annual-strategic-plan-fy-2018-2021.pdf>

¹⁷⁵ Arizona Game and Fish Department. Wildlife 20/20 Strategic Plan. 2006. Arizona Game and Fish Department. Phoenix, Arizona. Accessed March 8, 2019. <https://s3.amazonaws.com/azgfd-portal-wordpress/azgfd.wp/wp-content/uploads/2017/09/05135436/FinalDraftWildlife20-20StrategicPlan2017.pdf>

¹⁷⁶ This reference addresses the “yes” column of my evaluative rubric for question 12; see *supra* note 13 for an explanation of the terminology and methods).

“[r]egulated hunting is the cornerstone of the North American Model of Wildlife Conservation, a system that keeps wildlife a public and sustainable resource, scientifically managed by professionals.”¹⁷⁷ This excerpt clearly affirms the North American Model, but makes no connection to the public trust and additionally, does not elaborate on how the North American Model, and its foundation on the public trust doctrine, informs the document.

Access to wildlife was referenced in twenty-eight documents (33%) across ten states (Alaska, Arizona, California, Colorado, Idaho, Montana, New Mexico, Oregon, Washington, and Wyoming; exceptions are Hawaii, Nevada, and Utah).¹⁷⁸ None of these references however, occurred in the context of the public trust in wildlife.

D. References by State Legal Counsel

Responses from state legal counsel from seven states affirmed that the public trust guides wildlife management in their states (California, Hawaii, Idaho, Montana, New Mexico, Utah, and Wyoming). Of these states, four (Hawaii, Idaho, Utah, and Wyoming) pointed to state statutory and constitutional provisions that support the public trust in wildlife. For example, Hawaii’s legal counsel responded that, “[w]e define, conceptualize, and use the public trust doctrine for wildlife management through its broad establishment in the state constitution...”¹⁷⁹ Montana and New Mexico additionally advised that the public trust is a value that informs state wildlife management on a conceptual level. Legal counsel from Montana stated, “[w]e use the public trust principles on a daily basis in our management as an agency, and in my advice as counsel.”¹⁸⁰ No responses from state legal counsel provided additional documentation or references for inclusion in my review.

¹⁷⁷ Idaho Department of Fish and Game. Idaho State Wildlife Action Plan, 2015. 2017. Boise, ID. Accessed February 11, 2019. <http://fishandgame.idaho.gov/>.

¹⁷⁸ This reference addresses the “yes” column of my evaluative rubric for question 11; see *supra* note 13 for an explanation of the terminology and methods).

¹⁷⁹ Scott Fretz and Kathryn Stanaway, personal communication, Nov 14, 2018.

¹⁸⁰ Rebecca Dockter, personal communication, November 13, 2018.

Similar to how the public trust is referenced in the documents reviewed, the response from legal counsels to my inquiry provided minimal elaboration on how wildlife is managed in the public trust. For example, the response received from Wyoming conflated the public trust with public input requirements as required by other statutes, stating, “[w]e use the public's input as directed by state law to implement our statutory authority to make decisions about managing the public's resources.”¹⁸¹ An example report was provided that listed “all the ways we involved the public in areas that are not required under law, but that involvement in the future of the agency is a core principle.”¹⁸²

Legal counsel for Colorado and Washington asserted that the public trust in wildlife does not apply in their state. This is notable given that Colorado and Washington have trust-like language in state statute, are members of AFWA, and have been signatories to legal briefs asserting the public trust in wildlife.¹⁸³ My document analysis found references to the public trust in wildlife in two documents from Colorado¹⁸⁴ and one document from Washington.¹⁸⁵

To support claims that the public trust did not apply to wildlife in their states, legal counsel in Washington and Colorado pointed to the lack of controlling case law in their state. Washington legal counsel cited *Citizens for Responsible Wildlife Mgmt. v. State* (2004)¹⁸⁶ in which Citizens for Responsible Management, a pro hunting group, filed suit to overturn a ballot initiative prohibiting certain hunting techniques on the premise that the initiatives violated the public trust doctrine. The court upheld the ballot initiatives by dismissing the standing of Citizens to bring suit but did so *without* deciding that the public trust doctrine applies.¹⁸⁷ Referencing the *Citizens* case, legal counsel in Washington State claims that “the

¹⁸¹ Renny MacKay, personal communication, September 21, 2018.

¹⁸² *Id.*

¹⁸³ Utah Native Plant Society, *supra* note 133.

¹⁸⁴ Wildlife Commission, Colorado Parks and Wildlife, *supra* note 164; Colorado Wolf Management Working Group, Colorado Division of Wildlife. Findings and Recommendations for Managing Wolves that Migrate Into Colorado. 2014. Denver, CO. Accessed February 24, 2019. <https://cpw.state.co.us/Documents/WildlifeSpecies/SpeciesOfConcern/Wolf/recomendations.pdf>

¹⁸⁵ Washington Department of Fish and Wildlife. Sherman Wolf Pack: 2017 Lethal removal action. 2017. Olympia, WA. Accessed February 22, 2019. <https://wdfw.wa.gov/publications/01949/wdfw01949.pdf>

¹⁸⁶ 124 Wash. App. 566, 103 P.3d 203 (2004).

¹⁸⁷ *Id.* at 205, (“No Washington case has applied the public trust doctrine to terrestrial wildlife or resources... But we need not decide whether the public trust doctrine applies here because, even if it does, Citizens' challenge fails.”)

court of appeals observes that the traditional public trust doctrine in Washington State applies narrowly to the public's use of navigable waters, not to wildlife resources on the uplands.”¹⁸⁸

Washington also has case law that offers some support for public trust concepts relative to wildlife. In *Graves v. Duplap* (1915),¹⁸⁹ the Washington Supreme Court stated that “title to game belongs to the state in its sovereign capacity, and that the state holds this title in trust for the use and benefit of the people of the state”¹⁹⁰ and that state legislature “has the right to control for the common good the killing, taking, and use of game.”¹⁹¹ However, as seen in these excerpts and as cited in *Citizens*, Washington has never expressly applied the public trust to terrestrial wildlife in the state. Washington has, however, supported the public trust doctrine as applied to water resources and fish.¹⁹²

Courts in Colorado have similarly sidestepped ruling on the presence or absence of the public trust in wildlife. For example, *In re Title, Ballot Title & Submission Clause, for 2007-2008, #17* (2007)¹⁹³ the Supreme Court of Colorado invalidated a ballot initiative to add the public trust as a purpose of wildlife management to state code on the grounds that the ballot initiative was not a “single subject initiative,” as is required under Colorado law. Legal scholars have summarized that Colorado has “taken a very limited view of the [public trust doctrine], declining to expand the [doctrine’s] scope in the state constitution, statutes, or case law.”¹⁹⁴ The Supreme Court of Colorado has further asserted that if the public trust doctrine is to be implemented in Colorado, it must occur via the legislature.¹⁹⁵ That said, Colorado state code has clear trust-like statements,¹⁹⁶ has claimed sovereign ownership of wildlife,¹⁹⁷ and

¹⁸⁸ Joseph Panesko, personal communication, September 19, 2018.

¹⁸⁹ 87 Wash. 648, 152 P. 532 (1915).

¹⁹⁰ *Id.*, at 651, 533.

¹⁹¹ *Id.*

¹⁹² Rebecca Guiao, *The Public Trust Doctrine in 45 States*, Michael C. Blumm (ed.). Lewis & Clark Law School Legal Studies Research Paper, 858 (2014) (summarizing the public trust in Washington).

¹⁹³ 172 P.3d 871 (Colo. 2007), as modified on denial of reh'g (Dec. 17, 2007).

¹⁹⁴ Mac Smith, *The Public Trust Doctrine in 45 States*, Michael C. Blumm (ed.). Lewis & Clark Law School Legal Studies Research Paper, 102 (2014).

¹⁹⁵ *Id.* at 104, citing *Smith v. People*, 120 Colo. 39 (Colo. 1949) (“If a change in long established judicial precedent is desirable, it is a legislative and not a judicial function to make any needed change.”)

¹⁹⁶ COLO. REV. STAT. § 33-1-101(1), providing that state wildlife must be “protected, preserved, enhanced, and managed for the use, benefit, and enjoyment of the people of this state and its visitors.”

¹⁹⁷ COLO. REV. STAT. ANN. § 33-1-101(2), “All wildlife within this state not lawfully acquired and held by private ownership is declared to be the property of this state.”

in *Maitland v. People* (1933),¹⁹⁸ the Colorado Supreme Court asserted that the state has to protect wildlife for the benefit of the public. Colorado has similarly been reticent to embrace the public trust relative to any other resources, including water.¹⁹⁹

Part IV – Implementing the Public Trust in Wildlife

The public trust has significant potential to shape state wildlife management and governance. If states want the public trust in wildlife to do so, however, there is a need to implement the public trust in a more robust way. To set the context for this section on implementing state public trust in wildlife, I first describe why state claims to manage wildlife in the public trust are unreasonable unless states are willing to embrace the obligations and responsibilities that accompany this claim. Next, I discuss recommendations for implementing the public trust if states choose to go that route. Specifically, I recommend codifying the public trust in statute or regulation, and identify practices vital to implementing the trust, including transparency, use of information, and use of existing decision-making frameworks. Lastly, I provide an example of what the public trust in wildlife would look like if used in state decision-making.

