Hard decisions: The role of the judiciary in contemporary environmental politics wild life law in the later twentieth and early twenty-first centuries

HARD DECISIONS: THE ROLE OF THE JUDICIARY IN CONTEMPORARY ENVIRONMENTAL POLITICS AND WILDLIFE LAW IN THE LATTER TWENTIETH AND EARLY TWENTY-FIRST CENTURIES

A Thesis By

Felicia R. Hammons

Bachelor of Arts, Wichita State University, 2013

Submitted to the Department of History
and the faculty of the Graduate School of
Wichita State University
in partial fulfillment of
the requirements for the degree of
Master of Arts

December 2016

HARD DECISIONS: THE ROLE OF THE JUDICIARY IN CONTEMPORARY ENVIRONMENTAL POLITICS AND WILDLIFE LAW IN THE LATTER TWENTIETH AND EARLY TWENTY-FIRST CENTURIES

The following faculty members have examined the final copy of this thesis for form and content, and recommend that it be accepted in partial fulfillment of the requirement for the degree of Master of Arts, with a major in History.

_____
Robin Henry, Committee Chair

_____
George Dehner, Committee Member

_____
Mary Liz Jameson, Committee Member

"Our obligation is to define the liberty of all, not mandate our own moral code."

US Supreme Court Justice Anthony M. Kennedy. From *Planned Parenthood of Southeastern Pennsylvania v. Casey*, 91 US 744 (1992).

ACKNOWLEDGMENTS

This work was greatly influenced by three inspirational scholars; Dr. Robin Henry, Dr. George Dehner, and Dr. Mary Liz Jameson. All three have been mentors and advisors for countless students of all disciplines. I thank them for their commitment to my work and my overall professional success. But, more importantly, I thank them for their unyielding devotion to their respective fields of study. Their teachings and advisement are what inspired me to study environmental law and wildlife conservation.

I would like to give a special thank you to Dr. Robin Henry for acting as my Committee Chair and my academic advisor. I would also like to extend my gratitude to the faculty and staff of the Wichita State University History Department for their investment in my academic and professional development. On a personal note, I would like to thank my family for supporting me through my academic career. I especially thank my mother, Nancy Farr, who has been my role model for academic excellence and moral integrity. And I thank my colleague, Joshua Roeder, for making me fancy coffee and a Scottish breakfast during the long work nights. I dedicate this work to the supporting efforts of my steadfast committee members and my wonderful family.

ABSTRACT

This research utilizes legal court cases to describe scientific, legal, and political controversies inherent in the real-world implementation of environmental legislation during the latter twentieth and early twenty-first centuries. Most current scholarship focuses solely on the science, legal practices, or politics involved in the application of environmental statutes. This works utilizes environmental history and legal history methodologies to argue that environmental legal cases are not simply beacons of environmental successes or failures. They are windows into the scientific, legal, economic, and political contexts in which they occurred. The majority of environmental laws were created nearly a half-century ago during the golden era of the contemporary environmental movement and their application has been tested in a string of legal cases.

The cases presented in this work are illustrative of the increased role of the judiciary in environmental topics and how legal courts have dealt with dilemmas of environmental policies. The Oregon District Court case *Defenders of Wildlife; et al. v. Secretary of the United States Department of the Interior* (2005) focused on the role of science, politics, and law in the management and conservation of the gray wolf under the Endangered Species Act. The US Supreme Court case *Lujan v. Defenders of Wildlife (*1992) demonstrated the conservative nature of the Rehnquist Court (1986-2006) and its effect on legal standing in future environmental cases. The US Supreme Court case *Winter v. Natural Resources Defense Council* (2008) highlighted the conflict between US national security and environmental protection invested in the protection of marine life from US Navy sonar. The primary inquiry is how the environmental legislation created during the latter twentieth century has and will survive the changes in science, politics, and law during the early twenty-first century.

TABLE OF CONTENTS

CHAPTER I

INTRODUCTION

Environmental law is a legal discipline derived from social movements during the 1960s and 1970s, and it has altered the understanding and practice of law. Although the field is still in its infancy, it has progressively received social, political, cultural, and legal acceptance in the latter twentieth and early twenty-first centuries. Since its inception, the environmental movement's agenda has been altered by globalism, radical reform of existing institutions and laws, increased cost consciousness, and a greater awareness of the limits and problems in achieving environmental goals. How environmental statutes are treated and whether they are a priority or are part of a balancing act with other areas of public interest remains an ongoing debate. The topics discussed within this work demonstrate that decision-making authorities feel that they are forced to choose between environmental objectives and separate topics of public interest. Included is a discussion of environmental legislation created during the 1960s and 1970s and their implementation in the latter twentieth and early twenty-first centuries. This work is most relevant to contemporary conservation politics because the topics described in the following chapters are still being debated in the current year of 2016. The primary inquiry is how twentieth century environmental legislation have and will survive the changes in science, politics, and law during the early twenty-first century. The legal cases presented in this work are not arguments for or against wildlife protection or conservation. Rather, the cases are illustrative of the scientific, economic, political, and legal controversies surrounding conservation law, including the conservation and management of endangered species, the geographical scope of the ESA, the role of the judiciary in environmental policy, and the effects of sonar upon marine life. The increased role of the judiciary in environmental policy has given the judiciary the difficult

responsibility of resolving divisive controversies associated with implementing environmental policies. The decisions they are requested to make are literally "hard decisions." How does one determine when a species is recovered? How can one determine the constitutionality of an interpretation that resulted from textual ambiguities of the law in question? And how can one determine which is more important, national security or environmental protection? Both of which are considered areas of public interest. Scientists, politicians, and legal scholars still debate these questions, but only the judiciary has the power to judge whether their decisions are constitutional or not. A further inquiry is whether the judiciary is the proper place for the future of environmental policy.

Many factors led to the growth of the environmental regulatory system, including the perceived failure of the preexisting institutions and practices tasked with insuring environmental protection. In the introduction to *Creative Common Law Strategies for Protecting the Environment*, author Joseph L. Sax cited the failure of common-law institutions to protect environmental values as motive for the explosion of environmental legislation enacted during the 1960s and 1970s. Tort law dealt with after-the-fact remediation of harm, but environmental threats needed to be addressed before the actual injury occurred. Legal actions like private nuisance and trespass generally protected private property rights, but did not address chemical pollution in public resources. And all actions required concrete proof of causation, which was difficult for cases that involved contaminated groundwater or hazardous waste sites, for example. Existing regulatory laws were lacking adequate regulatory measures; pesticides were regulated only for accuracy on their labelling and not for their use and manner of disposal. Automobile emissions were not regulated and new asphalt roads cut through wilderness parks for expediency. Public lands were dominantly given to industrial activities, such as mining, cattle grazing, and

timber harvesting. Sax found that the greatest obstacle to protecting the environment was to prove legal standing. Under conventional rules of standing, plaintiffs needed a property or contract right that required legal protection. This made protecting public resources, wilderness areas, and wildlife difficult, because the plaintiffs technically had no legal interest invested in any of them. The public was threatened with long-term health risks from hazardous air emissions, polluted water, leaking waste dumps, and the reduction of biological diversity. It became apparent that common law remedies were proving inadequate to deal with contemporary environmental problems. The creation of a whole new body of law and, indeed, a whole new conception of law was needed to support responsible management of the environment in the latter twentieth century.[1]

The environmental movement sprang from an attitude toward nature that assumed humanity was part of the order of nature and that humanity was ethically responsible for the preservation of the Earth's ecological integrity. Humanity was also ultimately vulnerable, like all other living things, to the ills humans inflicted upon the environment. To maintain a healthy environment, humans adopted forms of ecological management, an approach to managing nature that stressed the interdependency of all natural systems. It focused on ecological stability, resource sustainability, and the long-term perspective of which ecological changes occur. Following World War II, state governments progressively enacted broad regulatory policies to control the environmental effects and abuses of private industrial activity. The US federal government followed suit and erected the basic architecture of the contemporary environmental legal system we are familiar with in the twenty-first century. Beginning in 1969, Congress enacted the National Environmental Policy Act (NEPA) (1969), followed by the Clean Air Act

[1] Joseph L. Sax, preface to *Creative Common Law Strategies for Protecting the Environment*, edited by Clifford Rechstaffen & Denise Antolini (Washington, DC: Environmental Law Institute, 2007), xvii-xx.

(CAA) (1970), Clean Water Act (CWA) (1972), Endangered Species Act (ESA) (1973), Safe Drinking Water Act (SDWA) (1974), Resource Conservation and Recovery Act (RCRA) (1976), Toxic Substances Control Act (TSCA) (1976), and the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) (1996). This wave of environmental legislation signified a fundamental reordering of societal values and priorities. Congress took seriously the urgency, scope, and complexity of environmental problems and institutionalized the values and goals of the environmental movement. [2]

In his work "Is There a There There in Environmental Law?" author Dan A. Tarlock stated, "Environmental law's rapid rise and great success is nonetheless a mixed blessing because it postponed consideration of the hard questions about the content and legitimacy of the field and environmental protection generally." He stated three reasons for legal difficulties with environmental law; the first is that, as a legal field, environmental law is still in its infancy. The second is that, unlike other legal traditions, it is not derived from common law. Finally, it remains largely unintegrated into the legal system, making it vulnerable to the ebbs and flows of environmental interests, as well as to the interpretation and enforcement of environmental policy and laws.[3] This work should be used as a window into early twenty-first century conservation politics. The cases discussed are illustrative of the ways in which the federal government, in particular the judicial system, has attempted to manage divisive topics associated with wildlife protection in the early twenty-first century. Contemporary environmental legislation was created primarily during the 1960s and 1970s. But the purpose of the legislation has been tested in a

[2] Ibid; Walter A. Rosenbaum, *Environmental Politics and Policy*, 2nd ed. (Washington, DC: Congressional Quarterly Inc., 1991), 21, 28-29; Jonathan Z. Cannon, *Environment in the Balance: The Green Movement and the Supreme Court* (Cambridge, MA: Harvard University Press, 2015), 31.
[3] Dan A. Tarlock, "Is There a There There in Environmental Law?" *Journal of Land Use and Environmental Law* 19, no. 2 (Spring, 2004): 216-217.

string of legal cases that have demonstrated the difficulties of implementing environmental law and the environmental ethos into the real world.

All the cases discussed in this work are part of the legal subfield wildlife law. In their 1977 work *The Evolution of National Wildlife Law*, authors Michael J. Bean and Melanie J. Rowland found that there was no single comprehensive text that addressed wildlife law as a distinct segment of environmental law. There also seemed to be little scholarly criticism of the subject in legal journals. By the second publication of their book in 1983, however, wildlife law had become incorporated into the scientific, political, and legal systems. Since 1977, the US Supreme Court has ruled on more than a dozen cases that involved wildlife law and lower federal courts have handled even more wildlife cases brought by the government, conservation groups, and commercial interests. This has created a body of judicial decisions that reflect topics and controversies associated with wildlife conservation. The cases discussed in this work are primarily wildlife law cases because wildlife law is a difficult field for plaintiffs to prove legal injury. Proving legal injury is more clearly defined in environmental cases that involve toxic waste or property disputes because humans are the objects that are injured. In wildlife cases, animals and plants are the objects that are injured, but animals and plants are not granted standing under the US legal system. Many environmental organizations have proven that wildlife does have a lawyer and they have brought wildlife cases before all levels of the judicial court system. But, as will be described in the following chapters, legal courts have maintained conservative stances on many topics within environmental policy.[4] The goal of this work is to demonstrate that courts and policy-making authorities need rely less on traditional practices in law and policy and need to adopt new innovations in science, politics, and law. The bulk of

[4] Michael J. Bean and Melanie Rowland, *The Evolution of National Wildlife Law*, 3rd ed. (Santa Barbara, CA: Praeger, 1997), 3-4.

environmental legislation was enacted nearly a half-century ago, but authorities need to act innovatively to effectively implement environmental statutes.

The "golden era" of environmental lawmaking was between 1964 and 1980 and included the passage of twenty-two pieces of major environmental legislation. Authors Christopher M. Klyza and David J. Sousa found that, since the golden era, environmental issues have divided political parties and have created interest-group politics, which has led to a legislative gridlock. Consequently, supporters and opponents of environmental statutes have turned to the courts to advance their respective interests. Judges have always played a major role in environmental policies, on a case-by-case basis, through interpreting statutes, regulating agency procedures, and judging the constitutionality of agency rules. But the legislative deadlock has greatly increased the policy-making role of the judiciary, and has also increased the significance, complexity, and contentiousness of the judicial pathway. The judicial arena has become a stage for interest-group rivalries and fundamental policy conflicts. This has created a judicial atmosphere of polarity and instability, rather than convergence toward a pragmatic center. This ideological fracturing prevents policy-makers from creating efficient mechanisms for addressing controversies in environmental policy. Courts, however, provide a unique vantage point to assess the controversies inherent in the real-life implementation of environmental legislation enacted nearly fifty years ago. The cases presented in this work are illustrative of the increased role of the judiciary in environmental topics and how courts have dealt with dilemmas of environmental policies in the 1990s and the early twenty-first century.[5]

This work is comprised of six chapters, an introduction, a historiography, three body chapters, and then a conclusion. Each of the three body chapters center around a US legal case

[5] Christopher M. Klyza and David J. Sousa, *American Environmental Policy, 1990-2006: Beyond Gridlock* (Cambridge, MA: MIT Press, 2008), 153, 158.

that reveals controversies associated with the implementation of the Endangered Species Act and the National Environmental Policy Act. The first case study focuses on the debate about the role of science and politics in wildlife conservation as demonstrated in the Oregon District Court case *Defenders of Wildlife; et al. v. Secretary of the United States Department of the Interior* (2005), referred to as the "wolf case." In the wolf case, the Defenders of Wildlife (Defenders) challenged the US Fish and Wildlife Service's (FWS) downlisting of the gray wolf from the status of "endangered" to the status of "threatened." District Judge Robert E. Jones ruled in favor of the Defenders and found the downlisting in violation of the Endangered Species Act.[6] The case is also illustrative of other controversial topics involved in wildlife conservation management, such as perspectives concerning wildlife, management strategies, federal administrative authority, and assessing risk. The Endangered Species Act (ESA) was enacted in 1973 with the aim of protecting wildlife, but its real-world application has resulted in scientific, political, and legal debate.

The second case study is an examination of the conservative nature of the Rehnquist Court (1986-2005) and its effect on environmental policy, which was demonstrated in the US Supreme Court case *Lujan v. Defenders of Wildlife (*1992). In 1978, the FWS and the National Marine Fisheries Service (NMFS) jointly stated that the ESA regulations extended to federal agency actions in foreign nations. In 1986, the Department of Interior and Department of Commerce jointly limited the ESA's geographical scope to the United States or on the High Seas. In *Lujan*, the Defenders of Wildlife (Defenders) filed an action against the Secretary of the Interior, Manuel Lujan Jr., seeking a declaratory judgment from the Court that the new regulation erred in its geographical limitation, and that Lujan restore the original regulatory scope. The Court ruled in favor of Lujan because the Defenders lacked both standing to sue and

[6] *Defenders of Wildlife v. Secretary, United States Department of the Interior*, 354 F.Supp.2d 1156 (D. Or. 2005).

redressability.[7] The Court's conservative treatment of *Lujan* demonstrated to the Court's strategy to limit judicial legislative overreach and maintain the government balance of powers. The case arguments also contain disputes over additional controversies in environmental law, including the textual ambiguities of the ESA, inter-agency authority struggles, the relationship between science and law, the purpose of preventative law, and new approaches to legal standing.

The third case study focuses on the balance between national security and environmental protection, which was epitomized in the US Supreme Court case *Winter v. Natural Resources Defense Council* (2008). In *Winter*, the Natural Resources Defense Council (NRDC) sued for a preliminary injunction against US Navy sonar training exercises scheduled between February 2007 and January 2009 off the coast of southern California. The NRDC argued that the Navy violated the National Environmental Policy Act (NEPA) because the Navy's use of mid-frequency sonar would have irreversibly harmed marine life, and that the Navy should have completed a satisfactory Environmental Impact Statement (EIS) before commencing with the training exercises. In a 5-4 decision, the Roberts Court ruled that the Navy's need to conduct realistic training exercises outweighed the plaintiffs' "ecological, scientific, and recreational interests in marine mammals."[8] The Court concluded that national security was more important than the protection of marine life and the Navy's compliance with the NEPA regulations. *Winter* falls under the theme of "national security trumps all," but the case is representative of many other legal and historical developments, including the relationship between science and law, the expansion of executive authority, proving legal injury, defining "emergency circumstances," and legal standardization.

[7] *Lujan v. Defenders of Wildlife*, 90 US 1424 (1992).
[8] *Winter v. Natural Resources Defense Council*, 555 US 07-1239 (2008).

The sixth chapter of this work is the conclusion and will include additional information about the legal cases and topics discussed within this work, as well as an assessment of the increased role of the judiciary in environmental politics. Environmental law is altering the understanding and practice of law because the field's legitimacy is derived from extra-legal evidence. Law experienced a similar shift during the Progressive Era of the late 19th and early 20th centuries. Progressive legal scholars promoted the Law and Society Movement, which focused on the concept of "legal realism." Legal realism argued that courts consider legal and non-legal evidence in their decision-making processes. They preferred to base legal arguments on empirical research rather than traditional legal rules and institutions. In his 1881 work *The Common Law*, legal historian Oliver Wendell Holmes noted that experience should govern the creation and application of law, not solely logic. He argued that one had to be aware of all kinds of non-legal matters to develop a thorough understanding of law. In 1921, Judge Benjamin N. Cardozo's work The *Nature of the Judicial Process* continued Holmes' argument. He added that judges not solely rely upon legal past precedent, but consider all branches of knowledge, experience, information, and their own intuition. Modern legal realists view law not as a fixed phenomenon, but in a state of constant flux, responding to changing social conditions.[9]

Environmental law challenges court justices to not only include procedural law and sociological jurisprudence in their decisions, but also to consider each case as unique and different from all others. An early demonstration of sociological jurisprudence was the US Supreme Court case *Muller v. Oregon* (1908) in which the Fuller Court (1888-1910) unanimously upheld an Oregon law that limited working hours for women in factories and laundries to no more than ten hours a day. Louis D. Brandeis represented Oregon and defended

[1] Melvin Urofsky and Paul Finklemean, *A March of Liberty: A Constitutional History of the United States, Vol. II: From 1898 to Present,* 3rd ed. (New York: Oxford University Press, 2011), 718-19.

the law as the state legislature's concern for the health of safety of women workers. He submitted the famed "Brandeis brief," in which he devoted only a few pages to legal precedent and the rest of the brief included over a hundred facts provided by sociological, scientific, and economic professionals that detailed the impact long hours had upon women's physical and mental well-being. The use of extra-legal evidence in the Brandeis brief was an early practice of sociological jurisprudence and became the model of how lawyers could effectively include sociological, scientific, and economic evidence in future cases. Sociological jurisprudence became pivotal to cases that involved controversial topics, such as the Civil Rights cases in the later twentieth century.[10] Sociological jurisprudence has also been instrumental to cases involving environmental controversies, because environmental policy is a mixture of science, politics, economics, and law.

Of the cases presented in this work, the lower courts appeared apt to agree with environmental interests, while the Rehnquist Court (1986-2005) and the Roberts Court (2005-present) maintained conservative majorities, which weakened the environmental interests in each case. The opinions and dissents in the cases included are descriptive of the personal and legal concerns of the justices, but also reflect the controversies involved in the real-world implementation of environmental statutes. All three cases demonstrate that the application of environmental law is an organic and ongoing process that is being shaped by all three branches of the US federal government; through legislation by the legislative, proclamations by the executive, and rulings by the judiciary. While all three branches may be constructing environmental policy, it is the judicial branch that holds the ultimate authority to rule on whether laws and proclamations are constitutional or not. The question remains whether the three

[10] Ibid., 622-623.

branches of government, but most especially the judiciary, will narrow or broaden the environmental directives set forth in the environmental statutes of the 1960s and 1970s.

CHAPTER II

HISTORIOGRAPHY

This work is related to multiple disciplines and topics, including environmental history, environmental politics, and wildlife conservation. And within those broader topics, each chapter contains micro-topics, such as endangered species management, the relationship between science and law, and the effects of sonar upon marine life. Many works have been published on these macro and micro subjects. This historiography will begin with the broader topics and then break down into the micro topics presented within the following chapters. The cases and topics discussed have received limited scholarly attention and current work tends to focus on specific themes within the cases, such as the issue of legal standing or the effects of sonar upon marine life. Consequently, works have generally been geared toward a specialized audience, such as a legal, scientific, or political audience. Most authors have focused on famous, more well-known wildlife cases, such as the Snail Darter Case in the 1970s and the Spotted Owl Controversy in the 1980s. This focus is understandable because both cases were paramount to the evolution of environmental policy in the latter twentieth-century. The Snail Darter Case was the first case that tested the Endangered Species Act (ESA) in legal courts and demonstrated the powerful role of the judiciary in the future of environmental policy. The Spotted Owl Controversy illustrated the commercial effects of species conservation upon industry when the protection of the Northern Spotted Owl and its habitat threatened the logging industry in the pacific northwest. This work is an attempt to bridge the gap between older works and the current state of wildlife policy in the early twenty-first century, and to create a better understanding of the complexities involved in the real-world implementation of environmental statutes enacted nearly fifty years ago.

Two of the earliest foundational works about environmental policy was Rachel Carson's *Silent Spring* (1962) and Stewart L. Udall's *The Quiet Crisis* (1963), both of which are considered foundational works of the environmental movement. Rachel Carson was a zoologist and marine biologist and is credited with having launched the global environmental movement. Her work *Silent Spring* was published in 1962 and was a massively popular book and had an immense effect in the United States where it inspired changes in the national pesticide policy. Carson passed away two years after the publication, but she was posthumously awarded the Presidential Medal of Freedom by President James (Jimmy) Carter. *Silent Spring* was Carson's response to the widespread use of DDT and other chemical pesticides by state and federal governments. She used case studies to illustrate the ways in which the chemicals affected life within ecosystems and could harm humans by consequence. Her work inspired President John F. Kennedy's Science Advisory Committee to investigate pesticide use in 1963. Carson's work led to a new era of pesticide control and the development and management of new synthetic pesticides more effective than DDT. Carson's work was also important to the burgeoning field of ecology, which would prove essential to environmental policy in the latter twentieth and early twenty-first centuries.[11]

Stewart L. Udall was Secretary of the Interior from 1961 to 1969 under presidents John F. Kennedy and Lyndon B. Johnson, and was an early supporter of Rachel Carson. He wrote *The Quiet Crisis* in 1963 to further inform and inspire support for environmental conservation. He wanted Americans to grasp the relationship between human stewardship and the health of the environment. He traced the history of human environmental use and abuse, from the early Native

[11] Rachel Carson, *Silent Spring* (Boston, MA.: Houghton Mifflin, 1962); Jonathan Norton Leonard, "Rachel Carson Dies of Cancer: 'Silent Spring' Author Was 56," *New York Times* (April 15, 1964), accessed October 20, 2016, http://www.nytimes.com/books/97/10/05/reviews/carson-obit.html; "Medal of Freedom Awards by President Carter 1977-1981," Jimmy Carter Presidential Library & Museum, last modified April, 28, 2016, accessed October 20, 2016, https://www.jimmycarterlibrary.gov/documents/jec/medal.phtml.

Americans to Americans in the first half of the twentieth century, and defined the quiet crisis by stating, "America today stands poised on a pinnacle of wealth and power, yet we live in a land of vanishing beauty, of increasing ugliness, of shrinking open space, and of an over-all environment that is diminished daily by pollution and noise and blight. This, in brief, is the quiet conservation crisis of the 1960s." [12] He viewed future conservation with optimism in which he called upon individuals and the nations of the world to cooperative. Carson's and Udall's works were some of the earliest and most influential works of the environmental movement. But they were less about environmental politics and legislation, and more about inspiring support for the environmental ethos.

An influential book that followed Udall's *The Quiet Crisis* was Frank E. Smith's 1966 work titled *The Politics of Conservation*, in which Smith focused on the political activities that surrounded conservation legislation. He used the work of the Tennessee Valley Authority (TVA) to describe the history of public power and river basin development by the federal government to demonstrate pork-barrel politics. To describe pork-barrel politics, he stated, "Conservation goals can be achieved only by mastering the multiple art that is pork barrel politics- the ever-shifting coalitions, the compromises, the trades, the inter-agencies lobbies, the special interests of alliances." Arnold W. Reitze Jr. was an Associate Professor of Law at Western Reserve University and he found Smith's work too optimistic by only describing the successes of TVA. He supported a more pessimistic or more objective view of the topic because he predicted that it "would reveal the weaknesses inherent in the ad hoc, unplanned approach of pork-barrel

[12] Stewart L. Udall, *The Quiet Crisis* (New York: Avon, 1963), viii; Keith Schneider and Cornelia Dean, "Stewart L. Udall, Conservationist in Kennedy and Johnson Cabinets, Dies at 90," *New York Times*, last modified March 20, 2010, accessed October 20, 2016, http://www.nytimes.com/2010/03/21/nyregion/21udall.html.

politics."[13] The *Politics of Conservation* may have been biased toward the successes of federal conservationism, but it focused on conservation politics, whilst other authors, such as Carson and Udall, focused on the relationship between humanity and the environment.

In his 2000 book titled *Environmental Politics Since 1945*, Samuel P. Hays presented an overview of contemporary environmental affairs since 1945. He emphasized the place of nature in contemporary urbanized society, land developments, environmental technology, the structure of environmental politics, the environmental opposition, and the resulting environmental policy. The most inspiring element of Hays's work was his presentation of the complexities of environmental law and the conflicting social, political, and legal issues that arise with its reception in contemporary society. Hays' work was important to the field of environmental history and politics because the topics he presented are still being debated in the early twenty-first century. Few authors have assessed the current condition and treatment of the gambit of environmental legislation enacted nearly fifty years ago. This work also describes the current condition of environmental statutes in the early twentieth century.

Environmental law is a difficult topic to study because of its inherent complexity. Hays separated environmental politics into three competing forces: individuals and groups motivated to protect and improve the environment, the environmental opposition, and the institutions of policy and development. Hays described major focal points of environmental politics that directly relate to this work, primarily being the objectives of public policy, the translation of legislation, the day-to-day implementation of regulatory rules, the role of science, technology, and economics, competition for the use of the instruments of government-executive, legislative, administrative, and judicial-in decision making, and the relative roles of local, state, and federal

[13] Frank E. Smith, *The Politics of Conservation* (New York: Pantheon Books, 1966), x; Arnold W. Reitze, "Book Review," review of *The Politics of Conservation* by Frank E. Smith, *Case Western Reserve Law Review* 18, no. 5 (1967): 1827.

governmental action.[14] All of these forces are moving parts in the machine of environmental politics and are all players in complex decision-making processes. This work differs from Hays's work in approach by focusing on wildlife law, but it deals with the same complexity and moving parts of environmental law. Hay's work, in contrast, focused on the politics involved in environmental protection and this work focuses on the relationship between law and environmental protection.

In his 2007 work *Preserving the Nation: The Conservation and Environmental Movements 1870-2000*, Thomas R. Wellock identified John Muir, Gifford Pinchot, and Theodore Roosevelt as the canon of works about the environmental movement, like a "dysfunctional Holy Trinity." Their stories have been the focus of most environmental histories. John Muir led what historians consider the preservationist wing of the environmental movement, which sought the protection of wilderness for its aesthetic, rather than economic value. Gifford Pinchot was Muir's friend and founded the United States Forestry Service and served as President Theodore Roosevelt's chief conservation advisor. Pinchot differed from Muir in that he was a "utilitarian" conservationist, which meant he supported protection of natural resources for their commercial value. The philosophical division between Muir and Pinchot laid the foundation for the division between conservationists and preservationists in the later environmental movement of the 1960s and 1970s. Captivated by Muir and Pinchot, historians have tended to focus on their two stories. Consequently, other environmental topics, such as pollution and urban environmental problems, had received limited attention. The historical themes that Wellock discussed were the influence of economic modernization, international ties, class, race, and gender upon the environmental movement, and how the movement acted as a state-building catalyst by creating public faith in

[14] Samuel P. Hays, *Environmental Politics Since 1945* (Pittsburgh, PA: University of Pittsburgh Press, 2000); Samuel P. Hays is University Professor Emeritus of History at the University of Pittsburgh; Hays, *Environmental Politics Since 1945*, 2.

and support for greater government power. Wellock's work is a general history of environmentalism in America from the mid-nineteenth century to the 1990s. The fourth chapter is most relevant to this work because it contains a section about the Endangered Species Act (ESA) and wildlife preservation between 1973 and 2000. But the section was very brief and focused on popular cases that involved the ESA, such as the Snail Darter Case during the 1970s and the Spotted Owl Controversy during the 1980s. The section was useful as a basic reference, but lacked an in-depth study and analysis of recent cases that are presented within this work.[15]

A more recent work that focused on contemporary environmental politics is the 2008 work *American Environmental Policy, 1990-2006: Beyond Gridlock*, in which authors Christopher M. Klyza and David J. Sousa focused on the political arena surrounding environmental legislation. They argued that the long-standing legislative gridlock in Congress has forced environmental policymaking onto other pathways, inside and outside the government. The "golden era" of environmental lawmaking was between 1964 and 1980 and included the passage of twenty-two pieces of major legislation, including the ESA and the NEPA. But Klyza and Sousa found that since the golden era, environmental issues have divided the political parties and have created interest-group politics, which has led to a legislative gridlock. They identified and presented five alternative pathways where environmental policy is progressing, which were "appropriations politics" in Congress, executive authority, role of legal courts, "next generation" collaborative politics, and state-level policymaking. The authors found that environmental policymaking since 1990 has continued to move in favor of environmental interests, but that the legislative deadlock is unlikely to be resolved anytime soon. The legislation created during the golden age had created an enduring "green state" rooted in statutes, bureaucratic routines, and

[15] Thomas R. Wellock, *Preserving the Nation: The Conservation and Environmental Movements 1870-2000* (Hoboken, NJ: Wiley-Blackwell, 2007), 204-208; Thomas R. Wellock is Associate Professor of History at Central Washington University.

public expectations. *American Environmental Policy, 1990-2006* is far more politically inclined than this work, but the element most related to this work was their analysis of the role of legal courts in environmental policymaking. Klyza and Sousa found that the legislative deadlock increased the policymaking power of the judiciary, and has transformed legal courts into arenas for environmental politics.[16]

Peter S. Alagona's 2013 book *After the Grizzly: Endangered Species and the Politics of Place in California* is relevant to this work because he focused on the conservation politics surrounding the management and recovery of four famous endangered species in California; the California Condor, Mojave Desert Tortoise, San Joaquin Kit Fox, and Delta Smelt. The stories of these four species illuminate how the American political system used these endangered species as proxies for broader debates about the politics of place. Alagona argued that the place where the species lived were as important as the species themselves. The politics of place questions who should have access to and control over what lands and which natural resources. Alagona was interested in how the habitat approach to wildlife management has encountered problems and paradoxes in the twenty-first century, and if those encounters have further jeopardized the species. Alagona's focus on habitat as a way to assess wildlife management is very similar to the first chapter of this work titled "Controversial Conservation," which centers on the management of the gray wolf and its habitat in the United States. Alagona focused on how the protected areas paradigm emerged and spread as a principal approach for biodiversity and endangered species conservation and whether, in the face of much political conflict, nature reserves established for

[16] Christopher M. Klyza and David J. Sousa, *American Environmental Policy, 1990-2006: Beyond Gridlock* (Cambridge, MA: MIT Press, 2008), 1-18; Klyza and Sousa, "From 'Who Has Standing?' to 'Who is Left Standing?': The Courts and Environmental Policymaking in the Era of Gridlock," from *American Environmental Policy, 1990-2006: Beyond Gridlock* (Cambridge, MA: MIT Press, 2008), 153-194; Christopher M. Klyza is Robert '35 and Helen '38 Stafford Professor of Public Policy and Professor of Political and Environmental Studies at Middlebury College. David J Sousa is Professor in the Department of Politics and Government at the University of Puget Sound.

these purposes are fulfilling their goals. He concluded that protected accounts do not account for the dynamic processes required for future species conservation. Humans need to focus on creating sustainable landscapes to support ecosystem management and provide diverse habitats for species conservation. This would better accommodate the dynamic processes within nature, which we are only beginning to understand.[17] The major difference between this work and Alagona's is the scope of the subjects. Alagona's was confined to wildlife conservation in California and this work focuses on the conservation of species at both the national and global levels.

The first chapter of this work titled "Controversial Conservation" focuses on the Oregon District Court case *Defenders of Wildlife; et al. v. Secretary of the United States Department of the Interior* (2005), referred to as the "wolf case," which involved the conservation and management of the endangered gray wolf, which was protected under the ESA. The chapter contains many themes, such as dilemmas in species management, conservation politics, the relationship between predatory wildlife and humans, and the real-world implementation of the ESA. An article relevant to Controversial Conservation was by Craig T. Donovan titled "Delisting the Eastern Gray Wolf: Has the Species Truly Recovered?" in which Donovan discussed the Oregon District Court case *Defenders of Wildlife v. U.S. Department of the Interior* (2005), which followed the Oregon District Court case *Defenders of Wildlife; et al. v. Secretary of the United States Department of the Interior* (2005)." Donovan's work was a response to the FWS's proposed rule to delist the eastern gray wolf from the endangered species list in 2005. The eastern and western gray wolves had already been reclassified from endangered to threatened. Donovan analyzed the FWS' proposal to completely delist all the eastern gray wolves

[17] Peter S. Alagona, *After the Grizzly: Endangered Species and the Politics of Place in California* (Oakland, CA: University of California Press, 2013), 3-4, 8, 233.

from the ESA and expressed his concerns. His greatest concern was how the FWS proposed rule focused on healthy metapopulations of the gray wolf rather than the endangered, smaller populations. The arguments Donovan made were identical to those in the wolf case. The difference between Donovan's work and the chapter in this work is that the chapter contains deeper analysis of the case and its context. As a result, Donovan's work was much shorter in length, but it is a great reference for the basic facts and arguments involving the gray wolf and the ESA. Controversial Conservation also affords greater attention to general approaches to species management under the ESA, rather than just focusing on the conservation of the gray wolf.[18]

In their 2005 work *Coexisting with Large Carnivores: Lessons from Greater Yellowstone*, editors Tim W. Clark, Murray B. Rutherford, and Denise Casey presented a socio-political context of the management of large carnivores in western Wyoming south of Yellowstone National Park, a region known as the Greater Yellowstone Ecosystem. The book contained work of researchers who studied and worked in the region, and was intended to help readers navigate the contentious topics involving large carnivores, their interactions with humans, and the politics that arose from that relationship. The goal of the work was to make recommendations for the decision-making process and to get more people involved in the management of wildlife. The section about wolves, titled "Wolf Restoration: A Battle in the War over the West," was most applicable to Controversial Conservation, as it focused on the reintroduction of wolves to Yellowstone National Park in 1995 and 1996 and the popular reactions in the area. The editors argued that coexistence could only be achieved by understanding the human populations involved, their values, attitudes, beliefs, and managing institutions. The work included an

[18] Craig T. Donovan, "Delisting the Eastern Gray Wolf: Has the Species Truly Recovered?" *Natural Resources & Environment* 20, no. 2 (Fall 2005): 17-21.

overview of the strategies and dilemmas for managers, researchers, government officials, ranchers, and others involved in the management and conservation of the large carnivores resident in Yellowstone National Park. The different interest groups listed are the same groups involved in the conservation of gray wolves, as will be explained in Controversial Conservation. But this work focuses more on the legal dilemmas associated with the conservation of gray wolves, while *Coexisting with Large Carnivores* focused on the context of conservation for multiple predatory species.[19]

In his 2002 work *Acting for Endangered Species: The Statutory Ark*, author Shannon Petersen described the struggles over interpretation that have marked the history of the Endangered Species Act (ESA). Peterson focused on how interpretations of the act by legal courts have changed and empowered the law. He used primarily two case studies to describe the controversies implementing the ESA, the Snail Darter Case in the 1970s and the Spotted Owl Controversy during the 1980s. *Acting for Endangered Species* was intended for a legal audience and emphasized the role legal courts play in interpretive power. The groundbreaking component of the work was Petersen's account of the Snail Darter Case because it changed the conventional understanding of the ESA, which was that only to bodies of endangered species needed to be protected, not the habitats in which they resided. Petersen maintained that the US Supreme Court's decision in the case *TVA v. Hill* (1978) "reflected a change scientific understanding regarding the importance of habitat in the preservation of endangered species." The habitat became essential to the survival of endangered species. The most influential element in

[19] Tim W. Clark, Murray B. Rutherford, and Denise Casey, eds., *Coexisting with Large Carnivores: Lessons from Greater Yellowstone* (Washington, DC: Island, 2005), 1-28; Tim W. Clark is an adjunct professor at Yale School of Forestry and Environmental Studies and he is President and founder of the Northern Rockies Conservation Cooperative in Jackson, Wyoming; Murray B. Rutherford is assistant professor at Simon Fraser University in Burnaby, British Columbia; Denise Casey is secretary and treasurer of the Northern Rockies Conservation Cooperative; Tim W. Clark and Jason Wilmot, "Wolf Restoration: A Battle in the War over the West," in *Coexisting with Large Carnivores*, edited by Tim W. Clark, Murray B. Rutherford, and Denise Casey (Washington, DC: Island, 2005), 138-174; Clark, et al., *Coexisting with Large Carnivores*, 254-271.