I do not aim to advocate for an unachievable bar to implement the public trust. Rather, these recommendations address how states can better meet their public trust responsibilities within the current paradigm of state wildlife management. This approach is taken because recommendations on sweeping reforms to wildlife management can be found in the work of other scholars²⁰⁰ and while many of these proposals have merit, such changes are unlikely to happen in the near future.

A. Why States Need to Embrace the Public Trust Comprehensively or Not at All

¹⁹⁸ 93 Colo. 59 (Colo. 1933).

¹⁹⁹ Mac Smith, *supra* note 194 (summarizing the history and application of the public trust doctrine in Colorado).

²⁰⁰ Nelson, *supra* note 134; Jacobson, *supra* note 134; and David Willms & Anne Alexander, *The North American Model of Wildlife Conservation in Wyoming: Understanding It, Preserving It, and Funding Its Future*, 14 Wyo. L. Rev. 659 (2014).

With a private trust, a trustee cannot choose which parts of their trust responsibilities to implement. If the trustee does not implement the requirements outlined by the trust relationship, the trustee is vulnerable to litigation and judicial intervention. Similarly, case law and literature have established core principles of the public trust.²⁰¹ In other words, what the public trust in wildlife entails is clearly established and any one aspect of the trust responsibility cannot be abdicated.

Claims made by western states to manage wildlife in the public trust are inaccurate and misleading if the core principles of trust management are not recognized or implemented. The public trust is a legal obligation between a trustee and beneficiary, and the term should not be used loosely or for rhetorical purposes. States must refrain from calling on the public trust unless they are willing to comprehensively implement what trust management entails.

B. Codifying Administrative Law and Best Practices to Implement State Public Trust in Wildlife

If states choose to embrace the public trust in wildlife, they need tools to implement its accompanying responsibilities and obligations. I recommend two complementary avenues for states to do so: 1) to codify trust management in state law and/or regulation; and 2) to implement best practices that support functional implementation of the public trust in wildlife.

i. Codification as a Way to Implement the Public Trust in Wildlife

Courts are sometimes hesitant to implement the public trust without clear precedent in state statute or administrative law.²⁰² If the public trust is codified in state statute or regulation however, case law indicates that the courts may be more supportive of both the substance and procedure of the trust.²⁰³ In this section, “codification” is used as an overarching term to refer to changes both to state statute and to regulation.

²⁰¹ See *supra* Part II.A and accompanying notes.

²⁰² Owen, *supra* note 13, at 1151.

²⁰³ *Id.*

In support of codifying the public trust, Professor David Owen analyzed implementation of the public trust doctrine as applied to California water law. Owen does so by examining use of the public trust doctrine in court cases and administrative proceedings. Owen found that the State Water Resources Control Board (SWRCB), California’s primary water use regulation agency, uses the public trust doctrine in decision-making and that the public trust compliments the broader landscape of environmental statutes that the SWRCB is carrying out.²⁰⁴ In other words, while not the sole factor, the public trust doctrine plays a supplemental role in decision-making. Owen concludes that “[w]ith a few additional procedural triggers and informational requirements, the doctrine’s influence at the administrative level could expand.”²⁰⁵

The recommendation of this thesis to codify the public trust build on Owen’s findings by acknowledging the realities of the modern administrative state and leverages them to bring the public trust in wildlife into a tangible doctrine that informs management. Specific recommendations for how the public trust in wildlife should be codified in state law are to:

1. Affirm that wildlife is held in the public trust.
2. Designate the trustee.
3. Establish a clear standard of enforceability.
4. Clarify what species are included within the trust management framework

These recommendations are not a comprehensive list of all of the possible ways to codify the public trust in wildlife²⁰⁶ and instead focuses on selected recommendations based on my findings and consideration of which are the most feasible to implement.

²⁰⁴ *Id.* at 1139 (“The influence of the public trust doctrine is hard to separate from the influence of other legal doctrines, and the doctrine seems comfortably enmeshed within a system of statutory protections. The relationship is consistently complementary.”).

²⁰⁵ *Id.* at 1152.

²⁰⁶ Omitted actions include, but are not limited to, implementing a broad-based funding structure for wildlife management (*see generally* Willms & Alexander, *supra* note 200); diversifying the composition of wildlife game commissions (*see generally* Martin Nie, *State wildlife policy and management: the scope and bias of political conflict*. 61 Public Administration Review 221, 223 (2004)); clarifying how certain wildlife management practices, such as game farms and commercial fisheries, fit into the foundational requirement of the public trust of non-privatization of public resources. These are omitted because, while valid points, there are actions that need to be taken first to begin to shift the conversation in order to make these actions feasible at a later time.

1. Affirm that Wildlife is Held in the Public Trust

It is necessary for states to clarify that the public trust applies to wildlife and is the paradigm of state wildlife management. While some states already have statutory language supporting the public trust in wildlife, there is a need to clarify what that obligation means with more specificity and precision.²⁰⁷ For example, a report by The Wildlife Society (2010) provides draft language for what statutory support for public trust in wildlife could look like:

The state declares that wildlife is held in trust by the state for the benefit of its citizens:

- a) to protect and conserve the wildlife of this state or province;
- b) to ensure the permanent and continued abundance of the wildlife resources of this state or province;
- c) to provide for the sustainable use and enjoyment of wildlife for present and future residents of this state or province; and
- d) to ensure that wildlife resources will not be reduced to private ownership except as specifically provided for in law.²⁰⁸

This language clearly establishes that wildlife is held in the public trust and also delineates principles of what that means for management.

Clarifying this paradigm would provide a lens through which the courts could more clearly review state wildlife management actions, contributing to a clearer standard of enforceability. Similarly, such codification would provide a clearer lens with which to conceive of state wildlife management for both the trustees and beneficiaries.²⁰⁹ If it is clear that the public trust applies to wildlife, implementing its substantive and procedural duties becomes significantly more straightforward and transparent.

2. Designate the Trustee

Codifying the trustee of wildlife would provide important clarification as to which entity holds the responsibility of implementing the trust. As summarized by Susan Morath Horner, “[p]ublic officials

²⁰⁷ See *supra* note 122 and accompanying text.

²⁰⁸ The Wildlife Society, *supra* note 57, at 25-26.

²⁰⁹ See *infra* Part IV.A.ii.

cannot be expected to fulfill their trust responsibilities without having a sound understanding and acceptance of their obligations.”²¹⁰ Horner goes on to suggest that “there be one or more individuals who are ultimately responsible for fulfillment of the fiduciary obligations inherent in the trust model [and] to avoid confusion about the mantle placed upon these individuals, they be called ‘trustees.’”²¹¹

Designating the trustee in state statute would provide clarity as to who is ultimately responsible for managing the trust resource. Specifically, designation needs to clarify the respective roles of the legislature, executive branch of government, as well as state wildlife agency employees in fulfilling trustee responsibilities. Christian Smith provides a succinct summary of these respective roles, providing that legislators and the commissioners “are the primary trustees of the public’s wildlife,”²¹² career professionals working for state wildlife agencies “have ministerial duties as trust managers,”²¹³ and the judiciary is “the people’s source of redress if the legislative or executive branches of government fail to perform their duties under the public trust doctrine.”²¹⁴

Clarifying these roles is appropriate for both the trustees and beneficiaries. The beneficiaries would have a better understanding of who is responsible for the corpus of the trust, and trustees would better understand that it is their responsibility to manage wildlife in the public trust and that they will be held accountable if that responsibility is not fulfilled. There is a need for both the trustee and beneficiary to better understand what the public trust in wildlife means and how it relates to the rights and obligations held by each entity.

Designating the trustee would further provide a meaningful platform on which to base education of wildlife professionals as trustees to their responsibilities, and the rights of citizens as beneficiaries.

²¹⁰ Horner, *supra* note 26, at 43.

²¹¹ *Id.*

²¹² Smith, *supra* note 152, at 1539 (“A trustee must either possess or have effective ownership control of the corpus of the trust to make decisions regarding management of the trust and distribution of proceeds from the trust in the interest of the beneficiaries... Through adoption of state constitutions, the citizens of each state have granted the power to enact the laws that govern the taking of wildlife to the legislature. Thus to the extent the people have empowered any branch of government to exercise control over their collective ownership of wildlife, they have done so to their elected representatives in the legislature, not to the executive branch or judiciary.”).

²¹³ *Id.* at 1540.

²¹⁴ *Id.*

Codifying the trustee is would further benefit trust management by establishing a more clear mechanism requiring trustees to bring a balanced view to wildlife management and without bias towards any particular user group.²¹⁵ In property law, a specific person or entity must be appointed as the trustee, in part, to establish clear relationships and lines of accountability.²¹⁶ The same is true of a public trust.

3. Establish a Clear Standard of Enforceability

A clear mechanism for enforcing the public trust is key to its implementation.²¹⁷ Specifically, state law should clarify the right of average citizens to bring suit if the state's actions are perceived to be in contravention of the state's public trust responsibilities.²¹⁸ Limitations on the ability of the beneficiary to enforce the responsibilities of the trustee are inappropriate.