Petersen's work was that he focused on the interactions between the three branches of government and how courts have shaped environmental policy. Essentially, the policy history of environmental statutes was a history of power struggles between the branches of government and the implementing agencies. Petersen's work is relevant to this work because his themes of government power struggles and interpretive power are important throughout this work as well.[20]

Another relevant work to the ESA was Kenneth M. Murchison's 2007 book *The Snail Darter Case: TVA versus the Endangered Species Act*. Murchison presented a legal study of the US Supreme Court case *Tennessee Valley Authority v. Hiram Hill, et al.* (1978), which was the first landmark case of the ESA. The Court ruled that the Tennessee Valley Authority (TVA) could not complete the Tellico Dam because an endangered species of fish, called the snail darter, resided within the Little Tennessee River. The case was significant to environmental politics because, in response to *TVA v. Hill*, Congress created the Endangered Species Committee to override the Supreme Court's ruling and to grant the TVA permission to complete the Tellico Dam. So the case of the snail darter was a success in defense of the ESA, but it also weakened the purpose of the act because the Endangered Species Committee was created with the authority to grant exemptions from the ESA. *TVA v. Hill* can be regarded as one of the greatest examples of pork-barrel politics in the history of environmental law.[21] The difference between Murchison's and Petersen's books and this work is that this work includes more recent

[20] Shannon Peterson, *Acting for Endangered Species: The Statutory Ark* (Lawrence, KS: University Press of Kansas, 2002); Shannon Petersen has a doctorate in history and practices law with Latham & Watkins in Washington, DC; Diana R. Hyman, "Hyman on Petersen, 'Acting for Endangered Species: The Statutory Ark'," review of *Acting for Endangered Species: The Statutory Ark* by Shannon Peterson, H-Law, H-Net Reviews, last modified January, 2003, accessed October 24, 2016, https://networks.h-net.org/node/16794/reviews/17000/hyman-petersen-acting-endangered-species-statutory-ark.

[21] Kenneth M. Murchison, *The Snail Darter Case: TVA Versus the Endangered Species Act* (Lawrence, KS: University Press of Kansas, 2007); Kenneth M. Murchison is James W. and Betty M. Phillips Professor of Law at Louisiana State University; University Press of Kansas, "About the Author," The Snail Darter Case: TVA Versus the Endangered Species Act, accessed October 26, 2016, https://kansaspress.ku.edu/978-0-7006-1504-9.html.

cases that involved the Endangered Species Act and is more illustrative of conservation law and politics in the early twenty-first century.

The second chapter of this work, titled "A Moderate Interpretation," revolves around the 1992 US Supreme Court case *Lujan v. Defenders of Wildlife* (1992), in which the Defenders of Wildlife (Defenders) sought to have the geographical application of the ESA expanded to included federal agency actions in foreign countries. The ESA had applied to federal agency actions within the United States, on the high seas, and in foreign countries, but in 1986 the US Fish and Wildlife Service (FWS) issued a rule that limited the act's application to only within the United States and on the high seas. The Rehnquist Court (1986-2005) ruled in favor of Lujan because the Defenders lacked both standing to sue and redressability. Most scholarly works about *Lujan* focus on the issue of legal standing because the Court's ruling drastically limited standing for third-party plaintiffs seeking to regulate government actions. As a result, most works regarding *Lujan* are written by legal scholars and are generally intended for a legal audience.

An early work that addressed standing in *Lujan* was Cass R. Sunstein's 1992 work "What's Standing after Lujan? Of Citizen Suits, 'Injuries,' and Article III," in which Sunstein had two goals; the first was to argue that the Rehnquist Court's dismissal of the citizen suit in *Lujan* was an invalidation of a congressional grant of standing and a misinterpretation of the Constitution. Sunstein's second goal was to discuss the issues that would arise in the aftermath of *Lujan*. She was especially interested in how citizens could obtain standing in future regulatory cases and if Congress would respond. Sunstein's work is a thorough study of *Lujan* and legal standing. The first part is a brief history of the law of standing and the creation of the citizen suit provision in England and then in early America. The second part is an analysis of Justice

Antonin Scalia's conception of standing and part three is a discussion of the future of standing in the wake of *Lujan*. Sunstein concluded that it was up to Congress to confer greater standing for citizen suits and that the Rehnquist Court's dismissal of the citizen's suit was judicial overreach into congressional authority. Legal standing is a major theme in the chapter A Moderate Interpretation, but the chapter is less about standing and focuses more on the relation between the justices of the Rehnquist Court and the controversies within the case.[22]

A more recently published work regarding standing in *Lujan* was Richard J. Pierce Jr.'s 2010 work "Making Sense of Procedural Injury," in which Pierce sought to make sense of the concept of procedural injury and how courts have used it to determine whether a petitioner had legal standing to obtain judicial review of an agency action. Courts applied tests to determine whether the plaintiffs had standing, all varying in degrees of proof. Some had to demonstrate a probable causal relationship between the agency action and their own injury, whilst others had to prove a near-certain causal relationship. Tests for proving procedural injury lacked standardization and *Lujan* induced many courts, for the first time, to question whether an alleged procedural injury suffered by a petitioner qualified the petitioner for standing. This placed a greater burden of proof upon the plaintiff to prove injury. Consequently, the ruling in *Lujan* favored agency transgressions of the ESA regulations because suing parties would have greater difficulty proving standing in future cases. Pierce concluded that the narrowed standing test "would devalue the procedures required by the Constitution and by statutes by encouraging agencies to deny procedural safeguards in all close cases." And that "would deprive courts of the opportunity to decide important cases in which agencies allegedly deprived a party of such a

[22] Cass R. Sunstein, "What's Standing After Lujan? Of Citizen Suits, 'Injuries,' and Article III," *Michigan Law Review* 91, no. 2 (1992): 163-236; Cass R. Sunstein is the Robert Walmsley University Professor at Harvard Law School. From 2009 to 2012, he was Administrator of the White House Office of Information and Regulatory Affairs.

right." Pierce defined the test as permitting agencies to commit "substantial justice," meaning they would be able to violate the substantial rights of the plaintiff parties involved.[23]

There are many additional scholarly works published on the topic of legal standing in *Lujan*.[24] But the Rehnquist Court's limitation of standing in *Lujan* has prompted authors to focus less on standing and more on the role of the judiciary in environmental law cases. A prime example was Daniel A. Farber's 1996 work "Is the Supreme Court Irrelevant- Reflections on the Judicial Role in Environmental Law," in which Farber argued that the US Supreme Court was basically irrelevant to the evolution of environmental law because it was dismissing most environmental cases. He felt the Court needed to play a greater role in interpreting environmental statues, establishing standards for judicial deference, and integrating environmental statutes into the standardized body of law. By doing so, the Court could have provided leadership in the environmental movement, rather than relying upon the Environmental Protection Agency (EPA). Farber found that, since the creation of environmental statutes during the 1960s and 1970s, the Court had behaved almost as if it deliberately sought to minimize its own influence on environmental policy. Farber titled this paradox "hyperactive passivity," in which the Court selected environmental cases and based its decisions on procedural rather than substantive grounds. This judicial avoidance was evident in *Lujan* where the Rehnquist Court focused on the issue of standing and made no comment on whether the ESA applied to US federal agency

[23] *Lujan v. Defenders of Wildlife*, 90 US 1424 (1992), argument of Justice Scalia; Richard J. Pierce, Jr., "Making Sense of Procedural Injury," *Administrative Law Review* 62, no. 1 (Winter 2010): 1-2, 17-18; The footnote was as follows: There is this much truth to the assertion that "procedural rights" are special: The person who has been accorded a procedural right to protect his concrete interests can assert that right without meeting all the normal standards for redressability and immediacy. Thus, under our case law, one living adjacent to the site for proposed construction of a federally licensed dam has standing to challenge the licensing agency's failure to prepare an environmental impact statement, even though he cannot establish with any certainty that the statement will cause the license to be withheld or altered, and even though the dam will not be completed for many years.

[24] Christopher T. Burt, "Procedural Injury Standing after Lujan v. Defenders of Wildlife," *The University of Chicago Law Review* 62, no. 1 (Winter 1995): 275-299; Richard J. Pierce, Jr., "Lujan v. Defenders of Wildlife: Standing as a Judicially Imposed Limit on Legislative Power," *Duke Law Journal* 42, no. 6 (Apr. 1993): 1170-1201; Sam Kalen, "Standing on its Last Legs: Bennett v. Spear and the Past and Future of Standing in Environmental Cases," *Journal of Land Use & Environmental Law* 13, no. 1 (Fall 1997): 1-68.

actions in foreign countries. Farber's analysis of *Lujan* is extremely relevant to A Moderate Interpretation, as he argued that the Court demonstrated judicial restraint because it was most concerned with the balance of powers concept. The Court avoided ruling on the substance of the case because it felt that authority resided with the executive branch. The Court used judicial deference to leave the decision-making to other federal agencies. These themes are present in A Moderate Interpretation, but this work also focuses more on the environmental controversies described in the case.[25]

The third chapter of this work titled "Facing Reality" focuses on the US Supreme Court case *Winter v. Natural Resources Defense Council* (2008), in which the Roberts Court (2005-present) was forced to choose between environmental protection and US national security. The Natural Resources Defense Council (NRDC) sued for a preliminary injunction against US Navy training exercises scheduled between 2007 and 2009 off the coast of southern California. The NRDC argued that the Navy had failed to meet the regulatory statutes of the National Environmental Policy Act (NEPA) because the sonar trainings would have caused irreparable harm to marine life. The Court ruled that the Navy's need to conduct realistic sonar training exercises was more important to public interest and national security than strict agency adherence to the NEPA regulations. Legal historians have primarily treated *Winter* as a case study in determining the standard for preliminary injunctions in federal courts, such as Bethany M. Bates' 2011 work "Reconciliation after Winter: The Standard for Preliminary Injunctions in Federal Courts." Bates outlined the historical evolution of standards for preliminary injunctions and the formulas used by courts for the granting of injunctions. She found that standards for injunctions lacked standardization, especially when courts considered what constituted

[25] Daniel A. Farber "Is the Supreme Court Irrelevant- Reflections on the Judicial Role in Environmental Law," *Minnesota Law Review* (1996): 547-569; Daniel A. Farber is the Sho Sato Professor of Law at the University of California, Berkeley and is the Co-Director of the Center for Law, Energy, and the Environment.

"irreparable harm" in environmental cases. Bates found that *Winter* placed more burden on the plaintiffs to prove that irreparable harm was *likely* rather than simply a "possibility." Therefore, *Winter* became precedent for further burdening plaintiffs in future injunction cases. Bates concluded that federal courts, especially the US Supreme Court, needed to establish clear and firm standards for preliminary injunctions that included consideration of the merits of the case. This desire for legal standardization is also a theme in the chapter Facing Reality in which author C.C. Vassar proposed a national security amendment to the NEPA in an effort to standardize the act.[26]

Other authors have focused on the controversy of whales and the use of sonar, such as Joshua Horwitz's 2014 book *War of the Whales: A True Story*, in which Horwitz described the conflict between environmental protection and US national security, as demonstrated in *Winter*. Horwitz described the link between the beaching of marine life in the Bahamas in 2000 and the nearby US Navy sonar training exercises. He then traced the development of the field of cetology, the study of whales, dolphins, and porpoises, and how science was essential to discovering the harmful effects of sonar upon marine life. The book ends with the US Supreme Court's ruling in *Winter*. Horwitz's work is unique because it relies on interviews from marine mammal scientists, environmental activists, uniformed naval officials, civilian naval employees, and employees of the National Marine Fisheries Service (Fisheries). The work is, therefore, a product of investigative journalism and is targeted toward a general audience. It is relevant to the Facing Reality chapter because it focused on the controversy of whales and sonar and the events that led to *Winter*. Other themes Horwitz presented were also relevant, such as the relationship

[26] Bethany M. Bates, "Reconciliation After Winter: The Standard for Preliminary Injunctions in Federal Courts," *Columbia Law Review* 111, no. 7 (Nov. 2011): 1522-1556; Bethany M. Bates received her Juris Doctorate from Columbia University Law School and, as of 2016, works in Legal Counsel at Betterment in the Greater New York City Area.

between science and environmental law and the conflict between environmental protection and military interests. But this work provides a deeper analysis and focuses on the scientific, legal, and political dilemmas within the case rather than solely the relationship between sonar and marine life.[27]

Multiple authors have focused on the conflict between environmental protection and national security in *Winter*. Three influential journal articles are Joel R. Reynolds's "Submarines, Sonar, and the Death of Whales: Enforcing the Delicate Balance of Environmental Compliance and National Security in Military Training" (2008), C.C. Vassar's "*NRDC v. Winter*: Is NEPA Impeding National Security Interests?" (2009), and John C. Stellakis' "U.S. Navy Torpedoes NEPA: *Winter v. Natural Resources Defense Council* May Sink Future Environmental Pleas Brought Under the National Environmental Policy Act" (2010). Each author wrote on the same topic of environmental protection and national security, but each included information unique to their arguments. Reynolds presented a detailed history of the relationship between the military use of sonar and beachings of marine life around the world between the 1980s and 2006. His work focused on the controversy of noise pollution and how the international community was addressing it. Reynolds concluded that courts have used judicial deference to avoid making difficult decisions in light of political realities, but that courts need to uphold environmental legislation because it is a part of the US constitutional system of government. The chapter Facing Reality highlights the use of judicial deference by the Roberts Court to help choose between national security and environmental protection.