The courts have a history of narrowly determining the right to standing of individuals to challenge wildlife management decisions.²¹⁹ That said, some case law has been notable for its clear support of the right of members of the public to enforce the public trust in wildlife. For example, *CBD v. FPL* (2008) clearly articulated that “any member of the general public ... has standing to raise a claim of harm to the public trust.”²²⁰

Implementation of a citizen suit provision would allow for more meaningful action by citizen beneficiaries to sue state wildlife management agencies if the agency's actions are perceived to be out of alignment with the interests of beneficiaries.

²¹⁵ Horner, *supra* note 26, at 43.

²¹⁶ Plater, *supra* note 18, at 374.

²¹⁷ Sax, *supra* note 15.

²¹⁸ Horner, *supra* note 26, at 54 (supporting establishment of a citizen suit provision and asserting that implementation of the public trust would be appropriately served by “articulating the beneficiaries’ right to challenge breaches of trust”).

²¹⁹ *Id.*, at 54-56, (asserting that there are two factors that inappropriately limit citizen suits: “The first [limiting factor] is procedural, and is based on narrow definitions of which persons have standing to sue the agency in the first place. The second limitation is more substantive, and is based upon the high degree of deference generally given to agency decision-making-even decision-making that may lead to questionable results.”).

²²⁰ *Ctr. for Biological Diversity, Inc. v. FPL Grp., Inc.*, 166 Cal. App. 4th 1349, 1364, 83 Cal. Rptr. 3d 588, 600 (2008), as modified on denial of reh'g (Oct. 9, 2008), citing among other cases, *Environmental Defense Fund, Inc. v. East Bay Mun. Utility Dist.* (1980) 26 Cal.3d 183, 161 Cal.Rptr. 466, 605 P.2d 1, in which the standing of a public interest organization was recognized. (*National Audubon Society, supra*, 33 Cal.3d at p. 431, fn. 11, 189 Cal.Rptr. 346, 658 P.2d 709.).

4. Clarify What Species Are Included Within the Trust Management Framework

There is a need for common understanding of what species are encompassed within the term “wildlife.” Many states narrowly define what constitutes “wildlife” in statute. As an example representative of the thirteen western states, Idaho state statute specifies that “wildlife means any form of animal life, native or exotic, generally living in a state of nature provided that domestic cervidae as defined in section 25-3701, Idaho Code, shall not be classified as wildlife.”²²¹ Similarly, Montana statute has specific delineations between “game animals,”²²² “predators,”²²³ and “non-game,”²²⁴ with implications for how those terms are used in statute. For example, when Montana statute subsequently says “the department shall enforce all the laws of the state regarding the protection, preservation, management, and propagation of fish, game, fur-bearing animals, and game and nongame birds within the state”²²⁵ there are implications in that predators are not addressed by this provision.

If “wildlife” is narrowly defined, the scope of the public trust is also narrowed. States need to ensure that the statutory definition of “wildlife” aligns with the desired scope of the public trust in wildlife. For example, Washington state statute defines wildlife as “all species of the animal kingdom whose members exist in Washington in a wild state. This includes but is not limited to mammals, birds, reptiles, amphibians, fish, and invertebrates.”²²⁶ Simultaneously, there are numerous commercial fisheries in Washington and a principle of the public trust is that trust resources cannot be privatized. If Washington pursues implementation of the public trust in wildlife, how privately owned commercial fisheries fit into the framework of the public trust in wildlife would need to be clarified.

²²¹ Idaho Code Ann. § 36-202.

²²² “Game animals” means deer, elk, moose, antelope, caribou, mountain sheep, mountain goat, mountain lion, bear, and wild buffalo. Mont. Code Ann. § 87-2-101.

²²³ “Predatory animals” means coyote, weasel, skunk, and civet cat. Mont. Code Ann. § 87-2-101.

²²⁴ “Nongame wildlife” means a wild mammal, bird, amphibian, reptile, fish, mollusk, crustacean, or other wild animal not otherwise legally classified by statute or regulation of this state. Animals designated by statute or regulation of this state as predatory in nature are not classified as nongame wildlife for purposes of this part. Mont. Code Ann. § 87-5-102.

²²⁵ Mont. Code Ann. § 87-1-201.

²²⁶ Wash. Rev. Code Ann. § 77.08.010.

I advocate for neither an inclusive nor narrow definition of wildlife. Rather, I advocate that consideration is given to how wildlife is defined and that there is a need to align the definition of wildlife with state willingness to implement public trust responsibilities. This alignment is important to keep the responsibilities associated with the trust clear to both the trustees and beneficiaries.

ii. Practices Vital to Implementing the Public Trust in Wildlife

Certain practices are vital to implementing the public trust in wildlife, irrespective of requirements in administrative law. These practices are transparency, using information and data resources, and using existing decision-making frameworks to implement the public trust. Each of these practices are examined below.

1. The Need for Transparency

Implementing the public trust in wildlife requires states to bring the rationale behind decisions into the open. To do so, state decision-making needs to transparently document the rationale behind each wildlife management decision, along with its associated trade-offs and implications. Professor Daniel Decker asserts, “management objectives result in some citizens deriving benefits from wildlife while others experience negative impacts. Although these are not always black-and-white win-lose situations, frequently tradeoffs must be made.”²²⁷ Documenting these trade-offs and considerations allows states to transparently grapple with their public trust obligations. As summarized by Susan Morath Horner, “the actions of a trustee cannot be monitored unless they are brought into broad daylight.”²²⁸

Transparency may also bring conflict. For example, stakeholders who are negatively affected by a decision may become frustrated and pursue litigation. However, frustrated user-groups are already

²²⁷ Daniel J. Decker, et al., *Moving the paradigm from stakeholders to beneficiaries in stakeholder management*, *Journal of Wildlife Management* 1, 4 (2019).

²²⁸ Horner, *supra* note 26, at 49-54; *see also* Owen, *supra* note 13, 1142 (“Procedural design is widely and correctly viewed as integral to the success or failure of an environmental regulatory scheme” citing Nicholas A. Robinson, *Legal Systems, Decisionmaking, and the Science of the Earth's Systems: Procedural Missing Links*, 27 *Ecology L.Q.* 1077, 1084 (2001)).

present, and decisions with positive and negative effects are already being made. Increasing transparency allows for more informed discussion about the situation and the decision being made by all affected parties. Indeed, if citizens aren't allowed to see behind the curtain, the structure of the trust relationship is unsound and cannot be upheld.²²⁹

Increasing transparency reflects requirements of the federal National Environmental Policy Act, which requires full disclosure of environmental impacts but does not dictate a particular outcome of decision-making.²³⁰ Transparency is equally important for states and regardless of the outcome of a decision, there is a need to fully disclose why and how that decision is being made.

2. *The Need for Information Resources*

Information resources are vital to effective wildlife management, including both wildlife data (for example, wildlife population data, harvest data, and habitat needs) and social science data (for example, the values associated with wildlife, desired outcomes for wildlife management, and the societal acceptability of management actions). As summarized by Professor Dave Owen, “[i]nformation is the ‘lifeblood’ of environmental regulation. It allows agencies to track environmental conditions, identify threats, set priorities, develop policies, and justify their actions to the public and the courts.”²³¹ One of the

²²⁹ When wildlife professionals do not equitably conduct wildlife management in the public interest, citizens turn to other avenues to make their voices heard. For example, via litigation or ballot initiatives. While sometimes the only recourse, these approaches have raised concerns over the role of science and wildlife biology in the process, opportunities for dialogue are missed, and in the case of ballot initiatives, voters are asked to cast a “yes/no” vote on a nuanced issue. See generally Thomas Beck, *Citizen Ballot Initiatives: A Failure of the Wildlife Management Profession*. 3 *Human Dimensions of Wildlife* 21, (1998). See also Marion Hourdequin, et al., *Ethical implications of democratic theory for U.S. public participation in environmental impact assessment*. 35 *Environmental Impact Assessment Review* 37 (2012).

²³⁰ *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989) (“[I]t is now well settled that NEPA itself does not mandate particular results, but simply prescribes the necessary process.”). See generally Marion D. Miller, *The National Environmental Policy Act and Judicial Review After Robertson v. Methow Valley Citizens Council and Marsh v. Oregon Natural Resources Council*, 18 *Ecology L.Q.* 223, 251 (1991) (summarizing that “NEPA’s procedural mandates of full disclosure and public participation remain the enforceable expression of NEPA’s substantive goals.”). While state-level environmental protection acts serve a similar purpose, not all western states have such statutes in place.

²³¹ Owen, *supra* note 13, at 1147, citing Cary Coglianese et al., *Seeking Truth for Power: Informational Strategy and Regulatory Policymaking*, 89 *MINN. L. REV.* 277, 277 (2004); see, e.g., Holly Doremus, *Data Gaps in Natural Resource Management: Sniffing for Leaks Along the Information Pipeline*, 83 *IND. L.J.* 407, 408 (2008) (emphasizing the importance of information for environmental regulation); Jody Freeman & Daniel Farber, *Modular*

fundamental responsibilities of trust management is to not diminish the resource being held in trust.²³² If the information required to understand whether the corpus of the trust is being impaired is unavailable, the fundamental structure of the trust relationship cannot be upheld.

Scientific data is one type of information vital to wildlife management. Such information needs to be both available and used. However, according to one study, scientific data is currently not being used to its appropriate extent in state wildlife management. Professor Kyle Artelle and others (2018) reviewed 667 species management plans for their use of scientific information and found that “[m]ost management systems lacked indications of the basic elements of a scientific approach to management.”²³³ Indeed, the article is titled “Hallmarks of science missing from North American wildlife management.”²³⁴ Artelle’s findings provide strong support for the need to better and more transparently apply scientific information to wildlife management. In situations when scientific data is unavailable, for financial or logistical or other reasons, states need to transparently document that science is not being used as the basis of the decision and then describe the other factors that have influenced the decision.

Human dimensions of wildlife research and social science are also needed to implement the public trust in wildlife.²³⁵ This research informs wildlife management decisions at the nexus of biology and society, which is becoming increasingly important as societal values and demographics shift over time. Professor Michael Manfredo has asserted that social factors functionally govern wildlife management in the U.S., in some instances, more so than biological factors.²³⁶ Human dimensions of

Environmental Regulation, 54 DUKE L.J. 795, 824-25 (2005) (describing environmental agencies’ ongoing information needs); Wendy Wagner, *Commons Ignorance: The Failure of Environmental Law to Produce Needed Information on Health and the Environment*, 53 DUKE L.J. 1619 (2004) (emphasizing the common inability of environmental regulators to access needed information).

²³² See *supra* note 45 and accompanying text.

²³³ Artelle, *supra* note 13, at 1.

²³⁴ *Id.*

²³⁵ The field of human dimensions of wildlife explores the relationships between humans, wildlife, and habitat by understanding and applying insights about how humans value wildlife, how humans want wildlife to be managed, and how humans affect, or are affected by, wildlife and wildlife management decisions. The field emerged in response to a need for applied research to better integrate “human considerations” into wildlife management. See Daniel J. Decker, et al. HUMAN DIMENSIONS OF WILDLIFE MANAGEMENT (2nd ed.). Baltimore, MD: Johns Hopkins University Press, (2012).

²³⁶ Michael Manfredo, et al., *Why Are Public Values Toward Wildlife Changing?* 8 Human Dimensions of Wildlife 287, (2003).

wildlife and social science have significant potential to increase alignment between management actions and perspectives held by the beneficiaries.²³⁷

3. Existing Decision-Making Frameworks to Make Trust Management Decisions

Existing processes for wildlife decision-making can be used to implement the public trust in wildlife. The findings of Professor Dave Owen on implementation of the public trust in California water law support this assertion.²³⁸ Specifically, Owen finds that in California water law, “[i]n the absence of any dedicated procedural framework, the public trust doctrine utilizes procedural requirements established by other statutes. That approach has succeeded to some extent, for those procedural requirements are extensive.”²³⁹ Existing processes for environmental decision-making, and requirements associated with those decisions, are already in place across the thirteen western states. These existing processes however, are not being used to meaningfully implement the public trust in wildlife management decision-making.

For example, many states have procedural environmental statutes.²⁴⁰ Such procedural environmental statutes can be a platform to implement the public trust by helping to present information about management decisions, document the process, and provide an avenue for litigation.²⁴¹ For example, the Montana Environmental Protection Act (MEPA) requires a specific process to be followed when making decisions that effect that natural environment.²⁴² MEPA additionally requires consideration of

²³⁷ Ann B. Forstchen, et al., *The Essential Role of Human Dimensions and Stakeholder Participation in States’ Fulfillment of Public Trust Responsibilities*. 19 *Human Dimensions of Wildlife* 417, (2014). Public participation continues to be an important avenue to hear the diversity of stakeholders’ perspectives and works towards freeing state wildlife management agencies from an influential minority.

²³⁸ A summary of Owen’s findings is provided *supra* notes 202-205 and accompanying text.

²³⁹ Owen, *supra* note 13, at 1143 (additionally stating that “Outside of the Mono Lake basin, the public trust doctrine’s effects are largely intertwined with, and often eclipsed by, the impacts of other environmental laws.”).

²⁴⁰ Marchman, *supra* note 169 (summarizing that of the thirteen western states, California, Hawaii, Montana, and Washington have existing procedural environmental protection statutes; Arizona, Alaska, Colorado, Idaho, New Mexico, Nevada, Oregon, Utah, and Wyoming do not).

²⁴¹ Statute in some Michigan (Mich. Comp. Laws Ann. § 324.1701) and Connecticut (Conn. Gen. Stat. Ann. § 22a-16) already explicitly requires that the public trust is considered as a resource to which impacts from decision making need to be considered. However, shortcomings of this approach in terms of actual implementation have similarly been criticized. For example, Kelsey Breck, *Closing the Regulatory Gap in Michigan’s Public Trust Doctrine: Saving Michigan Millions with Statutory Reform*, 46 *U. Mich. J.L. Reform* 267 (2012).

²⁴² Mont. Code Ann. §§ 75-1-101 to -324.

alternatives, disclosure of environmental effects, cumulative effects analysis, and provides an avenue for litigation if that process is not followed.²⁴³ These requirements help make state wildlife management decisions more transparent and further, is a process that can easily be adapted to address public trust principles. Similarly, many states have existing requirements about public involvement. States could use existing requirements for public involvement to ensure that the diversity of interests held by the citizenry are represented.

In summary, avenues to implement the public trust are already in place if states use them as such. There is an opportunity to interpret these existing processes so that they implement the spirit of the public trust, not just the letter of existing requirements. If states choose this route, the public trust in wildlife could be implemented without statutory or regulatory change.

C. What Implementing the Public Trust Would Look Like in State Decision-Making

If state decision-making is to meaningfully demonstrate that states are using the public trust in wildlife to inform decision-making, the foremost need is for documents to explicitly discuss the rationale behind the decision and tie that rationale to principles of the public trust. For example, how does the decision being made relate to the states' affirmative and active duty to protect wildlife? Is preventing privatization of the resource relevant, and if so, how was it considered? How did the decision consider the diversity of interests held by the citizenry? Answering these questions could be achieved by minor clarifications within current state decision-making frameworks and documentation thereof.

To provide a tangible example of what this would look like, I examine Oregon's Cougar Management Plan (2017)²⁴⁴ and discuss how the document could be adjusted to incorporate the public trust in wildlife. This document was selected as an example because it already includes some elements

²⁴³ *Id.*

²⁴⁴ Oregon Department of Fish and Wildlife. 2017 Oregon Cougar Management Plan. 2017. Salem, Oregon. Accessed March 9, 2019. https://www.dfw.state.or.us/wildlife/cougar/docs/2017_Oregon_Cougar_Management_Plan.pdf

supporting public trust principles and with some adjustments, the document could clearly and robustly implement the public trust in wildlife.

The Cougar Management Plan begins with a history of cougars and their management in Oregon, then proceeds to identify management objectives and actions, and lastly defines details of how adaptive management is to be applied to cougar management in different areas of the state. This thesis provides seven recommendations for how to adjust this document to better implement the public trust and put it into practice.

- 1) More seriously consider a broader diversity of stakeholders and represent the spectrum of interests held by the citizenry. In discussing public involvement, the document states, “communications occurred with local sporting groups, state agencies, landowner groups, wildlife researchers, and other interested parties throughout the entire duration of this process.”²⁴⁵ The interests as summarized need to be more representative of the citizenry as a whole.
- 2) Provide explicit rationale for why the state ultimately settled on the management approach they did, including the trade-offs inherent in that decision. The document identifies four management objectives, each of which are followed by a section on “Assumptions and Rationale.” The presence of a “rationale” section is an important step that other state documentation would benefit from emulating. Minor adjustments however, would easily tie this existing section to the public trust. For example, Objective 1 is “ODFW will manage for stable cougar populations that are not [to] fall below 3,000 cougars statewide.”²⁴⁶ The rationale needs to explain *how* and *why* that objective was developed. For example: What alternatives were evaluated? What criteria caused this objective to be selected? What interests does this objective benefit? Which interests does it have the potential to negatively effect?

²⁴⁵ *Id.* at i.

²⁴⁶ *Id.* at 53.

- 3) Identify the public trust management framework of cougar management. The document peripherally alludes to a trust relationship once, stating “[t]he public entrusts Oregon Department of Fish and Wildlife (ODFW) with management responsibility for cougars and depends on ODFW to provide for the animal's continued existence into the future.”²⁴⁷ This statement should be adjusted to clearly articulate that ODFW is the trustee for cougars, which are managed on behalf of the beneficiary, which is all citizens of the state.
- 4) Explicitly assert how the management action being taken is an active and affirmative duty. In other words, how do the objectives and actions outlined in the plan serve as active management in service of the public trust? In discussing how an affirmative duty should be implemented, scholar Douglas Quirke states, “experts must... use the best available science to determine what level of use can be maintained consistent with preventing substantial impairment.”²⁴⁸ The cougar management plan could better articulate how the management objectives and actions meet the standard of using the best available science to provide for sustainable use of cougars and how the plan prevents impairment to cougars as a resource. The plan could include this discussion in the “assumptions and rationale” section for each objective.
- 5) Specify how the management actions do not diminish the resource, cougars in this instance. For renewable resources, such as cougars, management must ensure that “the extent of that use must be limited, such that there is no substantial impairment of the resource for future generations.”²⁴⁹ The cougar management plan needs to articulate how the management objectives and actions do not impair cougar populations and similarly, how the plan ensures that cougars will be available for future generations. The plan could include this discussion in the “assumptions and rationale” section for each objective.