Author C.C. Vassar was especially interested in how the NEPA could have impeded national security interests in *Winter*. She proposed that the NEPA should have a national security

[27] Joshua Horwitz, *War of the Whales: A True Story* (New York: Simon & Schuster, Inc., 2014); Joshua Horwitz is a Senior Fellow at The Ocean Foundation and the founder and publisher of Living Planet Books in Washington, DC.

amendment added to standardize requirements for such an exemption from the act. She focused on the ambiguities of the arguments in *Winter* and argued that more legal standardization in environmental law would have made the decision of the case clearer. The chapter Facing Reality is a critique of Vassar's proposal for a national security amendment to the NEPA. Vassar's work was more concerned with the legal issues in *Winter* and Reynolds focused more on the relationship between sonar and whales. Stellakis was most concerned about the effect *Winter* would have on future NEPA claims. He focused on the balancing of hardships in the case, which was environmental protection versus national security. He described that the decision was difficult because both topics were of public interest. But that the court erred in its ruling because it heightened standing requirements for future NEPA cases.[28]

All three case-study chapters in this work draw into question whether the judiciary will use its increased role in environmental policy-making to further legal environmental protection. Jonathan Z. Cannon was keenly interested in the increased role of the judiciary in environmental politics in his recent 2015 work titled *Environment in the Balance: The Green Movement and the Supreme Court*. In his work, Cannon presented a study of the relationship between the environmental movement and law culture embodied by the US Supreme Court. He conducted in-depth studies of some of the most influential environmental cases heard before the Court during the past four decades. He found that the Court was initially receptive to environmentalism, but

[28] Joel R. Reynolds, "Submarines, Sonar, and the Death of Whales: Enforcing the Delicate Balance of Environmental Compliance and National Security in Military Training," *William & Mary Environmental Law Review* 32, no. 3 (2008): 759-802; Joel R. Reynolds is a Senior Attorney with the Natural Resources Defense Council (NRDC) and Director of its Marine Mammal Protection in Los Angeles, California; C.C. Vassar, "NRDC v. Winter: Is NEPA Impending National Security Interests?" *Journal of Land Use & Environmental Law* 24, no. 2 (Spring 2009): 279-307; C.C. Vassar was Law Clerk to the Honorable Lawrence R. Johnson, Judge of District Court, Anoka County, Minnesota. She received her J.D. from Hamline University School of Law in 2008; John C. Stellakis, "U.S. Navy Torpedoes NEPA: *Winter v. Natural Resources Defense Council* May Sink Future Environmental Pleas Brought Under the National Environmental Policy Act," *Villanova Environmental Law Journal* 21, no. 2 (2010): 353-381; John C. Stellakis is an associate attorney at the law firm Murphy Bartol & O'Brien based in Mineola, New York.

the Court has since backed off from its support and instead has ruled in favor of protection of private property rights, limited government, and freedom to pursue individual interest within the laissez-faire system. Some Court's rejections of environmentalist claims are because elements of environmentalism challenge traditional legal practice and the Court sought to preserve or strengthen judicial doctrine. Opinions in environmental cases revealed the divergent views among the justices at the cultural and legal levels. Justices have differed in perspective on legal standing, federalism, landowners' rights, and the scope of regulatory authority. These differences reflect the level of acceptance of the environmentalists' model of ecology and the values associated with it. Environmental cases rely on the justices' legal interpretations, institutional orderings, and legislative priorities. These divisions reveal that the environmental movement has not yet fully achieved its transformative aspirations. Cannon stated that "this unresolved cultural conflict has produced a stalemate in which the movement has been largely successful in maintaining its historical gains but has struggled to make progress on the issues that remain."[29]

Cannon's work is an extremely thorough study of the relationship between the judiciary and the implementation of environmental statutes in the late twentieth and the early twenty-first centuries. Both *Lujan* and *Winter* were included in the book, but were seated within broader legal and environmental topics that included other influential environmental cases. The range of environmental cases has placed an increased burden upon the judiciary to rule on environmental problems of daunting scale and complexity. But they have increased the judiciary's role as reason-giver, to interpret legal meanings and to determine their outcomes. Alongside *Environment in the Balance*, this work argues that the careful study of court decisions reveals

[29] Jonathan Z. Cannon, *Environment in the Balance: The Green Movement and the Supreme Court* (Cambridge, MA: Harvard University Press, 2015), 2-3, 299; Jonathan Z. Cannon is Blaine T. Phillips Distinguished Professor of Environmental Law and Director of the Environmental and Land Use Law Program at the University of Virginia School of Law.

that the judiciary's deliberations reflect deep-seated, extralegal beliefs and values, both for and against environmentalist beliefs.[30] Both Cannon's work and this work demonstrate that the judiciary is never completely for or against environmentalism; they decide cases based upon their own scientific, political, and legal perspectives. What is deemed constitutional is largely a matter of interpretation by court judges and justices. The question for the future is how to make sense of court decisions and to determine how their rulings will affect future environmental cases. The greatest difference between *Environment in the Balance* and this work is that *Environment in the Balance* is largely a constitutional history and this work incorporates additional perspectives involving the relationship between law, science, and politics. This work is also limited to environmental cases that involved wildlife while Cannon's work encompasses a broader spectrum of environmental cases and topics.

This work is unique to the field of environmental history because it focuses on the state of wildlife protection in the early twenty-first century. Most works that focused on wildlife conservation focused on well-studied and famous cases, such as the Snail Darter Case and the Spotted Owl Controversy. But, apart from Shannon Petersen's *Environment in the Balance*, few works have studied more recent wildlife cases in the late twentieth and early twenty-first centuries. As demonstrated in this historiography, most works that focused on environmental conservation were largely political or constitutional histories. But this work includes in-depth analyses of the scientific, legal, and political controversies surrounding environmental cases. Similar to Samuel P. Hay's perspective in *Environmental Politics Since 1945*, the scientific, legal, and political contexts are essential to understanding the current state of environmental protection. A way to improve the effectiveness of environmental statutes is to understand the context in which they were created and the contexts in which they are applied. The cases in the

[30] Cannon, *Environment in the Balance: The Green Movement and the Supreme Court*, 2-3.

following chapters highlight the difficulties in implementing environmental statutes in the contexts of the late twentieth and early twenty-first centuries. One should not approach each case with the question of whether the court rulings were in support of environmental protection or not. Instead, try to glean an understanding of the scientific, legal, and political contexts of each case and how those contexts influenced the case arguments and rulings. This approach will produce a more substantial understanding of the controversies inherent in the real-world application of environmental statutes that were enacted nearly a half-century ago.

CHAPTER III

CONTROVERSIAL CONSERVATION: THE CASE OF THE GRAY WOLF

In his work "Beyond Cute and Fuzzy: Science and Politics in the U.S. Endangered Species Act," David Cash asserted that the US Fish and Wildlife Service (FWS) has been struggling to construct boundaries between the scientific basis of the Endangered Species Act (ESA) and the politics that surround it. Pro-science advocates encourage the FWS to base its actions solely on science with a firm boundary between science and politics. Political conservatives, on the other hand, have pushed for more political and economic considerations. In 1982, amendments to the ESA called for a greater reliance on science and less reliance on preferences for specific wildlife groups. Yet Cash found that funding relied more on political input rather than scientifically determined decisions.[31] This debate about the role of science and politics in wildlife conservation was demonstrated in the Oregon District Court case *Defenders of Wildlife; et al. v. Secretary of the United States Department of the Interior* (2005), referred to as the "wolf case." In the wolf case, the Defenders of Wildlife (Defenders) challenged the Fish and Wildlife Service's (FWS) downlisting of the gray wolf from the status of "endangered" to the status of "threatened." The Final Rule of the FWS delisted the gray wolf in fourteen southeastern states based on a "listing error" because the region was not part of the gray wolf's historical range. The District Court judge ruled in favor of Defenders and found the FWS' downlisting arbitrary and capricious. The FWS' downlisting of the entire Designated Population Segment (DPS) was inconsistent with the ESA because the FWS had not thoroughly analyzed the threats to the gray wolf outside of its current DPS range. Apart from the debate between

[31] David W. Cash, "Beyond Cute and Fuzzy: Science and Politics in the U.S. Endangered Species Act" in *Protecting Endangered Species in the United States: Biological Needs, Political Realities. Economic Choices,* edited by Jason F. Shogren and John Tschirhart (New York: Cambridge University Press, 2001), 130-31.

science and politics in conservation management, the wolf case is also illustrative of other controversial topics involved in wildlife conservation in the late twentieth and early twenty-first centuries. Conservation management is influenced by perspectives concerning wildlife, approaches to conservation management, federal administrative authority, and assessing risk in wildlife conservation. The ESA was enacted with the aim of protecting wildlife, but its real-world application has resulted in scientific, political, economic, and legal debate. The wolf case highlights questions and ambiguities concerning wildlife conservation management, and potential strategies for improvement.

Not all wildlife is created equal in humans' eyes and our perceptions matter greatly when it comes to conservation. The term *wildlife* refers to the animals of this earth that are not the property of human beings and are not under direct human dominion and control. Wildlife is generally viewed as animals that live in their natural habitats. Large, iconic species, like elephants, lions, and pandas, attract a lot of attention and conservation funding, while others species lack such attention. Human perspectives about wildlife vary by cultural and personal values. Wildlife have been viewed as sources of attraction and fear, as objects for utilitarian uses, as symbols of religious or spiritual significance, and have become mascots for measuring people's concern for environmental sustainability. Animals that lack conservation attention and funding are primarily small, slimy, icky, or ugly: insects, snakes, amphibians, and fish. They are not as well studied as birds and mammals, and are less likely to receive legal protection. This preference for some animals and not others affects the public, politicians, and even conservation scientists. A major reason for this exclusion is aesthetics, meaning some animals are simply not cute to the general public. Zoologist Nathan Yaussy wrote in *Earth Times* that protecting cute things is literally "hard-wired into our brains. This means the more baby-like an animal is, the

more we want to save it. Big eyes, round heads, and short snouts are all characteristics that set off the 'cute' response."[32]

Another factor that influences wildlife conservation politics is the reputation of predatory animals. From the first settlement of the North America, the acquisition of and protection of private property have guided cultural, economic, political, and legal histories. Coyotes and wolves are predatory animals that historically preyed on livestock. By the 1920s, ranchers called upon state governments to manage coyote and wolf populations. Programs were created for the protection of private property in the form of livestock. But there were two major differences between coyotes and wolves. The first is that coyote populations were far greater than wolf populations. And the second is the difference in their reputations. Coyotes have been viewed as romantic symbols of the west, commonly depicted howling in the distance at the moon. Wolves, on the other hand, have been viewed as horrible monsters that must be exterminated.

The decline of the wolf within the United States was the result of habitat destruction, hunting, trapping of wolf prey, such as beaver and ungulates, hunting of wolves for their pelts, and wolves' competition with humans, especially concerning agriculture. Due to habitat loss, gray wolves have preyed upon agricultural livestock, which prompted federal, state, and local programs to eradicate wolves. Additional factors that led to the endangerment of wolves were steel trapping, sport and bounty hunting, aerial shooting, poisoning, and recreational hunting. But the development of ecology by the 1960s and the passage of the ESA in 1973 both reflected and inspired new attitudes towards both coyotes and wolves. The wolf received particular attention because it was in danger of extinction by 1973. In 1974, only 700 gray wolves were observed solely in northern Minnesota and on Isle Royale in Lake Superior. In 1974, the FWS listed the gray wolf as threatened in Minnesota and endangered in the other forty-seven conterminous

[32] David S. Favre, "Wildlife Jurisprudence," *Journal of Environmental Law & Litigation* 25 (2010): 460-464.

states. Policy makers had to reconcile preservationist aims of the ESA with the realities of human occupation of the continent and the continued widespread fear and hatred of wolves.[33]

The Endangered Species Act was enacted in 1973 to reflect environmentalists' concerns about decreasing populations and the extinction of rare wildlife species. It was crafted to "provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species." The US Fish and Wildlife Service in the Department of Interior and the National Marine Fisheries Service (NMFS) in the Department of Commerce were charged with implementing the act. State or federal agencies, individuals, or nongovernmental organizations could petition the FWS or the NMFS to have a species listed for protection under the ESA. The petition set in motion an investigation-driven process which is concluded with the Secretary of Interior's decision to list a species as "endangered," "threatened," or not. The act stipulated the secretary's decision be based "solely on the basis of the best scientific and commercial data available." An endangered species is any species that is in danger of extinction throughout all or a significant portion of its range. A threatened species is any species that is likely to become endangered within the foreseeable future throughout all or a significant portion of its range. The FWS lists species as endangered or threatened due to the present or threatened destruction, modification, or curtailment of its habitat or range, the overutilization of the species for commercial, recreational, scientific, or educational purposes, disease or predation, the inadequacy of existing regulatory mechanisms, or other natural or manmade factors affecting its continued existence. A species' critical habitat is the specified areas within the geographical area

[33] Craig T. Donovan, "Delisting the Eastern Gray Wolf: Has the Species Truly Recovered?" *Natural Resources & Environment* 20, no. 2 (Fall 2005): 17-18; *Defenders of Wildlife v. Secretary, United States Department of the Interior*, 354 F.Supp.2d 1156 (D. Or. 2005); Thomas R. Dunlap, *Saving America's Wildlife: Ecology and the American Mind, 1850-1990* (Princeton, NJ: Princeton University Press, 1991), 164.

occupied by the species and upon which is found the physical and biological features essential to the conservation of the resident species, and which requires special management and protections. Once listed under the ESA, a species was entitled to a broad range of legal protections and recovery efforts. The FWS and the NMFS were tasked with designing and implementing recovery plans for the conservation and recovery of listed species. The recovery program was central to the ESA implementation and accounted for nearly thirty percent of the FWS endangered species program budget.[34]

To manage the conservation of the gray wolf, the Department of Interior utilized the already existing Distinct Population Segment (DPS) policy. The ESA instructs the Secretary of the Department of the Interior to develop and implement recovery plans for the conservation and survival of listed endangered and threatened species. The term "species" is not limited to only one population segment; it includes any subspecies and any distinct population segments. The FWS and the NMFS created the DPS policy in 1996 to help differentiate between species populations and the level of protection necessary within each DPS segment. The policy was a strategy for the management of species protection under the ESA and allowed the FWS the flexibility to list, downlist, or delist discrete and significant populations, even though the conservation status of the species may have differed elsewhere. On April 1, 2003, the FWS issued the Final Rule to reclassify and remove the gray wolf from the List of Endangered and Threatened Wildlife in portions of the conterminous United States. The Final Rule reduced protection of the gray wolf under the ESA by changing the species status from "endangered" to "threatened," but only in some regions of the United States.

[34] Cash, "Beyond Cute and Fuzzy: Science and Politics in the U.S. Endangered Species Act," 110-111; *Defenders of Wildlife v. Secretary, United States Department of the Interior*; National Research Council, *Science and the Endangered Species Act* (Washington DC: National Academy Press, 1995), 149.

The Final Rule created three DPSs: the Eastern, Western, and Southwestern DPS. The gray wolf was downlisted in only the Eastern and Western DPSs where it ceased to be endangered, only threatened. The Defenders filed an action for declaratory and injunctive relief against the defendant Gail Norton, Secretary of the United States Department of the Interior. Defenders alleged that the change in the gray wolf's status violated the ESA implementing regulations and they sought injunctive relief for the rule to be remanded back to the FWS for reconsideration. The plaintiffs sued the FWS violated the ESA because it: 1) failed to assess threats to the wolf in a significant portion of its range, 2) improperly applied the five statutory factors for downlisting, 3) improperly based its decision to downlist on factors Congress did not intend for it to consider, 4) designated DPSs that violate the Act, and 5) abandoned its affirmative duty under the ESA to conserve the wolf.[35]

The wolf case resulted from two differing approaches to conservation management. Defenders contended that the gray wolf remained endangered throughout a significant portion of its range because the wolf was entirely absent or rarely observed throughout most of its historical range, including areas of most suitable habitat. Defenders argued that the FWS violated the ESA by limiting protection to two of the three DPS, a thirty-state area, due to a lack of observed populations. The very fact that both regions lacked wolves was an obvious call for sustaining "endangered" status protections. The FWS argued that the success of recovery programs in the western Great Lakes and northern Rockies regions warranted reducing protections throughout all the regions. Reducing protections in two of three DPS, when wolves resided only in the remaining protected DPS, is contrary to protecting the survival of the gray wolf and the significant portion of its range. The FWS argued that the successful recovery progress in the Great Lakes and Rockies regions increased the gray wolf population enough for its change in

[35] *Defenders of Wildlife v. Secretary, United States Department of the Interior*.

status. The Defenders was critical that the FWS assessed threats to the populations in the recovered DPS, and failed to assess threats to the wolves across all the DPSs. The Final Rule made clear that the FWS limited its threat assessment to only the gray wolf's current range at the time. At a meeting at Marymount University in 2000, the FWS interpreted the range as "that area that is important or necessary for maintaining a viable, self-sustaining, and evolving representative population or populations in order for the taxon to persist into the foreseeable future." This approach to conservation relies heavily upon science to determine guidelines for when species are truly "recovered."[36]

The purpose of the ESA is to manage the recovery of listed threatened and endangered species. Recovery is "the process by which the decline of a threatened or endangered species is arrested or reversed, and threats to its survival are neutralized, so that its long-term survival in nature can be ensured." Downlisting a species is not based simply on whether or not the species is at a sustainable population level for the species to be considered "recovered." The downlisting factors include whether the threats to the species have decreased enough for its assured long-term survival. The decision is supposed to rely solely on the best scientific and commercial data available and without reference to possible economic or other impacts that may result from the decision.[37] The primary question in the wolf case was Norton's interpretation of the phrase "significant portion of its range" from the ESA. She downlisted the wolf in the Eastern and Western DPS because she determined the wolf was not endangered throughout the significant portions of either DPS. The root issue of the case was that the phrase "significant portion of its range" was ambiguous and victim to interpretation.

---

[36] Ibid.
[37] National Research Council, *Science and the Endangered Species Act*, 80; *Defenders of Wildlife v. Secretary, United States Department of the Interior*.

The wolf case is unique from the other cases described in this work because it is a District Court summary judgment case, not a US Supreme Court case. A summary judgment is a court order ruling in which no factual issues remain to be tried and, therefore, the causes of action in the complaint are decided based upon selected facts without an actual trial by jury. The judgment was issued by single judge who based their decision on the facts submitted in depositions and legal arguments. In a summary judgment, lawyers cannot rely on witness testimonies or cross-examination to convince jurors of their argument. The only sources can use are information in documents, deposition transcripts, interrogatory answers, admissions, or affidavits. A major difference between a trial by jury and summary judgment is that every factual and legal detail is taken into consideration. In a jury trial, the lawyers work to simplify information within their arguments to appeal to jurors and judges. But in a summary judgment, the singular judge has read through the information submitted by both parties before the judgment, so every detail matters. Summary judgment is interesting for environmental law cases because the facts are not being debated like in a trial by jury or among multiple justices as in the US Supreme Court. The singular judge issues their judgment purely based on the legal arguments, the facts, and personal perspectives concerning the issue on trial. The wolf case was decided by District Judge Robert E. Jones in the District Court of Oregon.