²⁴⁷ *Id.* at 1.

²⁴⁸ Quirke, *supra* note 44, at 13.

²⁴⁹ *Id.* at 14.

- 6) The document needs to articulate how social science informed the plan and specifically, how and if, it informed the trade-offs made therein. The document already provides helpful discussion about the diversity of perspectives on cougar management held by Oregonians and supports these perspectives with social science research.²⁵⁰ In addition to presenting different views on cougars held by the citizens of Oregon, there needs to be discussion tying that research to the decisions being made.
- 7) Specify how access and non-privatization of the resource relate to the management decision, if relevant. In this particular document, these two aspects of the public trust are less relevant to the decisions being made. But if, for example, the document addressed public access for cougar viewing or hunting, it would be appropriate for the document to identify how its decisions meet the state's obligation under the public trust doctrine to provide for access to cougars.

Wildlife management needs are greater than available state capacity. Producing decision documents is an investment of time and resources, and states have limited budgets and staffing. Even so, it is still a decision when states choose not to conduct planning or choose to not make management decisions publicly available. Ideally, states would articulate what decisions are not being made or are being postponed. For example, this could be achieved by articulating on state websites or other documentation which species management plans are the priority versus those which will be postponed and why.

States need to more clearly apply principles of trust management to the decisions they make regarding wildlife and grapple with the public trust in their processes. Transparent documentation that articulates how the state wildlife management agency wrestled with the decision at hand and how they came to the conclusion that they did is necessary to better implement the public trust in wildlife.

²⁵⁰ Oregon Department of Fish and Wildlife, *supra* note 244, at 1-2.

Part V – Conclusion

Current use of the public trust in wildlife by states is problematic. States call on the public trust as convenient, making strong assertions and even citing public trust literature when it serves state interests. States have also embraced the North American Model of Wildlife Conservation and this Model rests upon the public trust doctrine as applied to wildlife. It is the foundational principle according to the North American Model. Yet, my research finds that the thirteen western states do not apply the public trust doctrine or basic trust principles to wildlife management or decision making in a serious way. States should either apply the public trust doctrine and its basic principles to wildlife management in a more serious fashion or stop claiming to the public and the courts that they manage wildlife in accordance with the public trust doctrine. If states do not do so, they are knowingly misleading the public as to the objectives and process of state wildlife management.

One possible response to my research and recommendations is that I am interpreting the public trust doctrine and its obligations in a too legal and literal fashion. The response received from Washington state legal counsel is illustrative of this, stating “I think it is a mistake to presume that those references to ‘trust’ intended the specific ‘public trust doctrine.’ There are many different kinds of trusts, with differing obligations on the trustees. So merely describing something as a trust relationship does not connect that trust to the unique public trust doctrine.”²⁵¹ I find this response lacking.²⁵² What do states mean when they use the phrase “public trust,” if not the public trust? The case law cited by Washington legal counsel explicitly references the “public trust,” not just “trust.”²⁵³ It is unreasonable and a violation of their responsibilities to the citizens of their state if states claim to manage wildlife in the public trust, then assert that they didn’t mean it.

Some states take the public trust in wildlife more seriously than others, as evidenced by its use in decision making and state case law. But the variation in how the trust is treated between states illustrates

²⁵¹ Joseph Panesko, *supra* note 188.

²⁵² See *supra* notes 186-188 and accompanying text.

²⁵³ *Id.*

the need for consistency and a clearer understanding of what the public trust in wildlife actually is. This thesis contributes to that goal by helping to establish a common understanding of how the public trust in wildlife is being implemented in the western states. Common understanding of implementation of the public trust, or lack thereof, helps build a foundation on which better state wildlife management can be built.

There is no single, silver-bullet approach to implementing the public trust in wildlife. Trade-offs, competing interests, and hard decisions regarding wildlife management are unavoidable. The most important aspect of implementing the public trust is for states to transparently grapple with what the public trust in wildlife means in their decisions and how to implement it. In short, state wildlife management agencies need to wrestle with the hard questions of wildlife management, and do so transparently and in a manner that allows the agencies to be held accountable for their decisions and actions.

It is unclear if the public trust can rise to the challenge of wildlife management in the Twenty-First Century based on the variability of current use, the lack of substantive support in documentation, and variable support by legal counsel for state wildlife agencies. Indeed, my findings suggest that the public trust is not the pillar of state wildlife management in the western U.S. that it is claimed to be. Still, the historical pedigree and ongoing use of the public trust in wildlife indicates that it has staying power and if states want it to, the public trust in wildlife can meaningfully guide state wildlife management.

Appendices and tables

Appendix A. Evaluative rubric

1. Is the public trust explicitly referenced in the document?
2. Is the public trust implied in the document by making clear references to essential principles of trust management?
3. Is state ownership (or sovereign ownership) of wildlife referenced?
4. Is the public trust referenced to assert state management authority over wildlife?
5. Are there references to the conservation obligations/duties of trust management?
6. Are there references to what management limitations/constraints are imposed by trust management?
7. Are the beneficiaries of trust management identified and/or explained? (e.g., present and future generations, state residents, the American public, the public interest versus private interests, etc.)
8. Is the trust asset clearly defined? (e.g., are there references to fish and game, predators, application to habitat, etc.)
9. Is the trustee identified/explained in the document? (e.g., is it the state wildlife management agency, state legislature, board of game, game commission, etc.)
10. Are there references to accountability for trust management and/or trust enforcement?
11. Is the public trust linked to human access to / use of fish and wildlife?
12. Is the public trust referenced/discussed in the context of the North American Model of Wildlife Conservation?
13. Are potential adverse impacts of any proposed activity considered?
14. Was public input solicited or social science conducted on the decision/outcome (if applicable)?
15. Application: Does the document explain the connection/relationship between the public trust and the decision made or the position taken by the agency (if applicable)? In other words, is it apparent how the public trust was applied to the subject of focus in the document?

Appendix B. Summary of findings from document review

Table 2. Summary of findings from document review.

	# of documents	1. Is the public trust explicitly referenced in the document?			2. Is the public trust implied in the document by making clear references to essential principles of trust management?			3. Is state ownership (or sovereign ownership) of wildlife referenced?			4. Is the public trust referenced to assert state management authority over wildlife?		
		Yes	Tangentially	No	Yes	Tangentially	No	Yes	Tangentially	No	Yes	Tangentially	No
Alaska	10	2	0	8	10	0	0	0	0	10	0	2	8
Arizona	9	9	0	0	6	0	3	0	0	9	1	4	4
California	11	11	0	0	8	1	2	0	0	11	0	5	6
Colorado	7	2	0	5	7	0	0	0	0	7	0	2	5
Hawaii	1	0	0	1	1	0	0	0	0	1	0	1	0
Idaho	9	6	0	3	6	0	3	1	2	6	0	5	4
Montana	6	5	0	1	6	0	0	0	0	6	0	2	4
Nevada	1	0	0	1	1	0	0	0	0	1	0	0	1
New Mexico	5	0	0	5	3	1	1	0	0	5	0	1	4
Oregon	8	3	0	5	8	0	0	0	0	8	0	4	4
Utah	5	5	0	0	1	2	2	0	0	5	0	0	5
Washington	8	2	0	6	6	0	2	0	0	8	0	2	6
Wyoming	6	3	0	3	5	0	1	0	0	6	0	1	5
# OF DOCUMENTS	86	48	0	38	68	4	14	1	2	83	1	29	56
# OF STATES WITHOUT		3	13	3	0	10	6	12	12	0	12	2	1
# OF STATES WITH		10	0	10	13	3	7	1	1	13	1	11	12

Table 3. Summary of findings from document review (continued).

	5. Are there references to the conservation obligations/duties of trust management?			6. Are there references to what management limitations/constraints are imposed by trust management?			7. Are the beneficiaries of trust management identified and/or explained?			8. Is the trust asset clearly defined?		
	Yes	Tangentially	No	Yes	Tangentially	No	Yes	Tangentially	No	Yes	Tangentially	No
Alaska	0	9	1	0	0	10	3	6	1	0	10	0
Arizona	0	2	7	0	0	9	6	1	2	3	3	3
California	1	5	5	0	3	8	7	2	2	6	4	1
Colorado	0	6	1	1	0	6	3	2	2	0	4	3
Hawaii	0	0	1	0	0	1	0	0	1	0	0	1
Idaho	1	3	5	0	0	9	7	0	2	3	4	2
Montana	0	2	4	0	1	5	3	0	3	1	5	0
Nevada	0	0	1	0	0	1	1	0	0	0	1	0
New Mexico	0	1	4	0	1	4	0	4	1	0	2	3
Oregon	0	2	6	0	0	8	7	0	1	0	7	1
Utah	0	0	5	0	0	5	0	0	5	0	0	5
Washington	0	8	0	0	0	8	6	0	2	0	7	1
Wyoming	0	2	4	0	0	6	3	0	3	0	3	3
# OF DOCUMENTS	2	40	44	1	5	80	46	15	25	13	50	23
# OF STATES WITHOUT	11	3	1	12	10	0	3	8	1	9	2	3
# OF STATES WITH	2	10	12	1	3	13	10	5	12	4	11	10

Table 4. Summary of findings from document review (continued).