The interpretive powers of the Secretary of the Interior Norton were acknowledged by the Defenders, but Norton was required to explain why the area in which the species no longer lived was not considered a "significant portion of its range." According to the Final Rule, a species was no longer endangered if a viable population ensured the species was no longer in danger of extinction. The viability of one population, therefore, rendered all areas outside the core population region as insignificant. In this case, all regions outside of the Great Lakes region were

determined insignificant by the FWS. Norton's determination that the predicted long-term viability of the two core wolf populations in the Eastern and Western DPS had made all other historical and viable habitat regions insignificant and unworthy of stringent protection. Judge Jones determined that the Final Rule was not reasonable because it was contrary to the ESA and Ninth Circuit precedent. Furthermore, Judge Jones found Norton's interpretation ran counter to congressional intent. The House Report to the cited version of the ESA during the case recognized that the inclusion of the phrase "significant portion of its range" as a significant shift in intent. The Final Rule ignored the statutory modification to protect species in "any portion of its range," not just those deemed "significant."[38]

Another case similar to the wolf case was the protection of the bull trout river system in the District Court case *Friends of Wild Swan v. US Fish & Wildlife* Service (1997). In 1994, the FWS listed the bull trout as endangered throughout the entire conterminous United States. But in 1997, the FWS proposed to instead list the bull trout in only five DPS to better manage the species' recovery. The court ruled in favor of Friends of Wild Swan and determined that the creation of the DPSs narrowed the bull trout's range of protection, even though the threats to the species had not changed. Similar to the bull trout case, the wolf DPS decreased the protection afforded the species, even though the population statuses of gray wolf population had not changed outside the core recovery areas. In a similar summary judgment in 2003, the Defenders challenged an FWS Final Rule that reduced protection of the lynx under the ESA in three of the four designated DPSs. The Court concluded that "the Service's focus on only one region of the lynx's population—the Northern Rockies/Cascades-to the exclusion of the remaining three-quarters of the lynx's historical regions, is antithetical to the ESA's broad purpose to protect

[38] *Defenders of Wildlife v. Secretary, United States Department of the Interior*; Endangered Species Act of 1973, Public Law 93-205; D. Brock Hornby, "Summary Judgment Without Illusions," *Green Bag: An Entertaining Journal of Law* (Spring 2010): 274-275, 282.

endangered and threatened species." In the wolf Final Rule, the FWS limited the phrase "significant portion of its range," by stating, "The presence or absence of gray wolves outside of core recovery areas is not likely to have a bearing on the long-term viability of the three wolf populations…and therefore such presence or absence will not be a factor in our consideration of delisting each DPS."[39]

In the wolf case, the FWS had downlisted the entire Eastern and Western DPS due to the recovery of the core populations in each DPS. This was a violation of the ESA because the FWS failed to assess the threats in regions that were outside the core population areas within both DPS. The Defenders contended that the DPS in the Final Rule did not reflect sound biological principles and were not consistent with the conservation interest of the DPS policy and the ESA. Norton argued that the DPS policy was based on sound biology because DPS borders were based upon observed breeding populations. She explained that each DPS encompassed a gray wolf recovery population, its recovery areas, the locations of all documented dispersers, the most likely locations of future dispersers, and a wide buffer between the core area and the boundary of the DPS to ensure that it is markedly separate from other DPS. A significant factor in determining a DPS was that the FWS could not create a DPS unless there was a verified resident population. Since a wolf population was not verified in the Northeast, the Pacific Northwest, and the Southern Rocky Mountain regions, the FWS could not create DPS in those regions. When the FWS downlisted the gray wolf, all gray wolves potentially residing in those regions were afforded less protection under the ESA. Judge Jones found this application of the DPS policy inconsistent with the DPS policy and the ESA. The DPS policy was designed to draw borders around a population whose conservation status differs from other populations of the same species. In the wolf Final Rule, the FWS should have drawn the DPS boundaries closely around

[39] *Defenders of Wildlife v. Secretary, United States Department of the Interior.*

the core populations in the Western Great Lakes and Northern Rockies. And the areas surrounding the core populations should have been designated as separate DPS. Instead, the FWS extended the boundaries of the core population DPS to encompass regions with wolves of different conservation statuses. For example, the Western DPS included the successful core recovery population in Montana, which required less protection, and the precarious populations in Washington, which required more protection. As a result, a single DPS included populations with different recovery statuses. The FWS had used the DPS policy to downlist large geographic areas, which was found inconsistent with the DPS Policy. This usage of the DPS policy was a strategy to quicken the completion of the gray wolf recovery program. The FWS wanted to delist the gray wolf sooner, even though the species technically had not been recovered in accordance with the ESA. The FWS strategy is illustrative of the motives for removing species from the ESA protections.

To determine the recovery of listed species and to delist or downlist species, the ESA requires that the FWS consider five factors: (1) present or threatened destruction, modification, or curtailment of the species' habitat or range; (2) overutilization for commercial, recreational, scientific, or educational purposes; (3) disease or predation affecting the species; (4) inadequacy of existing regulatory mechanisms to protect or manage the species; and (5) other natural or manmade factors affecting the species' continued existence. But other factors influence whether a species is delisted or downlisted. A species may be downlisted if its removal is supported by the "best" scientific and commercial data available shows the species is no longer endangered or threatened. The FWS focused on the gray wolf populations in Michigan, Minnesota, and Wisconsin as representatives of the recovery of the entire species. The wolf case highlights two different approaches to wildlife conservation management. The Defenders maintained the

traditional approach to management being the preservation ethic. The preservation was based on the narrow reading of the ESA that gray wolves received protections under the ESA until the species successful inhabited its historical range again. The FWS approach was based on principles from conservation biology. Conservation biology is a type of applied, regulatory science that helps develop conservation management strategies. The field has been stimulated by the ESA, which created legal protections for listed endangered or threatened species and their habitats. For a species to become listed, scientists must first determine an "effective population size" for the long-term viability of the species. After the effective population size is determined, a minimum habitat reserve system must be designed which takes into account the existing land use patterns and uses. Because the habitat designation preserves only the minimum amount of land, conservation biologists are concerned about the relationship between habitat fragmentation and species extinction.[40]

In 1995, the Committee on Scientific Issues in the Endangered Species Act, the Board on Environmental Studies and Toxicology, the Commission on Life Sciences, and the National Research Council published the work *Science and the Endangered Species Act*, in which it analyzed and drew conclusions on the implementation of the act. The committee was concerned about the conflict between species within ecosystems. Within an ecosystem, plants and animals are inextricably in a variety of ways, in which, inevitably, conflicts would arise if and when attempts are made to protect only individual species. The committee concluded that the most effective way to avoid species conflict was to maintain large enough habitats to allow the dynamic network of ecosystem processes to continue. Habitat plays a vital role to protecting listed species and reduces the need to list additional species from the same listed habitats.

[40] Donovan, "Delisting the Eastern Gray Wolf: Has the Species Truly Recovered?," 18; Tarlock, "Environmental Law: Ethics or Science?" *Duke Environmental Law & Policy Forum* 7 (Fall 1996): 209-10.

Concerning habitat protection, the committee found two important factors for habitat management were assessing the ecological importance of listed species and the population distribution of the species.[41]

Species endangerment has three anthropogenic causes, which are overhunting or overharvesting, the introduction of nonnative species, and habitat loss or degradation. The gray wolf has been subjected to and is still victim to all three of these causes. But habitat loss or degradation has become the greatest threat all threatened and endangered species' survival. Wildlife species and their habitats do not exist independently; they are inextricably linked. Species of their habitats are part of the same ecological system, which is called an ecosystem. An ecosystem is an assemblage of organisms linked through their physical environment with which they exchange energy and matter. Yet the implementation of the ESA focuses primarily on the protection of organismal half of the species-habitat relationship. The ESA prohibits harms to listed species and listed species' habitats. Harm in an ecological sense applies only to the preservation of species' habitats and the species' access to habitat. Ecosystems are not static; they are composed of dynamic processes in a state of constant flux. Consequently, a habitat can change in distribution, growth, abundance, and species interaction. In response to environmental change, a habitat can shift in distribution or be unoccupied for a period of time. Habitats change due primarily four causes; the first being natural changes in climate. The second cause is natural episodic events, such as wildfires, floods, or disease outbreaks. The third cause is habitat changes due to wildlife migrations, or the movement of organisms in response to seasonal cycles, reproductive behavior, localized resource depletion, and a search for the protection. The fourth cause of habitat change is the activities of humans, which result in habitat alteration or damage.

[41] National Research Council, 10-11.

A habitat is the physical and biological setting in which organisms live and in which the other components of the environment are encountered. The fact that habitat serves a multitude of organisms is critical to the understanding its full role in the ESA. Many species have not been identified and, consequently, their statuses have yet to be determined. The number of unclassified living species has been estimated at nearly two to three times the number identified. Even among named species in the United States, most species remain poorly understood. Species that have received special attention have commercial or recreational value to humans. But species that lack or are obstacles to commercial and recreational development have received less investigation and less conservation attention. Therefore, broad, ecosystem-based conservation via habitat conservation seems like the most effective way to preserve the most species. Habitat conservation is the pre-emptive approach to species conservation that can prevent the need for the ESA protections.[42]

According to the Final Rule, protections for the gray wolf under the ESA were based upon whether each DPS contained a minimal viable population and habitat range. The FWS identified potential wolf habitat locations in the Northeast, between upstate New York and northern Maine. In 1992, the FWS identified the region as the official zone of recovery for wolves in the East (fig. 1). But in their study "Assessing Potential Gray Wolf Restoration in the Northeastern United States," authors David J. Mladenoff and Theodore A. Sickley investigated potential habitats in the northeastern United States and found that the region contained suitable habitat for gray wolves, but that human development created obstacles for wolf territorial expansion. An understanding of how gray wolves interact amongst themselves, with the environment, and with human expansion is essential for investigating the relationship between population and habitat needs. Gray wolves historically occupied all of the conterminous United

[42] Ibid., 35, 71-73, 94-97.

States, apart from arid regions of the Southwest. As social animals, they live and travel in packs that occupy from fifty to 500 square kilometers of territory. Most yearling wolves leave their natal packs to find mates and establish themselves in *unoccupied* territory. Yet, in the Final Rule, the FWS determined that the smaller, extended populations were unlikely to contribute to overall population recovery unless they had rejoined the core populations in the Great Lakes region or started their own packs. But yearling wolves need new territory to start new packs, so all unoccupied regions still needed to be protected. The FWS documented three wolves in eastern Oregon and one wolf in eastern Washington. Several wolf family units were spotted by private parties in the North Cascades of Washington and dispersed into British Columbia. This range of wolf territory attests to the protection of all wolves, not just those residing in specific territories. In response to the sightings, the FWS anticipated that wolves would extend from the northern Rocky region into western Washington, Oregon, and the Cascade Range. Wolves of unknown origin had also been observed in the Northeast, primarily in Maine and Vermont. The FWS identified suitable habitat in New York, Maine, and New Hampshire, but had been thus far uninhabited. The FWS attributed the lack of population to substantial barriers, such as the St. Lawrence River, highways, and dense human development. [43]

[43] *Defenders of Wildlife v. Secretary, United States Department of the Interior.*

Figure 1. "Officially designated primary gray wolf population range and critical habitat in Minnesota, secondary area in Wisconsin and Minnesota, and potential population locations in New York and Maine (redrawn from U.S. Fish and Wildlife Service 1992)." From David J. Mladenoff and Theordore A. Sickley, "Assessing Potential Gray Wolf Restoration in the Northeastern United States: A Spatial Prediction of Favorable Habitat and Potential Population Levels," Journal of Wildlife Management 62, no. 1 (Jan. 1998): 2.

Mladenoff and Sickley used telemetry data from wolves in fourteen radio collared packs in northern Wisconsin between 1979 and 1993 to extrapolate ideal habitats for wolves in the Northeast. The pack favored public lands and avoided smaller, privately owned land. The pack avoided areas with high road densities because roads served as indicators of human contact, which could lead to human- induced mortality. Mladenoff and Sickley's habitat model was derived from road density as the primary variable. Their model was further tested with new data from 1993 to 1996 from twenty-three packs. The distribution of the most suitable habitat is evident in figure 2. Mladenoff and Sickley found that areas of potential wolf habitat significantly exceeded the minimum area (25,000 km^2) required for a viable wolf population separate from that of Minnesota. The habitat in Maine was the most advantageous because it was contiguous across the state from east to west. The same habitat extended into Vermont and New Hampshire as well. Larger habitats are required for the successful recovery of wolf populations. The large, contiguous potential habitat that spanned across three states would support the long-term viability of resident wolf packs. Maine was found especially suitable to wolf recolonization

because of available prey for wolves. Prey density, especially deer, influences wolf population size, survival, and reproductive success. But the areas with the highest deer density were also semi-industrial areas where wolves were killed by humans. With successful restoration in the Midwest, management must justify increased killing of wolves. As humans expand closer to wolf habitats, wolves become more frequent visitors to human property, in which they often prey upon livestock and pets. The closer association of humans with wolves has resulted in more frequent depredation by wolves. The Northeast is a region that remains a highly altered, human-dominated system.[44]

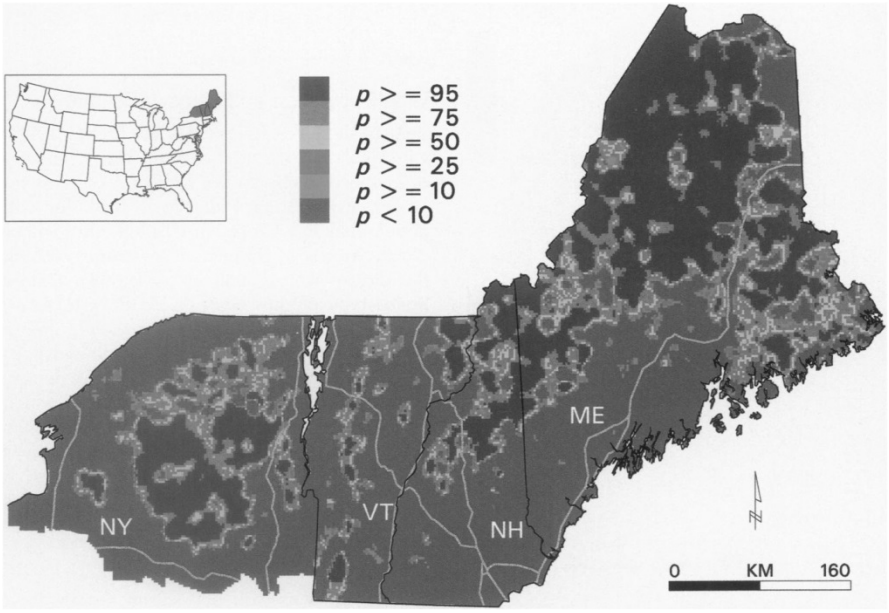

Figure 2. "Habitat favorability for the northeastern United States based on the logistic regression model from Mladenoff et. Al. (1995). Based on the model, classes with p > 0.5 are favorable habitat." From David J. Mladenoff and Theordore A. Sickley, "Assessing Potential Gray Wolf Restoration in the Northeastern United States: A Spatial Prediction of Favorable Habitat and Potential Population Levels," *Journal of Wildlife Management* 62, no. 1 (Jan. 1998): 3.

The National Research Council made recommendations for future habitat and population management, especially concerning dispersal populations. Young gray wolves disperse from the metapopulation to form a new wolf pack. Without proper migration paths and available suitable

[44] David J. Mladenoff and Theodore A. Sickley, "Assessing Potential Gray Wolf Restoration in the Northeastern United States," *Journal of Wildlife Management* 62, no. 1 (Jan., 1998): 6-9.

habitat, young wolves are unable to form new packs and aid in the species' recovery. The council recommended the continued protection of ecologically viable habitats and a greater focus on habitat-connecting corridors for subpopulations to potentially occupy. In the case of the gray wolf, the unpopulated habitats in the Northwest and Northeast would be suitable for subpopulation habitation. But the Final Rule attempted to strip gray wolf protections under the ESA in both those regions. Additionally, human development has created too great of obstacles for the gray wolf to even migrate to the Northeast.[45]

Since they became protected under the ESA in 1974, the wolves in Minnesota increased from 700 in 1973 to 2000 in 1995. The Minnesota wolves dispersed and recolonized parts of northern Wisconsin and Michigan, and wolves from Canada recolonized Montana. Surveys conducted in 2005 reported observed populations at 2445 in Minnesota, 323 to 339 in Wisconsin, and 278 in Michigan. Clearly, protections afforded by the ESA resulted in population increases and range extensions. Additionally, smaller populations had extended in territory and were observed in North Dakota, South Dakota, Illinois, and Missouri. The Final Rule delisted the gray wolf from the Southeastern DPS (North Dakota, South Dakota, Nebraska, Kansas, Minnesota, Iowa, Missouri, Wisconsin, Illinois, Michigan, Indiana, Ohio, Pennsylvania, New York, New Jersey, Massachusetts, Connecticut, Rhode Island, Delaware, Vermont, New Hampshire, and Maine) and Western DPS (Washington, Oregon, California, Nevada, and parts of Idaho, Montana, Utah, and Colorado) based on a "listing error" in which they claimed the two regions were not part of the wolf's historical range. The only remaining protections afforded the wolves under the ESA were in the Southwestern DPS, in which the gray wolf is no longer present.

In his 1996 work "Environmental Law: Ethics or Science?" author Dan A. Tarlock argued that environmental law needed to adopt a more science-based policy for biodiversity

[45] National Research Council, 103.

conservation to replace the simple nature veneration ethic born of the 1960s. Tarlock's central argument was that environmental law and management should derive its political and legal legitimacy from science rather than ethics. He argued that simple preservation of "natural areas" could not preserve the ecology of the ecosystems and was an ethical approach to biodiversity conservation. The preservation of natural areas was the traditional approach to conservation and was based upon the idea that humanity could control the balance in nature, or the equilibrium paradigm. But advances in ecological science during the past forty years have disproved this paradigm and the non-equilibrium paradigm has replaced it. Ecology holds that the environmental is in a state of constant flux and imbalance, and conditions within nature can change rapidly. According to Tarlock, if the environment is in flux, habitat conservation is not enough to save endangered species and their habitats.[46] Effective conservation of habitats can prevent some species from becoming extinct, but other unpredictable factors could alter endangered species' habitats. Habitat loss places additional pressures on endangered species, especially where suitable habitat is limited and there is competition between species, which further endangers them. The preservation of a single species can also adversely affect another. An example of the failure of habitat conservation is the Spotted Owl Controversy.