	9. Is the trustee identified/explained in the document?			10. Are there references to accountability for trust management and/or trust enforcement?			11. Is the public trust linked to human access to / use of fish and wildlife?			12. Is the public trust referenced/discussed in the context of the North American Model of Wildlife Conservation?		
	Yes	Tangentially	No	Yes	Tangentially	No	Yes	Tangentially	No	Yes	Tangentially	No
Alaska	6	3	1	0	2	8	0	3	7	0	0	10
Arizona	6	1	2	0	0	9	0	3	6	0	2	7
California	10	1	0	0	1	10	0	4	7	0	2	9
Colorado	1	6	0	0	0	7	0	1	6	0	2	5
Hawaii	0	0	1	0	0	1	0	0	1	0	0	1
Idaho	7	1	1	0	0	9	0	3	6	0	2	7
Montana	4	0	2	0	1	5	0	2	4	0	0	6
Nevada	1	0	0	0	0	1	0	0	1	0	0	1
New Mexico	0	4	1	0	0	5	0	1	4	0	1	4
Oregon	7	0	1	0	0	8	0	5	3	0	1	7
Utah	0	0	5	0	0	5	0	0	5	0	0	5
Washington	0	8	0	0	1	7	0	3	5	0	0	8
Wyoming	2	2	2	0	0	6	0	3	3	0	3	3
# OF DOCUMENTS	44	26	16	0	5	81	0	28	58	0	13	73
# OF STATES WITHOUT	4	5	4	13	9	0	13	3	0	13	6	0
# OF STATES WITH	9	8	9	0	4	13	0	10	13	0	7	13

Table 5. Summary of findings from document review (continued).

	13. Are potential adverse impacts of any proposed activity considered?			14. Was public input solicited or social science conducted on the decision/outcome (if applicable)?			15. Does the document explain the connection/relationship between the public trust and the decision made or the position taken by the agency (if applicable)?		
	Yes	Tangentially	No	Yes	Tangentially	No	Yes	Tangentially	No
Alaska	2	2	6	8	0	2	1	4	5
Arizona	0	2	7	3	2	4	0	1	8
California	1	3	7	5	0	6	0	4	7
Colorado	0	1	6	3	1	3	0	1	6
Hawaii	0	0	1	1	0	0	0	0	1
Idaho	1	0	8	3	0	6	0	1	8
Montana	1	0	5	5	0	1	1	1	4
Nevada	0	1	0	0	0	1	0	0	1
New Mexico	0	0	5	2	2	1	0	0	5
Oregon	0	0	8	4	0	4	0	3	5
Utah	0	0	5	0	1	4	0	0	5
Washington	1	0	7	3	0	5	0	1	7
Wyoming	0	0	6	2	0	4	0	1	5
# OF DOCUMENTS	6	9	71	39	6	41	2	17	67
# OF STATES WITHOUT	8	8	1	2	9	1	11	4	0
# OF STATES WITH	5	5	12	11	4	12	2	9	13

Appendix C. List of documents reviewed

- Alaska Department of Fish and Game. Wood Bison Management Plan for Lower Innoko/Yukon River in Westcentral Alaska, 2015-2020. 2015. Alaska Department of Fish and Game, Division of Wildlife Conservation, Wildlife Management Plan ADF&G/DWC/WMP-2015-1. Fairbanks, AK. Accessed March 22, 2019.
https://www.adfg.alaska.gov/static/species/speciesinfo/woodbison/pdfs/management_plan_lower_innoko_yukon_wood_bison.pdf
- Alaska Department of Fish and Game. Wood bison restoration in Alaska: A review of environmental and regulatory issues and proposed decisions for project implementation. 2007. Alaska Department of Fish and Game, Division of Wildlife Conservation. Fairbanks, AK. Accessed March 22, 2019.
https://www.adfg.alaska.gov/static/species/speciesinfo/woodbison/pdfs/er_no_appendices.pdf
- Alaska Department of Fish & Game. Intensive management protocol. 2011. Division of Wildlife Conservation, Alaska Department of Fish & Game. Juneau, AK. Accessed March 8, 2019.
https://www.adfg.alaska.gov/static/research/programs/intensivemanagement/pdfs/intensive_management_protocol.pdf
- Alaska Department of Fish and Game. Kodiak Archipelago Bear Conservation and Management Plan. 2002. Alaska Department of Fish and Game, Division of Wildlife Conservation. Anchorage, AK. Accessed March 22, 2019.
<https://www.adfg.alaska.gov/static/research/plans/kodiakbear/pdfs/kabcmp.pdf>
- Alaska Department of Fish and Game. Understanding Predator Management in Alaska. 2007. Alaska Department of Fish and Game, Division of Wildlife Conservation. Fairbanks, AK. Accessed March 22, 2019.
https://www.adfg.alaska.gov/static/research/programs/intensivemanagement/pdfs/predator_booklet.pdf
- Alaska Department of Fish and Game. Predator Management in Alaska. 2007. Alaska Department of Fish and Game, Division of Wildlife Conservation. Juneau, AK. Accessed March 22, 2019.
https://www.adfg.alaska.gov/static/research/programs/intensivemanagement/pdfs/predator_management.pdf
- Alaska Department of Fish and Game. Science Policy. 2012. Alaska Department of Fish and Game, Division of Wildlife Conservation. Fairbanks, AK. Accessed March 22, 2019.
https://www.adfg.alaska.gov/static/home/library/pdfs/wildlife/science_policy_04.02.12.pdf
- Alaska Department of Fish and Game. Strategic Plan. 2002. Alaska Department of Fish and Game, Division of Wildlife Conservation. Juneau, AK. Accessed March 22, 2019.
https://www.adfg.alaska.gov/static/research/plans/pdfs/strategic_plan_wc_2002.pdf
- Alaska Department of Fish and Game. Strategic Plan 2015-2020. 2015. Division of Sport Fish, Division of Wildlife Conservation, Alaska Department of Fish and Game. Juneau, AK. Accessed March 22, 2019. <https://www.adfg.alaska.gov/static/fishing/PDFs/sport/StrategicPlan2015Final.pdf>
- Alaska Department of Fish and Game. Alaska wildlife action plan. 2015. Alaska Department of Fish and Game, Division of Wildlife Conservation. Juneau, AK. Accessed March 22, 2019.
http://www.adfg.alaska.gov/static/species/wildlife_action_plan/2015_alaska_wildlife_action_plan.pdf

- Arizona Game and Fish Department. Central Arizona Grassland Conservation Strategy. 2014. Phoenix, AZ. Accessed March 22, 2019. http://www.azgfd.gov/w_c/documents/CAGCS_2014May.pdf
- Arizona Game and Fish Commission. Commission Position on HB2072. 2012. Arizona Game and Fish Department. Phoenix, AZ. Accessed March 22, 2019. <http://azgfd.net/artman/publish/NewsMedia/Commission-votes-to-oppose-HB-2072-sale-of-big-game-tags.shtml>
- Arizona Game and Fish Commission. A resolution of the Arizona Game and Fish Commission exploring the federal government to meet their obligation to control excessive populations of feral burros to reduce adverse impacts to wildlife habitat and public safety. 2016. Arizona Game and Fish Department. Phoenix, AZ. Accessed March 22, 2019. https://www.azgfd.com/PortalImages/files/commission/forum/2016_01_15%20Commission%20Resolution%20re%20Excessive%20Burro%20Populations.pdf
- Arizona Game and Fish Department. Comprehensive wildlife conservation strategy: 2005-2015. 2005. Arizona Game and Fish Department. Phoenix, AZ. Accessed March 22, 2019. https://repository.asu.edu/attachments/74283/content/b_Core%20Plan%20Final%206-28-05.pdf
- Arizona Game and Fish Department. Notice: Reopening public scoping comment period – Arizona sport fish stocking program 2010-2019. 2008. Arizona Game and Fish Department. Phoenix, AZ. Accessed March 22, 2019. <https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/WatershedFisheries/ReopeningScoping2009.pdf>
- Arizona Game and Fish Department. Public records provided – materials from meetings of the Catalina bighorn sheep reintroduction project advisory committee. 2014. Arizona Game and Fish Department. Phoenix, AZ. Accessed May 27, 2018. http://www.azgfd.gov/w_c/CatBighornReintroProj.shtml
- Arizona Game and Fish Department. Wildlife 2006: The Arizona Game and Fish Department's Wildlife Management Program Strategic Plan for the Years 2001-2006. 2001. Arizona Game and Fish Department. Phoenix, AZ. Accessed March 22, 2019. <http://azmemory.azlibrary.gov/digital/collection/statepubs/id/16645>
- Arizona Game and Fish Department. State wildlife action plan: 2012-2022. 2012. Arizona Game and Fish Department. Phoenix, AZ. Accessed March 22, 2019. https://www.azgfd.com/PortalImages/files/wildlife/2012-2022_Arizona_State_Wildlife_Action_Plan.pdf
- Arizona Game and Fish Department. Wildlife 20/20 Strategic Plan. 2006. Arizona Game and Fish Department Phoenix, Arizona. Accessed March 8, 2019. <https://s3.amazonaws.com/azgfd-portal-wordpress/azgfd.wp/wp-content/uploads/2017/09/05135436/FinalDraftWildlife20-20StrategicPlan2017.pdf>
- California Department of Fish and Wildlife. Aquatic biodiversity management plan for the Bucks Lake wilderness management unit. 2015. North Central Region Department of Fish and Wildlife, State of California. Sacramento, CA. Accessed March 22, 2019. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=102579>
- California Department of Fish and Wildlife. Elk conservation and management plan draft. 2017. Department of Fish and Wildlife, Natural Resources Agency, State of California. Sacramento, CA. Accessed March 22, 2019. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=151283>