Even wildlife living in their natural habitats are not free from human influences and species competition. Human actions can have profound effects upon wildlife without actual direct action upon the bodies of wildlife. The northern spotted owl of the Pacific Northwest was a prime example of how legal protections may not be enough to realistically preserve the survival of species and ecosystems threatened by endangerment.[47] The Sierra Club Legal

[46] Mladenoff and Sickley, "Assessing Potential Gray Wolf Restoration in the Northeastern United States," 1; *Defenders of Wildlife v. Secretary, United States Department of the Interior*; Tarlock, "Environmental Law: Ethics or Science?," 194-198.
[47] Favre, "Wildlife Jurisprudence," 463.

Defense Fund (SCLDF), the Audubon Society, and other environmental organizations executed one of the most successful legal strategies in the history of US environmental law. The northern spotted owl resided within a 200-year-old-forest in the Pacific Northwest. The owl fed off rich plant and invertebrate life created by the decaying timber and nested in cavities of the tree trunks. But scientists estimated that only ten percent of the old forests remained by 2015 and only two-thousand pairs of northern spotted owls survived. This dwindling of the owl's habitat forest was due to a 150-year history of heavy logging for the billion-dollar timber industry. In 1986, the SCLDF petitioned the FWS to list the owl as an endangered species and classify the historical forest as the owl's protected habitat. In 1990, after years of litigation and negotiation between the government, environmentalists, and the timber industry, the northern spotted owl was declared a threatened species. Therefore, the owl and its forest habitat gained protections under the ESA. Timber companies were required to leave at least forty percent of the habitat forest intact within a 1.3-mile radius of any owl nest or activity site. The protection of the northern spotted owl caused controversy over employment throughout the region. Protests erupted in logging towns and congressional delegations attempted to put riders on legislative bills that would have exempted logging from the ESA protections.

As demonstrated in the Spotted Owl Controversy, it seemed that centralized power could help the environmental movement. Following the listing, the Administration of President William (Bill) Clinton (1993-2001) set aside millions of acres of forestry in the Pacific Northwest that were made off-limits to logging. But habitat preservation was not enough to ensure the survival of the northern spotted owl; between 1997 and 2007, the northern spotted owl population in Washington was cut in half. Forest fires and disease decreased the population, but it was competition with other species that depleted the owl's resources. The northern spotted owl

had to compete for resources with other species that fled nearby habitats.[48] The Spotted Owl Controversy was technically a federal conservation management success, but the lack of ecological understanding resulted in adverse effects and the failure to fulfill the ESA objectives.

In response to the failure of habitat conservation management, Tarlock proposed a combination of strategies, which supported the dynamic processes within an ecosystem, the restoration of an ecosystem, and an increase use of adaptive management programs.[49] His central argument is in this statement:

> Environmental policymakers favor management strategies based on the consistent application of fixed rules to yield a single, final decision – the rule of law. Environmental laws accept a scientific principle and then require its continued application regardless of subsequent research findings. For example, the Clean Water Act requires that all coastal sewage discharges receive secondary treatment, although there is considerable evidence that this may not always be necessary to achieve environmental objectives. Adaptive management, in contrast, is premised on the assumption that management strategies should change in response to new scientific information: all resources management is an on-going experiment.[50]

Tarlock explained that adaptive management is difficult for policy-makers to adopt because "The idea that all management is an on-going experiment poses a profound challenge to our legal system because it undermines a core principle of procedural and substantive fairness—finality."[51] With the constant generation and adoption of new knowledge, there is no fixed quantitative goal to achieve. The National Research Council and National Academy of Sciences explained:

> Adaptive planning and management involves a decision-making process based on trial, monitoring and feedback. Rather than developing a fixed goal and an

[48] Thomas R. Wellock, *Preserving the Nation: The Conservation and Environmental Movements 1870-2000* (Wheeling, IL: Harlan Davidson, Inc., 2007), 206-208; Claire Andre and Manuel Velasquez, "The Spotted Owl Controversy," Markkula Center for Applied Ethics, Ethics and the Environment, Santa Clara University, last modified November 13, 2015, accessed June 29, 2016, https://www.scu.edu/ethics/focus-areas/more/environmental-ethics/resources/ethics-and-the-environment-the-spotted-owl/.
[49] Tarlock, 193-94.
[50] Ibid., 205.
[51] Ibid., 206.

> inflexible plan to achieve the goal, adaptive management recognizes the imperfect knowledge of interdependencies existing within and among natural and social systems, which requires plans to be modified as technical knowledge improves.[52]

Adaptive management acknowledges that there is always a level of uncertainty in every decision. The concept of risk assessment is central to the implementation of the ESA because the act functions to reduce the risk of species extinctions. Since the passage of the ESA, there have been increased developments in conservation biology, population genetics, ecological theory, and recovery planning processes. These developments aid in the implementation of the ESA, but other risk factors are less understood. Most risk assessments deal with time as the primary risk factor and focus less on the interactive relationships among species. The ESA decisions are inevitably based on limited information, and so agencies must make decisions with a level of uncertainty. The National Research Council found that "Our ability to estimate risk of extinction for use in assigning species to protection categories is limited by our understanding of the factors influencing extinction." While estimating risk of extinctions is grounded in science, conservation decisions are influenced by value judgments, which influence which species are listed quickly and which are delayed. And which habitats are worth the socioeconomic costs or political effort to designate as critical? Basing the ESA decisions solely on science is insufficient for the real-world application of the act. Proper implementation of the ESA requires making connections between value judgments and act's objectives. For even the best studied species, information may still be lacking, yet decisions must be made. Actions may be delayed, such as through injunctions, to gain additional information. But, either way, decision-makers must weigh the best choice in the face of uncertainty.[53]

[52] Ibid., 205-206.
[53] National Research Council, 11-14, 155, 159.

Adaptive management relies upon scientists to generate new information and advise conservation goals. But in his work, "How Much is Enough? Recurrent Problem of Setting," authors Timothy H. Tear, et al. argued that conservation management is difficult for even the scientists involved. He stated:

> Governments and organizations set goals or objectives, which are used as motivational and management tools. In the conservation arena, recovery goals for threatened and endangered species, and biodiversity protection goals for countries, play a central role in applying science to policy and translating policy into action. These goals and their application encompass a challenge that has plagued conservation scientists over the past several decades: providing credible answers to the question "How much is enough?"[54]

The essential question for every conservation management strategy is "How Much is Enough?" How much habitat is enough? How much population is enough? Tear, et al., found that "some of the Nature Conservancy's first ecoregional plans set 'protecting all viable occurrences' as the objective for rare species, regardless of the number extant or the historical distribution, while others adopted a universal objective of 10 viable populations, regardless of the species' life history, dispersal ability, or habitat requirements." There is a variety of approaches to conservation management because species conservation is a complex and ever-changing process. Tear, et al., explained this complexity by stating, "A variety of approaches are necessary for scientists to capture the continuum of biological organization, from genes to the entire biosphere, while addressing a variety of human needs, including recreational and commercial harvest, ecosystem services, and intrinsic value of biodiversity."[55]

The creation of the ESA in 1973 raised awareness and legal protections for threatened and endangered species. For the past four decades, research scientists and conservation

---

[54] Timothy H. Tear, Peter Kareiva, Paul L. Angermeier, Patrick Comer, Brian Czech, Randy Kautz, Laura Landon, David Mehlman, Karen Murphy, Mary Ruckelshous, J. Michael Scott, and George Wilhere, "How Much is Enough? Recurrent Problem of Setting Measurable Objectives in Conservation," *BioScience* 55, no. 10 (Oct. 2005): 835.
[55] Ibid., 836-837.

practitioners have attempted to establish minimum viable population standards. But even if appropriate quantitative targets are set, these conservation goals still have to compete with other objectives that hold greater weight in public policy, such as economic growth. Tear, et al., explained the lack of clarity in conservation decision-making by stating, "Conservation objective setting often mixes scientific knowledge with political feasibility in such a way that one cannot tell where the science stops and the political pragmatism takes over." Studies in 1993 and 1995 found that, of the recovery plans set for federally threatened and endangered species, over one-fourth of the plans set quantitative recovery population objectives at or below the species' current population size or number of populations. A separate study in 1995 concluded that the recovery objectives were so low due to political motivations.[56]

Tear, et al., argued that conservation plans need both goals and objectives. Conservation objectives specify a quantifiable area, a number of individuals, or a number of populations that are identified as part of the conservation plan. Goals are conceptual statements reflecting societal values and political or institutional intent. A conservation goal might be "a viable population" or "biodiversity protection." Conservation goals "may range from just enough resources for a species to survive 100 years to sufficiently abundant recovery that harvest of the species is allowed…If a minimal goal is set to 'prevent extinction' of a species, then conservation might be achieved solely by maintaining the species in a zoo." Goals need to be broad and visionary, but objectives must be measurable in order to evaluate the conservation plan progress. What goals are selected are more a reflection of societal values rather than science. Tear, et al., argued that conservation goals should be based more on science, but that conservation scientists have difficulty deciding how much and which approach to conservation is enough. And that

[56] Ibid., 835-836.

conservationists must design plans that incorporate scientific monitoring and adapt plans to reduce scientific uncertainty. He concluded that:

> The problem of how to credibly address the question 'How much is enough?' has plagued conservation for decades. In the United States, the ESA of 1973 raised awareness about the dire needs of many species, and demanded that science specify when a species is safe enough that it does not need federal protection. Thirty years later, a haphazard mix of science and societal values continues to drive biodiversity conservation.[57]

The wolf case involved two approaches to the conservation management of an endangered species protected under the ESA. The Defenders argued for the more traditional approach of habitat management, as stated in the ESA. The FWS assumed the approach of population management, which was largely based upon advances in conservation biology. But scientists, politicians, and legal scholars still debate about how much conservation is necessary and when is a species considered recovered. The ESA is a useful law for examining the role of science in politics and regulatory decision-making in wildlife conservation management. The act involves a fundamental reliance on scientific research, contentious political debate, and the risks and uncertainties involving species extinction and conservation. The act's stated purpose is "to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved."[58] Congress enacted the ESA in 1973 to stem the tide of human-caused wildlife extinction. Focused on averting the crisis, Congress did not specify how and when an endangered species was considered recovered. Over four decades later, the standards for the recovery of a species remain unclear. In their work "Why Listing May Be Forever: Perspectives on Delisting under the U.S. Endangered Species Act," authors Holly Doremus and Joel E. Pagel presented a discussion of the legal and practical ramifications of a delisting. Delisting requires the evaluation of the biological status of the species and of the laws protecting

[57] Ibid., 837.
[58] Ibid., 837.

the species. The factor that influences delisting the greatest is the risks to the survival of the species. If the risks are still present, listed species cannot be delisted. The risks the FWS must assess are species habitat destruction or modification, the overutilization for commercial, recreational, scientific, or educational purposes, disease or predation, the inadequacy of existing regulatory mechanisms, and any other anthropogenic factors. The greatest obstacle for delisting is that the majority of the risks to species' survival are anthropogenic in nature. So how can humans remove or remedy the threats that are caused by humans?

As demonstrated in the wolf case, the greatest threat to the future survival of endangered and threatened species is habitat destruction or modification. Through agricultural and industrial expansion, humans have reduced and fragmented occupied and potential habitats for endangered and threatened species. For example, the northeastern United States has been identified as suitable habitat for gray wolves, but human development has impeded the wolf's ability to reach the suitable habitat. And, according to the non-equilibrium paradigm, the protection of already occupied habitat may not be enough. As demonstrated in the spotted owl controversy, habitat protection may not be enough against the unpredictable responses of nature to human activity. The ESA was enacted with the aim to protect the future survival of wildlife, but the real-world implementation of the act has resulted in scientific, political, and legal controversies. The following chapter focuses on how the potential international application of the ESA challenged the Rehnquist Court's (1986-2005) conservative views of science, politics, and law in the US Supreme Court case *Lujan v. Defenders of Wildlife* (1992).[59]

[59] Holly Doremus and Joel E. Pagel, "Why Listing May Be Forever: Perspectives on Delisting under the U.S. Endangered Species Act," *Conservation Biology* 15, no. 5 (Oct. 2001): 1259; *Lujan v. Defenders of Wildlife*, 90 US 1424 (1992).

CHAPTER IV

A MODERATE INTERPRETATION: THE REHNQUIST COURT IN *LUJAN*

The Endangered Species Act (ESA) of 1973 requires that federal agencies ensure the actions they authorize, fund, or carry out are not likely to further jeopardize listed endangered species and do not result in the destruction or adverse modification of designated endangered species habitat. In 1978, the US Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS) jointly stated that the ESA regulations extended to agency actions in foreign nations.[60] In 1986, the Department of Interior and the Department of Commerce jointly limited the ESA's geographical scope to only within the United States or on the High Seas. In *Lujan v. Defenders of Wildlife* (1992), the Defenders of Wildlife (Defenders) filed an action against the Secretary of the Interior Manuel Lujan Jr., seeking a declaratory judgment from the US Supreme Court that the new regulation erred in its geographical limitation, and that Lujan restore the original regulatory scope. The Rehnquist Court (1986-2005) ruled in favor of Lujan because the Defenders lacked both standing to sue and redressability.[61] The Rehnquist Court's procedural treatment of the case attests to the Court's conservative initiative to limit judicial activism and maintain the separation of government powers. As will be discussed, the Rehnquist Court held a conservative view of environmental laws for multiple reasons, but one reason relevant to *Lujan* was because environmental legislation is founded upon public interest and science, which are fluctuating fields lacking in concreteness and standardization. The case arguments contain disputes over additional controversies in environmental law, which included the textual ambiguities of the ESA, inter-agency authority struggles, the relationship between science and law, global versus local views of the environment, the purpose of preventative law,

[60] *Lujan v. Defenders of Wildlife*, 90 US 1424 (1992), Argument of Justice Scalia.
[61] Ibid.

and public participation in the judicial process. The topics discussed within the arguments of *Lujan* highlighted the newness and complexity of environmental law as a legal field. Environmental statutes contain textual ambiguities that are open to interpretation by implementing authorities. *Lujan* was born from the ambiguity of the geographical scope of the ESA. The act provided the directive and implementation guidelines, but it lacked a geographical specification. The case also demonstrated that no party involved really knew what level of enforcement environmental congressional statutes required and who exactly held the authority to implement them. The conservative ruling of the Rehnquist Court in *Lujan* suggested that the Court majority was apprehensive to rule on the divisive topics involved in the implementation of the ESA.

The Rehnquist Court (1986-2005) was not considered ideologically consistent, but tended to favor restrictions on federal authority at all levels. They generally struck down federal congressional statutes that they viewed as infringing upon state sovereignty. As exemplified in the civil rights cases, the Rehnquist Court sought to abandon the high standards for equal protection set in place by the Earl Warren Court (1953-1969) and continued by the Warren Burger Court (1969-1986). This abandonment of racial desegregation initiatives was due to the Rehnquist Court's opposition to judicial intervention, in which it sought to end the long-term judicial involvement in what the Court viewed as legislative or executive jurisdiction. The conservatives of the Rehnquist Court focused on the reduction of federalism in favor of state authority. This neoconservativism was a reaction to the judicial activism of the Warren and Burger Courts, which had reflected the prolonged New Deal vision of a powerful, central federal authority.[62]

[62] Paul Finkelman and Melvin I. Urofsky, *A March of Liberty: A Constitutional History of the United States, Vol. II: From 1898 to the Present* (New York: Oxford University Press, 2002), 919-920, 1032-1034, 1070.

The justices of the Rehnquist Court seemed to get along well, but Chief Justice William Rehnquist could not amass unanimous decisions. The majority of the rulings were 5 to 4 decisions with multiple concurring and dissenting opinions. The Court was separated into three ideological blocs. Justices William Rehnquist, Byron R. White, Antonin Scalia, and Clarence Thomas were solid conservatives and tended to vote together depending on the issue. There was no clear liberal bloc, but increasingly, Justices John Paul Stevens, David H. Souter, and Harry A. Blackmun voted together. The moderate bloc included justices Sandra Day O'Connor and Anthony M. Kennedy, whose swing votes made the difference in closely decided cases. The most influential aspect of the Court was that six of the nine justices were moderates and conservatives open to the need for change, but were not eager to initiate change before it was absolutely necessary to do so. Consequently, the Rehnquist Court was not extreme in any way due to its moderate conservative majority deadlock.[63] To better grasp the moderate-conservative nature of the Rehnquist Court, it is necessary to understand the stances of the justices. Each justices' perspective influenced the ruling in *Lujan* and, more importantly, highlighted the intrinsic dilemmas in the case.

One could say that the ideological divisions within the Rehnquist Court were rooted in the earlier US Supreme Court case *Roe v. Wade* (1973), in which the Burger Court legalized abortion. Justices Rehnquist and White dissented in *Roe* and Justice Blackmun concurred with the ruling. Rehnquist, White, and Blackmun were the only three justices of the Burger Court that remained for the case that reaffirmed *Roe* in 1992. Nineteen years after *Roe*, the US Supreme Court case *Planned Parenthood of Southeastern Pennsylvania v. Casey* (1992) fully demonstrated the ideological divisions within the Rehnquist Court. In a 5 to 4 decision, the majority imposed a new standard to determine if state laws restricting abortion placed "undue

[63] Ibid., 1032, 1065.

burden" upon the woman. A major difference between the opinion in *Roe* and that in *Casey* was the Courts' reasoning. In *Roe*, the Burger Court placed the right of abortion under the right of privacy. But in *Casey*, the Rehnquist Court placed it within the liberty interest of the Fourteenth Amendment's Due Protection Clause. Under this reasoning, the authors determined that a "realm of personal liberty" existed which protected personal decisions relating to marriage, procreation, conception, family, and abortion.[64] The Court majority consisted of Justices Blackmun, Stevens, O'Connor, Kennedy, and Souter. Those that opposed the ruling were Justices Rehnquist, White, Scalia, and Thomas. The liberal and moderate blocs ruled in favor of abortion in *Casey* and the conservative bloc dissented. The ruling was about more than the constitutionality of abortion laws; it was about the justices' differing views regarding the Constitution.

The conservatives of the Rehnquist Court supported a strict construction and application of the Constitution and the liberals supported the concept of the living Constitution. A living Constitution is one that evolves, changes over time, and adapts to new circumstances, without being formally amended. Liberals believed that the Constitution should reflect societal and political changes. In contrast, conservatives supported a narrow view of the Constitution, which meant strict adherence to the original document under glass in the National Archives, which was adopted nearly 230 years ago. During the past two centuries, the United States has grown in territory and population. Technology, diplomacy, economics, and social mores have changed, in ways no one could have foreseen when the Constitution was drafted. It seemed inevitable that the Constitution would have to change too. Yet, the strict constructionist viewpoint holds weight as well. To strict constructionists, a living Constitution appears too malleable to be the bedrock of the US legal system. These contrasting arguments hold that the Constitution should be living, adapting, and changing, while simultaneously, invincibly stable and impervious to human

[64] Ibid., 1054-1056; *Planned Parenthood of Southeastern Pennsylvania v. Robert P. Casey*, 91 US 744 (1992).

manipulation. The liberal bloc supported legislative decisions, but they did not let deference outweigh their consideration of the real-world consequences of the Court's decisions.[65]

Although he only concurred in part in *Casey*, Justice Blackmun took the unusual step of praising his colleagues for what he termed was "an act of personal courage and constitutional principle."[66] As evident in the Rehnquist Court's splintered decision in *Casey*, abortion was and remains a topic of debate. Justices Stevens and Blackmun wrote separate concurring and dissenting opinions. Justice Scalia wrote a dissenting opinion, with which Justices Rehnquist, White, and Thomas joined. Scalia maintained a strict constructionist view of the Constitution in the case when he stated:

> That is, quite simply, the issue in this case: not whether the power of a woman to abort her unborn child is a "liberty" in the absolute sense; or even whether it is a liberty of great importance to many women. Of course it is both. The issue is whether it is a liberty protected by the Constitution of the United States. I am sure it is not. I reach that conclusion not because of anything so exalted as my views concerning the "concept of existence, of meaning, of the universe, and of the mystery of human life." Rather, I reach it for the same reason I reach the conclusion that bigamy is not constitutionally protected—because of two simple facts: (1) the Constitution says absolutely nothing about it, and (2) the longstanding traditions of American society have permitted it to be legally proscribed.[67]

Scalia argued that the case was embroiled in public social pressure and that the majority had made a "value judgment." He was concerned that the ruling relied upon "a new mode of constitutional adjudication that relies not upon texts and traditional practice to determine the law, but upon what the Court calls 'reasoned judgment,' which turns out to be nothing but philosophical predilection and moral intuition."[68] The conservative bloc found that the majority

---

[65] Ibid., 1031-1032; David A. Strauss, "The Living Constitution," *The Record* (Alumni Magazine) (Fall 2010), excerpt from *The Living Constitution*, by David A. Strauss (Oxford: Oxford University Press, 2010), accessed October 4, 2016, http://www.law.uchicago.edu/alumni/magazine/fall10/strauss.
[66] Finkelman and Urofsky, *A March of Liberty, Vol. II,* 1031-1032.
[67] *Planned Parenthood of Southeastern Pennsylvania v. Robert P. Casey*, 91 US 744 (1992), Justice Scalia dissenting.
[68] Ibid.

had usurped the power of the states and legislative authority, as Scalia stated that "value judgments, after all, should be voted on, not dictated." The conservatives supported regional control on the issue, as stated in the dissent:

> Quite to the contrary, by foreclosing all democratic outlet for the deep passions this issue arouses, by banishing the issue from the political forum that gives all participants, even the losers, the satisfaction of a fair hearing and an honest fight by continuing the imposition of a rigid national rule instead of allowing for regional differences, the Court merely prolongs and intensifies the anguish. We should get out of this area, where we have no right to be, and where we do neither ourselves nor the country any good by remaining.[69]

The conservative bloc believed that the abortion debate should have been settled by state and regional legislative authorities, not by federal judicial decree. By overriding the state and regional authorities, the Court had deprived citizens of their right to representation. They accused the majority of legally forcing their own views of abortion upon the citizens of the United States. The division within the Rehnquist Court over the contentious topic of abortion was similar to the division of the Court over the controversial environmental topics within *Lujan*. *Roe*, *Casey*, and *Lujan* all involved debates over the Constitution, the use of substantive due process, and the power of judicial review. How can one distinguish whether court rulings are the result of strict constitutional interpretation or the result of the justices' own personal dispositions? Meaning, did the justices who ruled for or against abortion make their decision because they either supported or opposed abortion? In the case of *Lujan*, did the justices support the environmental concerns of the case or not? Under further investigation, the answers to these questions are not so clear. Court rulings are largely a mixture of the justices' personal dispositions, legal philosophies, and views regarding constitutional interpretation.

Similar to the conservative minority in the abortion decisions, the conservative majority in *Lujan* maintained a strict view of the Constitution and dismissed the substantive arguments of

[69] Ibid.

the case. They were not persuaded by the substantive arguments of the Defenders, just as they were not persuaded by the arguments in favor of abortion. The conservatives of the Rehnquist Court were hesitant to rule on environmental protection in *Lujan* because they viewed it as the court justices writing their own personal values into law. But supporters of judicial activism, as demonstrated in *Roe* and *Casey*, argued that the judiciary is responsible for examining the constitutional provisions of due process, equal rights, and the unenumerated rights of the Ninth Amendment to determine if they need updating and to interpret what these rights mean in the light of current societal needs. As authors Paul Finkleman and Melvin I. Urofsky explained, "The judiciary has a right to intervene, they claim, when moral consensus is in flux; by taking bold steps, courts assist in a new consensus to develop."[70] The Burger and Rehnquist Courts intervened on the issue of abortion, but the Rehnquist Court was hesitant to intervene on the geographical application of the ESA in *Lujan* because a ruling on the matter may have been considered an action of judicial overreach.

The debate over judicial review questions if courts should use only the Constitution, referred to as "interpretivism," or if courts should be allowed to use other sources in order to interpret society's current fundamental values, termed "noninterpretivism." Proponents of noninterpretivism view it as "a crucial 'agency of moral evolution and growth,' by which courts engage in an open-ended quest for the current meaning of natural rights." The rulings in the abortion cases were noninterpretive in nature because the Constitution did not explicitly determine the legality of abortion. The majorities ruled on what they perceived was the current societal consensus on the matter and the intent of Congress. The same dilemma was present in *Lujan* as the Constitution did not clearly state the geographical scope of the ESA. The conservative majority in *Lujan* viewed that the arguments were based upon value judgments

[70] Finkleman and Urofsky, *A March of Liberty, Vol. II,* 997.

rather than concrete legal facts. Even the liberal Justice Souter and the moderate Justice Kennedy agreed with the majority that the Defenders had not proven standing. The Court's disposal of standing was because the Defenders' proof of standing was based upon controversial topics within environmental law, such as the influence of ecology and conferring standing for the defense of wildlife, which are still topics of debate in the current year of 2016.

The minority in the *Lujan* included Justices Stevens, Blackmun, and O'Connor, whose dissents were critical of the majority for not demonstrating innovations in standing requirements. Their dissents were noninterpretive because they cited the scientific, political, and legal facts of the case as reasons to confer standing, they did not simply focus on the traditional interpretations of standing.[71] *Roe* and *Casey* both reflected the divided views about abortion within larger society and *Lujan* represented divided views about environmentalism. The division among the Court was a reflection of the division between those that agreed with the environmental *and* legal arguments put forth in *Lujan* and those that did not. The case also represented the division between the conservative justices that supported the strict interpretation of the constitution and the moderate to liberal justices who supported constitutional interpretations that took societal needs into consideration.

Lujan was not the first US Supreme Court case that included the consideration of extra-legal evidence and innovations in judicial interpretation. Early innovations in judicial interpretation were in the water usage cases during the mid-nineteenth century. The law of water rights in England guaranteed fair resource use. The law did not allow users to obstruct the access or divert the flow of water sources, which would have deprived their neighbors of the resource, but Americans had different needs than Englishmen. By the 1830s, they needed water to irrigate

[71] Ibid.; *Lujan v. Defenders of Wildlife*, 90 US 1424 (1992), Justice Blackmun dissents; *Lujan v. Defenders of Wildlife*, 90 US 1424 (1992), Justice Stevens concurring in judgment.

fields, to power grain mills and saw mills, and to run factories. These needs resulted in obstructions of water sources, and legal cases soon followed. American legal courts were forced to choose between past precedent and older English law, and economic development. In the early New York case *Palmer v. Mulligan* (1805), the court held that an upstream owner could dam a water source, even if it caused inconvenience to an owner of a mill downstream upon the same river. The court had chosen economic development over fair resource use as early as 1805. But the case was also illustrative of the emerging notion that waterways belonged to the public, not private individuals.[72]

In the case *Tyler v. Wilkinson* (1827), Justice Joseph Story reaffirmed the traditional rules of natural flow, and multiple subsequent decisions cited *Tyler* in defense of undisturbed property rights. Story acknowledged that some development was necessary for progress and focused on the valuable use of resources. He held a utilitarian view of legal rules, that law had to meet the social and economic needs of the people it served. By the Civil War in the 1860s, nearly all state courts had adopted reasonable use tests to support development. The utilitarian view dominated the Massachusetts Supreme Judicial Court under Chief Justice Lemuel Shaw, as demonstrated in *Cary v. Daniels* (MA 1844). Shaw focused on the beneficial uses of a watercourse. A new element he proposed was that if development of resources aided in the development of the greater community, then other owners would have to suffer losses. The water laws and mill laws blurred the distinction between public and private interests. The mills were owned entirely by private parties, but were given the protection of public policy because some mills supposedly held more public value than other property interests. This invasion of traditional property interests and water law demonstrated the government's favoring particular interests at the

[72] Paul Finkelman and Melvin I. Urofsky, *A March of Liberty: A Constitutional History of the United States, Vol. I: From the Founding to 1900,* 3rd ed. (New York: Oxford University Press, 2011), 281-282.

expense of others. Critics came to view property rights as relative rather than absolute, with the balance favoring economic growth.[73]

In law of water cases, judicial courts adjusted the traditional English law to suit western expansion and the industrial needs of the United States. In US Supreme Court case *Propeller Genesee Chief v. Fitzhugh* (1851), Chief Justice Roger B. Taney ruled that the phrase "waters affected by the tide" was not synonymous with the concept of navigable waters. Inland rivers in the west were too far from the ocean to have tides and steamboats could navigate waters that lacked tides. Navigability no longer depended upon the tide, but on the reality of waterway commerce during the mid-nineteenth century. In the law of water cases, the courts ruled based upon the realities of the time. Unlike in England, parts of the United States lacked precipitation and sufficient water sources, but water was necessary for the economic, and therefore social, expansion of the U.S. In the California Supreme Court case *Irwin v. Phillips* (1855), the court allowed Irwin to divert a stream from its natural course to facilitate his mining operation. The Court acknowledged that its ruling violated traditional notions of water rights, but they argued that their ruling was appropriate because "Courts are bound to take notice of the political and social condition of the country which they judicially rule." California was rich in mineral resources, but mining operations required more water resources. The judiciary had to allow for new rules, because circumstances in the real-world had changed. This same ideological shift was evident in *Lujan*. As will be discussed, the conservative majority supported traditional legal practice and the moderate to liberal minority supported the adjustment of law to reflect the change in real-life circumstances.[74]

[73] Ibid., 282-283.
[74] Ibid., 283-284.

The ideological separation between the conservatives, liberals, and moderates of the Rehnquist Court was evident in the majority opinion, concurrences, and dissents within *Lujan*. The 6 to 3 majority opinion was authored by Justice Scalia and included Justices White, Rehnquist, Scalia, Kennedy, Souter, and Thomas. But within the majority, Justice Kennedy filed a separate opinion concurring in part, in which Justice Souter joined. Justice Stevens filed an additional separate opinion concurring in the judgment. Justice Blackmun filed a dissenting opinion in which Justice O'Connor joined. As in most Rehnquist Court decisions, the Court was splintered, which was due to multiple legal ambiguities the Court was tasked with resolving. But even within a less moderate Court, the issues in question would have been difficult to rule upon. The Court assessed the relationship between science and law, evaluated public participation in the judicial process, challenged to the separation of powers, and had to choose between substantive and procedural due process. Environmental law has presented challenges to the judicial system and, in the case of *Lujan*, it exposed the philosophical and ideological fractures within the Rehnquist Court. But the splintered Court was also a reflection of the philosophical and ideological divisions within the environmental legal field.

Environmental regulations are meant to prevent *unknown* adverse environmental effects of government actions, which are discovered through the regulatory statutes of the NEPA. The NEPA requires government agencies to complete an Environmental Assessment (EA) and, if found necessary, an Environmental Impact Statement (EIS) as well. The NEPA requires government agencies to consider the adverse environmental impact of their actions and to allow public comment. Section 102 requires that federal agencies submit a report to Congress detailing the environmental impact of proposed actions. The report, referred to as the Environmental Impact Statement (EIS), must describe the environmental impact of the proposed action, any

adverse environmental effects that cannot be avoided, alternatives to the proposed action, and irreversible and irretrievable commitments of resources affected.[75] For a satisfactory EIS, federal agencies have to study, develop, and describe appropriate alternatives to the course of action for consideration. The EA and EIS processes involve the investigation of the "unknowns" of government actions and make them part of the agency's decision-making process. Investigations during the EA and EIS processes result in newly acquired knowledge that may find the proposed agency actions in violation of protective laws. If the agency continues in the illegal action, then parties may sue for injunctive relief to temporarily or permanently prevent the action.

The purpose of the ESA is to prevent irreparable environmental impact on endangered species by federal agencies. The US Supreme Court case *TVA v. Hill* (1978) is a prime example of why the ESA exists and should have a broad application. In a 6-3 decision, the Burger Court approved an injunction against the Tennessee Valley Authority (TVA) because the completion of the Tellico Dam would have violated the ESA by harming the endangered snail darter species and its habitat. The snail darter (*Percina Imostoma tanasi*) was discovered by Zygmunt Plater in the Little Tennessee River in 1973. Congress had enacted the ESA in 1973 and the US Fish and Wildlife Service (FWS) was quick to add the snail darter to the Endangered Species List. The discovery and enlistment of the snail darter jetset the case to the US Supreme Court because the Tellico Dam would have further endangered the snail darter and its habitat in the Little Tennessee River Valley.[76] If the snail darter had not been discovered in 1973, the Tellico Dam would have been completed and the snail darter could have gone extinct from the loss of its habitat.

---

[75] John C. Stellakis, "U.S. Navy Torpedoes NEPA: Winter v. Natural Resources Defense Council May Sink Future Environmental Pleas Brought Under the National Environmental Policy Act," *Villanova Environmental Law Journal* 21, no. 2 (2010): 359; National Environmental Policy Act of 1969, Public Law 91-190.
[76] Kenneth M. Murchison, *The Snail Darter Case: TVA versus the Endangered Species Act* (Lawrence, KS: University Press of Kansas, 2007), 1-2, 80-81, 97.