- California Department of Fish and Wildlife. Conservation plan for grey wolves in California, part I. 2016. Department of Fish and Wildlife. Sacramento, CA. Accessed March 22, 2019. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=135026>
- California Department of Fish and Wildlife. Master plan for marine protected areas. 2016. Adopted by the California Fish and Game Commission on August 24, 2016. Accessed March 22, 2019. <http://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=133535&inline>
- California Department of Fish and Wildlife and U.S. Fish and Wildlife Service Pacific Southwest Region. Memorandum of Agreement: Wildlife agency participation for implementation of the federal and state Endangered Species Acts. 2015. California Department of Wildlife. Sacramento, CA. Accessed March 22, 2019. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=98242>
- California Department of Fish and Wildlife. Progress on achieving the fish and wildlife strategic vision goals. 2017. California Department of Wildlife. Sacramento, CA. Accessed March 22, 2019. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=150684>
- California Department of Fish and Wildlife. Seven strategic initiatives. 2011. California Department of Wildlife. Sacramento, CA. Accessed March 22, 2019. http://www.vision.ca.gov/docs/Seven_Strategic_Initiatives_2011.pdf
- California Department of Fish and Wildlife. California Spiny Lobster Fishery Management Plan and Proposed Regulatory Amendments: Initial Study/Negative Declaration. 2016. Sacramento, CA. Accessed March 8, 2019. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=121759&inline>
- California Department of Fish and Wildlife. California Department of Fish and Wildlife report to the legislature regarding instream suction dredge mining under the fish and game code. 2013. Department of Fish and Wildlife, Natural Resources Agency, State of California. Sacramento, CA. Accessed March 22, 2019. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=63843>
- California Department of Fish and Wildlife. California wildlife conservation challenges: California's wildlife action plan. 2005. California Department of Wildlife. Sacramento, CA. Accessed March 22, 2019. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=134992&inline>
- California Department of Fish and Wildlife. California wildlife action plan: A conservation legacy for Californians, Volume I: Plan Update. 2015. California Department of Wildlife. Sacramento, CA. Accessed March 22, 2019. <https://www.wildlife.ca.gov/SWAP/Final>
- Colorado Parks and Wildlife. COLORADO WILDLIFE COMMISSION POLICY ON CONFLICT OF INTEREST DISCLOSURE. 2009. Wildlife Commission, Colorado Parks and Wildlife. Denver, CO. Accessed February 11, 2019. https://cpw.state.co.us/Documents/Commission/policy_procedures/ConflictofInterestPolicy12-10-09.pdf
- Colorado Parks and Wildlife. 2015 Strategic Plan. 2015. Colorado Parks and Wildlife. Denver, CO. Accessed March 22, 2019. <https://cpw.state.co.us/Documents/About/StrategicPlan/DraftStrategicPlan081415.pdf>

Colorado Division of Wildlife. Strategic plan 2010-2020. Colorado Division of Wildlife. Denver, CO. Accessed March 22, 2019. <https://cpw.state.co.us/Documents/About/StrategicPlan/20102020DOWStrategicPlan.pdf>

Colorado Parks and Wildlife. 2017 Fact Sheet. Colorado Division of Wildlife. Denver, CO. Accessed March 22, 2019. <https://cpw.state.co.us/Documents/About/Reports/StatewideFactSheet.pdf>

Colorado Division of Wildlife. Conservation plan for grassland species in Colorado. 2003. Colorado Division of Wildlife and Colorado Grassland Species Working Group approved by CDOW Director Russell George, November 2003. Denver, CO. Accessed March 22, 2019. <https://cpw.state.co.us/Documents/WildlifeSpecies/Grasslands/plan.pdf>

Colorado Parks and Wildlife. State wildlife action plan. 2015. Colorado Division of Wildlife. Denver, CO. Accessed March 22, 2019. https://cpw.state.co.us/Documents/WildlifeSpecies/SWAP/CO_SWAP_FULLVERSION.pdf

Colorado Division of Wildlife. Findings and recommendations for managing wolves that migrate into Colorado. 2014. Colorado Wolf Management Working Group, Colorado Division of Wildlife. Denver, CO. Accessed February 24, 2019. <https://cpw.state.co.us/Documents/WildlifeSpecies/SpeciesOfConcern/Wolf/recomendations.pdf>

Hawaii Department of Land and Natural Resources. Hawai'i's state wildlife action plan. 2015. Honolulu, HI. Accessed March 22, 2019. <https://dlnr.hawaii.gov/wildlife/files/2016/12/HI-SWAP-2015.pdf>

Idaho Department of Fish and Game. Bighorn sheep management plan. 2010. Idaho Department of Fish and Game. Boise, ID. Accessed March 22, 2019. <https://idfg.idaho.gov/old-web/docs/wildlife/planBighorn.pdf>

Idaho Department of Fish and Game. Direction FY2014-2017: Annual strategic plan. 2014. Idaho Department of Fish and Game. Boise, ID. Accessed March 22, 2019. https://idfg.idaho.gov/old-web/docs/about/direction_2014_2017.pdf

Idaho Department of Fish and Game. Direction FY2018-2021: Annual strategic plan. 2018. Idaho Department of Fish and Game. Boise, ID. Accessed March 22, 2019. <https://idfg.idaho.gov/sites/default/files/annual-strategic-plan-fy-2018-2021.pdf>

Idaho Department of Fish and Game. Director's annual report to the Commission: FY2015. 2016. Idaho Department of Fish and Game. Boise, ID. Accessed March 22, 2019. <https://idfg.idaho.gov/sites/default/files/directors-annual-report-2015.pdf>

Idaho Department of Fish and Game. Frequently asked questions. 2013. Idaho Department of Fish and Game. Boise, ID. Accessed March 22, 2019. <https://idfg.idaho.gov/question/why-killing-wildlife-state-resources-for-prizes-okay-private-individuals-make-money-seems>

Idaho Department of Fish and Game. Mountain lion management plan 2002-2010. 2002. Boise, ID. Accessed February 22, 2019. <https://idfg.idaho.gov/old-web/docs/wildlife/planMtnLion.pdf>

Idaho Department of Fish and Game. Strategic plan. 2015. Idaho Department of Fish and Game. Boise, ID. Accessed March 22, 2019. <https://idfg.idaho.gov/old-web/docs/about/StrategicPlan2015.pdf>

- Idaho Department of Fish and Game. Idaho state wildlife action plan. 2015. Idaho Department of Fish and Game. Boise, ID. Accessed March 22, 2019. <https://idfg.idaho.gov/sites/default/files/state-wildlife-action-plan.pdf>
- Idaho Department of Fish and Game. Management plan for the conservation of wolverines in Idaho 2014-2019. 2014. Idaho Department of Fish and Game. Boise, ID. Accessed March 22, 2019. <https://idfg.idaho.gov/old-web/docs/wildlife/planWolverine.pdf>
- Montana Fish, Wildlife & Parks. Montana Bighorn Sheep Conservation Strategy. 2010. Wildlife Division of Montana Fish, Wildlife & Parks. Helena, MT. Accessed March 8, 2019. <http://fwp.mt.gov/fishAndWildlife/management/bighorn/plan.html>
- Montana Fish, Wildlife & Parks. Year-round habitat for Yellowstone bison environmental assessment. 2015. Wildlife Division of Montana Fish, Wildlife & Parks. Helena, MT. Accessed March 22, 2019. <http://fwp.mt.gov/fwpDoc.html?id=60011>
- Montana Fish, Wildlife & Parks. Bison conservation and management Montana, environmental impact statement. 2015. Wildlife Division of Montana Fish, Wildlife & Parks. Helena, MT. Accessed March 22, 2019. <http://fwp.mt.gov/fwpDoc.html?id=68868>
- Montana Fish, Wildlife & Parks. Montana sage grouse habitat conservation program annual report. 2016. Wildlife Division of Montana Fish, Wildlife & Parks. Helena, MT. Accessed March 22, 2019. https://sagegrouse.mt.gov/documents/AnnualReports/Exec_Summary_Annual_Report_6-29-17.pdf
- Montana Fish, Wildlife & Parks. Montana state wildlife action plan. 2015. Helena, MT. Accessed March 22, 2019. <http://fwp.mt.gov/fwpDoc.html?id=70169>
- Montana Fish, Wildlife & Parks. Vision and guide 2016-2026. 2016. Helena, MT. Accessed March 22, 2019. <http://fwp.mt.gov/fwpDoc.jsp?id=76036>
- Nevada Department of Wildlife. Predator management plan fiscal year 2019. Reno, NV. Accessed March 22, 2019. http://www.ndow.org/uploadedFiles/ndoworg/Content/Nevada_Wildlife/Conservation/Predator%20Plan%20FY2019.pdf
- New Mexico Department of Game and Fish. 2016 statewide fisheries management plan. 2016. Albuquerque, NM. Accessed March 22, 2019. <http://www.wildlife.state.nm.us/download/department/public-comment/NM-Fisheries-Management-Plan-2016-SCG-Approved.pdf>
- New Mexico Department of Game and Fish. Central region habitat improvement plan 2015-2020. 2017. Albuquerque, NM. Accessed March 22, 2019. http://www.wildlife.state.nm.us/download/conservation/habitat-handbook/habitat-stamp/regional-work-plans/Central-Region-Habitat-Improvement-Plan-2015_2020.pdf
- New Mexico Department of Game and Fish. Strategic plan FY2010 through 2014. 2008. Albuquerque, NM. Accessed March 22, 2019. http://www.wildlife.state.nm.us/download/department/strategic-plans/Strategic-Plan-FY_2010-FY_2014.pdf

- New Mexico Department of Game and Fish. Strategic plan FY2013 through 2018. 2012. Albuquerque, NM. Accessed March 22, 2019. http://www.wildlife.state.nm.us/download/department/strategic-plans/Strategic-Plan-FY_2013-FY_2018.pdf
- New Mexico Department of Game and Fish. State wildlife action plan for New Mexico. 2016. Albuquerque, NM. Accessed March 22, 2019. <http://www.wildlife.state.nm.us/download/conservation/swap/New-Mexico-State-Wildlife-Action-Plan-SWAP-Final-2017.pdf>
- Oregon Department of Fish and Wildlife. Oregon's bighorn sheep and rocky mountain goat management plan. 2003. Salem, OR. Accessed March 22, 2019. http://www.dfw.state.or.us/wildlife/management_plans/docs/sgplan_1203.pdf
- Oregon Department of Fish and Wildlife. Oregon black bear management plan. 2012. Salem, OR. Accessed March 22, 2019. https://dfw.state.or.us/wildlife/management_plans/docs/2012_Bear_Mgt_Plan_draft_21Mar2012b_X.pdf
- Oregon Department of Fish and Wildlife. Oregon black-tailed deer management plan. 2008. Salem, OR. Accessed March 22, 2019. https://www.dfw.state.or.us/wildlife/docs/oregon_black-tailed_deer_management_plan.pdf
- Oregon Department of Fish and Wildlife. Bridge Creek Wildlife Area Management Plan. 2009. Salem, OR. Accessed March 22, 2019. https://www.dfw.state.or.us/wildlife/management_plans/wildlife_areas/docs/BCWA%20Management%20Plan%20April%202009.pdf
- Oregon Department of Fish and Wildlife. 2017 Oregon Cougar Management Plan. 2017. Salem, Oregon. Accessed March 9, 2019. https://www.dfw.state.or.us/wildlife/cougar/docs/2017_Oregon_Cougar_Management_Plan.pdf
- Oregon Department of Fish and Wildlife. The Oregon Nearshore Strategy. 2016. Salem, OR. Accessed March 22, 2019. <http://www.dfw.state.or.us/MRP/nearshore/docs/strategy/Strategy.pdf>
- Oregon Department of Fish and Wildlife. Greater Sage-Grouse Conservation Assessment and Strategy for Oregon: A Plan to Maintain and Enhance Populations and Habitat. 2011. Salem, OR. Accessed March 22, 2019. <https://ir.library.oregonstate.edu/downloads/7p88cn36r>
- Oregon Department of Fish and Wildlife. Wolf conservation and management plan. 2010. Salem, OR. Accessed March 8, 2019. https://www.dfw.state.or.us/wolves/docs/Oregon_Wolf_Conservation_and_Management_Plan_2010.pdf
- Utah Division of Wildlife Resources. Utah Black Bear Management Plan V. 2.0 2011-2023. 2011. Utah Black Bear Advisory Committee, Approved by the Wildlife Board January 4, 2011. DWR Publication 11-01. Salt Lake City, UT. Accessed March 22, 2019. https://wildlife.utah.gov/bear/pdf/2011_bear_plan.pdf
- Utah Division of Wildlife Resources. 2017-2018 Utah Cougar Guidebook. 2017. Salt Lake City, UT. Accessed April 29, 2018. <https://wildlife.utah.gov/utah-cougar-guidebook.html>

Utah Division of Wildlife Resources. Utah Cougar Management Plan V.3 2015-2025. Cougar Advisory Group, Utah Division of Wildlife Resources. DWR Publication No. 15-28. Salt Lake City, UT. Accessed March 22, 2019. <https://wildlife.utah.gov/pdf/cmgtplan.pdf>

Utah Division of Wildlife Resources. Goals and objectives. 2019. Salt Lake City, UT. Accessed March 22, 2019. <https://wildlife.utah.gov/about/goals.php>

Utah Division of Wildlife Resources. Internal/External Operational Environmental Assessment Report. 2000. Division of Wildlife Resources, Department of Natural Resources, State of Utah. Publication No. 00-06. Salt Lake City, UT. Accessed March 22, 2019. <https://wildlife.utah.gov/pdf/stratpla.pdf>

Utah Division of Wildlife Resources. Utah Pronghorn Statewide Management Plan. 2017. Salt Lake City, UT. Accessed March 22, 2019. https://wildlife.utah.gov/hunting/biggame/pdf/pronghorn_plan.pdf

Washington Department of Fish and Wildlife. Wildlife Area Management Planning Framework. 2016. Olympia, WA. Accessed March 22, 2019. <https://wdfw.wa.gov/publications/01810/wdfw01810.pdf>

Washington Department of Fish and Wildlife Commission. Actions and guidelines to improve the conservation of Washington's diverse fish and wildlife resources. 2017. Policy No. C-7001. Accessed March 22, 2019. <https://wdfw.wa.gov/commission/policies/c7001.pdf>

Washington Department of Fish and Wildlife. Washington State Deer Management Plan: White-Tailed Deer. 2010. Olympia, WA. Accessed March 22, 2019. <https://wdfw.wa.gov/publications/00497/wdfw00497.pdf>

Washington Department of Fish and Wildlife. Game Management Plan July 2015 – June 2021. 2015. Game Division, Wildlife Program, Department of Fish and Wildlife, State of Washington. Olympia, WA. Accessed March 22, 2019. <https://wdfw.wa.gov/publications/01676/wdfw01676.pdf>

Washington Department of Fish and Wildlife. 21st Century Salmon & Steelhead Initiative. 2006. Olympia, WA. Accessed March 22, 2019. <https://wdfw.wa.gov/publications/00036/wdfw00036.pdf>

Washington Department of Fish and Wildlife. 2017-19 Strategic Plan. 2017. Olympia, WA. Accessed March 22, 2019. <https://wdfw.wa.gov/publications/01928/wdfw01928.pdf>

Washington Department of Fish and Wildlife. Sherman Wolf Pack: 2017 Lethal Removal Action, 2017. Olympia, WA. Accessed March 22, 2019. <https://wdfw.wa.gov/publications/01949/wdfw01949.pdf>

Washington Department of Fish and Wildlife. Smackout Wolf Pack: 2017 Lethal Removal Action, 2017. Olympia, WA. Accessed March 22, 2019. <https://wdfw.wa.gov/publications/01929/wdfw01929.pdf>

Wyoming Game and Fish Department. 2015 Annual Report. 2015. Cheyenne, WY. Accessed March 22, 2019. https://wgfd.wyo.gov/WGFD/media/content/PDF/About%20Us/Commission/WGFD_ANNUALREPORT_2015.pdf

Wyoming Game and Fish Department. 2015 Annual Report. 2015. Cheyenne, WY. Accessed March 22, 2019. https://wgfd.wyo.gov/WGFD/media/content/PDF/About%20Us/Commission/WGFD_ANNUALREPORT_2017.pdf

Wyoming Game and Fish Department. Comprehensive Management System: Strategic Plan FY17-FY21. 2016. Cheyenne, WY. Accessed March 22, 2019. https://wgfd.wyo.gov/WGFD/media/content/PDF/About%20Us/Commission/WGFD_STRATEGICPLAN.pdf

Wyoming Game and Fish Department. Mountain Lion Management Plan. 2006. Trophy Game Section (Management/Research Branch), Wyoming Game and Fish Department. Lander, WY. Accessed March 22, 2019. https://wgfd.wyo.gov/WGFD/media/content/PDF/Wildlife/Large%20Carnivore/MTNLION_MGMTPLAN.pdf

Wyoming Game and Fish Department. The Wyoming Mule Deer Initiative. 2018. Mule Deer Working Group, Wyoming Game and Fish Department. Cheyenne, WY. Accessed March 22, 2019. <https://wgfd.wyo.gov/WGFD/media/content/PDF/Habitat/Mule%20Deer%20Initiative/Mule-Deer-Initiative.pdf>

Wyoming Game and Fish Department. State wildlife action plan. 2017. Cheyenne, WY. Accessed March 22, 2019. <https://wgfd.wyo.gov/Habitat/Habitat-Plans/Wyoming-State-Wildlife-Action-Plan>