Unfortunately, six months after *TVA v. Hill*, Congress amended the ESA to create an Endangered Species Committee with the authority to grant exemptions from Section 7 prohibitions. The TVA was granted an exemption from the ESA and the Tellico Dam was completed in 1979 and the Little Tennessee River Valley was flooded by the dam. Scientists and environmentalists feared the completion of the dam would cause the extinction of the snail darter species. But, as early as 1978, the FWS had attempted to transplant specimens from the Little Tennessee River to locations in the Elk, Holston, and Hiwassee Rivers, and those in the Hiwassee River seemed to thrive. But in 1980, David Etnier, the ichthyologist who first discovered the snail darter, discovered additional snail darter populations outside of the Little Tennessee River Valley in a creek called the South Chickamauga. By 1983, the FWS discovered healthy snail darter populations in four other locations in Tennessee, Georgia, and Alabama. A year later, the FWS removed the snail darter from the Endangered Species List. The case had many legacies, but the legacy most applicable to *Lujan* was that the case fueled further political opposition and criticism about the implementation of the ESA.[77]

Courts generally defer to an agency's interpretation of its own regulations, unless the agency's interpretation opposes the original intent of the regulation.[78] The Department of the Interior held the controlling authority over the ESA, as stated in the *Lujan* opinion, "ESA is quite explicit as to the Secretary's controlling authority 'The Secretary shall promulgate regulations determining endangered species.'"[79] But the geographical limit set forth by Lujan opposed the original intent of the act; the protection of endangered species and their habitats. The pivotal question in *Lujan* was whether the respondents, the Defenders, could prove actual or imminent

[77] Shannon Peterson, *Acting for Endangered Species: The Statutory Act* (Lawrence, KS: University of Kansas Press, 2002), 69-70.
[78] C.C. Vassar, "NRDC v. Winter: Is NEPA Impending National Security Interests?" *Journal of Land Use & Environmental Law* 24, no. 2 (Spring 2009): 292.
[79] Argument of Justice Scalia.

legal injury; meaning the invasion of a legally protected interest. The Court focused on the procedural questions of the case rather than the substantive issue at hand. Multiple works have elaborated on the injury arguments within *Lujan*, but in Justice Blackmun's dissent, joined by Justice O'Connor, he argued that the respondents needed to show only a "genuine issue of material fact as standing." He stated, "This Court's "function is not itself to weigh the evidence and determine the truth of the matter but to determine whether there is a genuine issue for trial."[80]

In his work "Which Agency Interpretations Should Get Judicial Deference?- A Preliminary Inquiry," Robert A. Anthony analyzed the phenomenon of court deference to agency interpretations set forth in the US Supreme Court case *Chevron U.S.A. Inc. v. Natural Resources Defense Council, Inc.* (1984). In *Chevron*, the Court held that judicial courts must defer to a federal agency interpretation that is reasonable and is not contrary to specific congressional intent on the issue. Anthony was interested in the ambiguities within judicial deference such as how much power the courts held over agency interpretation through the reasonableness test. Even if the courts determine that agency interpretations are reasonable, to what degree are they accepted, could the interpretations be modified by the courts? Judicial deference is essentially about whether the courts or the agencies hold more authority in administering congressional statutes. In his study, Anthony evaluated the extent to which courts applied *Chevron* to defer or affirm agency interpretations. Some courts referred to *Chevron* out of simple precedent procedure and others cited the substantive elements of agency interpretations. So Anthony questioned how *Chevron* has affected the power relationship between the courts and implementing agencies. Has judicial deference given agencies the privilege or the right of statutory interpretation? And are courts conducting detailed analyses of agency interpretations or

[80] Justice Blackmun dissents.

are they relying on judicial deference to rule cases quickly? Anthony found that the answers to these questions remain unresolved and require further investigation.[81]

Courts may use judicial deference because they feel the substantive or procedural questions of environmental cases are simply unclear. With environmental cases, what is considered constitutional is largely a matter of interpretation. A judicial ruling is a combination of the judge's legal philosophy, personal disposition, and the persuasiveness of the arguments presented in the case. The texts of environmental statutes focus more on the statutes' substantive directive rather than its procedural instructions. This leaves statutes open to broad interpretations and applications, but they are also vulnerable to narrowing interpretations and applications, which limit their effectiveness. *Lujan* is a prime example of this paradox. In the argument of Lujan's representative, Edwin S. Kneedler, he supported the 1986 geographical limitation through textual analysis of Section 7 (a)(2) of the 1973 ESA, which stated:

> Each Federal agency shall, in consultation with and with the assistance of the Secretary, insure that any action authorized, funded, or carried out by such agency (hereinafter in this section referred to as an "agency action") is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined by the Secretary, after consultation as appropriate with affected States, to be critical, unless such agency has been granted an exemption for such action by the Committee pursuant to subsection (h) of this section. In fulfilling the requirements of this paragraph each agency shall use the best scientific and commercial data available.[82]

Kneedler argued that the section "consultation as appropriate with affected States" geographically limited the ESA to only the United States. Representing the Defenders, Brian B. O'Neill responded with text that supported a global scope of the ESA. He stated, "in section 2, the Congress recognizes that the U.S. has pledged itself as a sovereign state in the international

[81] Robert A. Anthony, "Which Agency Interpretations Should Get Judicial Deference? – A Preliminary Inquiry," *Administrative Law Review* 40, no. 1 (Winter 1988): 121-122, 126-134.
[82] Endangered Species Act of 1973, Public Law 93-205.

community, to conserve various species of wildlife. Section 4, which deals with the listing of the species, requires that both foreign and domestic species are listed."[83] O'Neill argued that Section 7(a)(2) demanded that an agency action "is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species."[84] The section did not specify that the species and their habitat had to be within the United States. *Lujan* was born from the ambiguity of the geographical application of the ESA. The text of the act provided the directive and implementation guidelines, but it lacked a geographical specification.

In the ESA, Congress declared the purpose of the act was "to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth." Yet some policy directives within the ESA lean toward an international concern for conservation efforts, such as Section 2(4), which reads: "the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction." Section 8 of the act focuses greatly on the encouragement of foreign programs to further carry out the provisions of the act. The Secretary of Interior, along with the Secretary of State, was required to encourage foreign countries to provide conservation to endangered and threatened species. The same section also required that the United States enter into agreements with foreign countries to provide for conservation, and prohibited the importation of foreign endangered species. Another part of Section 8 determined that personnel appointed by the Secretary of Interior and the

[83] *Lujan v. Defenders of Wildlife*, 90 US 1424 (1992), Response of Brian B. O'Neill.
[84] Endangered Species Act of 1973.

Secretary of State were required to cooperate with foreign countries and international organizations in developing personnel resources and programs which promoted species conservation in those foreign countries. The personnel were to also conduct and provide financial assistance for the educational training of foreign personnel in conservation to create professional assistance abroad.[85] Section 2(a) and Section 8 demonstrated Congress' directive for the preservation of endangered species in foreign countries, but both sections did not explicitly extend the geographical application of the ESA to foreign countries.

Justice Stevens viewed the international sections of the ESA, Section 2(a) and Section 8, as arrangements for species conservation in foreign countries *separate* from the ESA regulations. He concurred in part with the opinion of the Court; he believed the plaintiffs had proven standing because harm to endangered species would have produced legal injury to the plaintiffs' interests. But Stevens was not convinced of the international application of the ESA upon agency actions in foreign countries. He proposed a more global perspective when he questioned the international effects of domestic agency actions. He questioned, "Because you could have projects in the southern part of the state…of the United States that affect species in Mexico or Canada or something like that. But I'm not…it isn't clear to me that the project had to be located out of the States."[86] An example he suggested was if a project near the Canadian border caused acid rain in Canada and affected listed endangered species, a consultation would be necessary. But his question focused on domestic endangered species, not foreign species.[87]

Kneedler reasoned the application of the ESA in foreign countries "present practical difficulties and impose this Nation's environmental laws and land use planning on foreign

[85] Ibid.
[86] Response of Brian B. O'Neill.
[87] Justice Stevens concurring in judgment.

countries."[88] No evidence of any justices agreeing with this assertion can be found within the case arguments, opinions, or dissents. But if the ESA geographically covered the world, it would only apply to US government agency actions, not foreign government agency actions. If a US agency funds an action that is incongruent with the ESA, then the action would need to be altered to conform to the ESA or the agency is prohibited from further funding the proposed action. Kneedler stated, "she would have to show that the injury is fairly traceable to the Bureau of Reclamation's assistance, and would be likely to be cured by either a withdrawal of the assistance or consultation, or at least by the withdrawal of the assistance." Therefore, if implemented properly, the ESA would not demand foreign government agency compliance, only US government agency compliance. Kneedler stated, "we have here foreign sovereigns who have it within their own power, as respondents concede, to go forward or not to go forward, to seek funding from other sources."[89] International environmental cooperation is relegated to international law, contained in inter-governmental treaties and agreements. Since the ESA would apply only to US agency actions, foreign agencies would not necessarily have ended the projects the US agencies were involved in. Kneedler went a step further and claimed that a global application of the ESA would interfere in foreign relations and the broader American diplomatic initiative. He stated:

> Where an act would interfere with the conduct of the Nation's foreign relations diplomacy, the act should not be presumed to apply. And that is directly true here. Because a rigid…an application of section 7's rigid, substantive standard, and elaborate domestically focused procedural provisions to projects in foreign countries, would interfere with the flexibility and responsiveness of American foreign policy. After all, foreign aid is…does not stand in isolation. It's part of a broader diplomatic initiative. And the application of 7(a)(2) would interfere with those initiatives.[90]

[88] Argument of Edwin S. Kneedler.
[89] Ibid.
[90] Ibid.

Kneedler argued that the application of the ESA was too rigid for the real life "flexibility and responsiveness" of US foreign policy. He felt that the strict application of the ESA would interfere with the complex initiatives of diplomacy. But he provided no more details or examples to support this argument. Congress enacted the ESA in 1973, but nearly two decades later, Kneedler found the legislation too rigid for the real-life circumstances.

Lujan demonstrated that the underdevelopment and ambiguities of environmental law created inter-agency struggles. Justice Scalia was critical about whether the Department of Interior could even prohibit other federal agencies from funding foreign projects that were in violation of the ESA. He questioned, "How could the Interior Department bind other agencies in this regard? I mean, I think the Interior Department can say, you know, whether it will consult or not. But I don't see how the Interior Department can bind them not to do funding."[91] O'Neill responded that sections 4 and 7 of the ESA granted the Department of Interior the authority to bind agency funding. But funding could only be bound if the agencies consulted the Department of Interior. By limiting the ESA to domestic actions only, Lujan refused to consult with agencies about foreign projects. O'Neill was most concerned about Lujan's refusal to consult because it deprived agencies of the consultation process, which is a harm to the agencies. The lack of consultation also further endangered species affected by foreign actions.[92] Lujan's withholding of the consultation process was thereby in violation of the ESA's directive.

O' Neill focused on the preventative purpose of the consultation process; that the process aided in preserving listed endangered species and their habitat. Justice Stevens clearly agreed with the preventative directive of the ESA when he stated that all agencies were required to

[91] Response of Brian B. O'Neill.
[92] Ibid.

"ensure that any action authorized is not likely to" affect endangered species and their habitat, so "doesn't that impose an obligation on…of some kind of best efforts, at least, to be sure what happens in the foreign country?"[93] The specific funding discussed in *Lujan* was the United States Agency for International Development (AID) that was funding the Mahaweli project in Sri Lanka. The Department of Interior listed eight endangered and threatened species in the Mahaweli project area and that "the Sri Lankan government has requested the assistance of AID in mitigating the negative impacts to the wildlife involved." A letter from the Director of the FWS stated that the Sri Lankan government lacked the finances to maintain environmental management programs and that "donor nations and agencies that are financing the Mahawelli project will be the key as to how successfully wildlife is preserved."[94]

Justice Blackmun questioned the domestic geographical limitation because the 1986 declaration included the "high seas." Technically, the high seas are international waters and are not part of the domestic United States. He questioned if Antarctica fell within the ESA parameters as well, since no nation actually owned Antarctica. Kneedler answered that it would likely be excluded from the ESA enforcement because it was outside of US jurisdiction, but he was not sure. Yet Blackmun found no clear statement in the ESA that included the high seas. Blackmun's assessment called into question the inclusion of the high seas in the 1986 revision. Some evidence suggested political motives for the 1986 revision. Kneedler argued that in 1978, the Secretary of the Interior Cecil B. Andrus took the initial position that the ESA also applied to US government agency actions in foreign countries. But the State and Defense Departments greatly objected to the global application of the ESA. Consequently, the Solicitor of the Interior promptly ordered a reconsideration of the broad geographical application. The initial position of

[93] Ibid.
[94] Justice Blackmun dissents.

the Department of Interior was reversed in 1981. Then the new geographical limitation was instituted in the 1986 ESA regulations.[95] Lujan was pressured by the objections of other federal departments to limit the application of the ESA. He originally agreed with the 1978 application, but changed his mind later in 1986 after other departments disagreed with his interpretation of the statute.

If the ESA did apply only domestically, Stevens was concerned that Lujan's proclamation, that the ESA applied on the high seas, may have been a usurpation of the powers of Congress. And that the 1986 geographical limitation may have been a usurpation as well. Kneedler claimed that the extension of the ESA application would have to be through an amendment by Congress. But Stevens was unsure if Congress had even known of the previous applications of the statute. He stated:

> Justice John Paul Stevens: They do have the argument, don't they, that the interpretation that it applied abroad had issued before the…statute was amended and was amended without…without comment on that? So it's an argument that they assumed that it applied overseas.
> Is there a presumption that Congress would be aware of regulations implementing an earlier statute?
> No, I know there's no affirm…I'm just asking if there's a presumption that Congress knows what the law is.[96]

Stevens was questioning whether Congress even knew what the geographical application of the statute was. But, more importantly, he was concerned that Lujan had amended the geographical application of the act without congressional input. Or whether Congress even knew the implementing procedures of the statute. Stevens' inquiries highlight the ambiguities associated with the real-world application of the ESA.

Environmental law developed as a political force in the late 1960s and 1970s. In his work "Is There a There in Environmental Law?" legal historian Dan Tarlock explained that

[95] Argument of Edwin S. Kneedler.
[96] Ibid.

environmental law largely depends upon the constant generation and application of new knowledge. Unlike other types of legal cases, environmental cases rarely conform to repetitive fact patterns. Therefore, Tarlock agreed with the theory of reflexive environmental law, which argues that environmental decisions be based upon scientific knowledge and perspectives developed during the past four decades of environmental law. He stated, "The best we can hope for are presumptions because, in the end, environmental law is a series of hypotheses that must be tested (and often modified) over a long time horizon by rigorous monitoring and experimentation."[97] Summarily, Tarlock argued that environmental law is derived from science and, therefore, depends upon science for legitimacy. Scientific research has proven vital to discovering the environmental unknowns of government action, forming a symbiotic relationship between science and law. This relationship is evident in the respondent's allegation of the "geographical nexus" concept. The geographical nexus is derived from the field of ecological science, which did not gain academic credentials until the 1970s. It maintains a globalist perspective of environmental harm in which planetary ecology is a seamless web of interconnectivity and renders location irrelevant.[98] This "web of life" concept was argued in *Lujan*, but the Court required more thorough and conclusive proof and injury. The Court demanded details respondents had not conceived to prepare for as a strategy to distract from the substantive controversies on trial.

Two members of Defenders argued they had proof of injury; Amy Skilbred and Joyce Kelly. Skilbred was a professional wildlife biologist who had visited the Mahaweli project site in Sri Lanka in 1982 to study endangered species and their habitats. She did not see any endangered

[97] Tarlock, "Is There a There in Environmental Law?", 219-220.
[98] Samuel P. Hays, *A History of Environmental Politics Since 1945* (Pittsburgh, PA: University of Pittsburgh Press, 2000), 209; Daniel Farber, "Stretching the Margins: The Geographic Nexus in Environmental Law," *Stanford Law Review* 48 no. 5 (May, 1996): 1248.

species at the site, but O'Neill argued that requiring her to actually see endangered species at the site to prove injury was far too unrealistic. He stated, "To require her to actually find the endangered species is sort of a catch-22 because if they were easy to find, they wouldn't be endangered." He also addressed the claim that she had no concrete plans to return to the Mahaweli project site for further research. But the reason she had no definite plans was because Sri Lanka was in the midst of a civil war with no foreseeable end. She still had the intent to return, but only during peacetime.[99] O'Neill placed the case in the substantive realities rather than focusing on the procedural requirements and past precedent as Kneedler did.

Stevens was interested in the timeline of proving injury. Kelly claimed injury because the United States was overseeing the rehabilitation of the Aswan Dam and was assisting with Egypt's Master Water Plan. Both projects had a proposed likelihood of harming endangered crocodiles Kelly had studied in 1986. Kneedler argued that she held no standing because standing was based upon future injury, and Joyce Kelly had no concrete plans of returning to Egypt in the future. Justice Stevens questioned this timeline:

> Well, how could the injury...I mean, the project is going to take several years to complete. And she couldn't be injured…her theory is that she's injured by the completion of the project, as I understand. It may kill off the crocodiles. And if she's seen crocodiles the last time, she says sometime a couple of years from now, she wants to go back and take pictures of them and make studies, that wouldn't be enough?[100]

Stevens was critical that injury could only happen if the crocodiles were in fact harmed by agency actions. He questioned:

> Well, then why does she have to say any more than she thinks there's danger that if you don't consult and you don't avoid the environmental hazard and so on and so forth, the crocodiles may become extinct, and I can't see any more crocodiles?[101]

[99] Response of Brian B. O'Neill.
[100] Argument of Edwin S. Kneedler.
[101] Ibid.

Justice Scalia agreed that injury needed to be proven, but still concurred with Stevens regarding the statute's preventative directive by stating, "She'd have to prove that there would be the adverse consequence. I thought the statute was designed to avoid…you know, minimize the danger that would happen."[102] Preventative law is the only effective means of environmental protection against the onslaught of government agency action. Complying with the ESA regulations ensures that government agencies research and consider the impact of their actions upon endangered species and their habitat. The essential purpose of the ESA is to prevent the *unknown* and irreversible environmental impact of government actions upon listed species.

In his dissent, Justice Blackmun argued that the Court avoided the substantive arguments of the case for the preservation of government separation of powers. Justice Blackmun stated, "I cannot agree that the Government is free to play 'Three-Card Monte' with its description of agencies' authority to defeat standing against the agency given the lead in administering a statutory scheme."[103] In the Court opinion, Justice Scalia described that Congress legislated environmental directives, but the implementing authority of the ESA fell under the authority of the Department of Interior of the executive branch, vested in the Secretary of the Interior. The judiciary could resolve disputes between the branches of government, but only if standing was proven. If standing was not proven and the Supreme Court had altered the geographical limitation of the ESA, the judiciary would have infringed upon the authority of the executive branch. *Lujan* was about more than the enforcement of the ESA; it was also about the US federal government balance of power.

The architecture of environmental law is being formed through the complex relationship between all three branches of government; the legislative, the executive, and the judiciary. The

[102] Ibid.
[103] Justice Blackmun dissents.

contemporary environmental movement began in the 1960s with localized public demands for increased environmental protections for public interest. Regulation of public health lassoed the federal government into assuming more environmental responsibility.[104] But the ESA of 1973 was an entirely different legal arena because it was based more on scientific and political objectives rather than traditional legal practice. Proving legal injury with public health was more clear than proving that the harm of an animal or its habitat actually injured a person. Consequently, the procedural treatment of environmental law has reduced its effectiveness and public participation. The directive of the environmental movement has become entangled with federal and legal squabbles involving the balance of powers and procedural versus substantive authority. This begs the question of whether environmental directives should be reverted back to Congress. Legal historians Richard Pierce and Cass Sunstein argued that Congress could make legislative finding confirming injury under the nexus theories. Pierce assumed that Congress wants to do so and that it needs to make explicit what is already implicit in the ESA.[105]

The Court held that the citizen suit provision of the ESA, which allows "any person" to sue to redress violations of the act, did not give standing to just "anyone" to sue for such violations. The Court focused on injury as the core element of *Lujan*. Proof of injury was in place to prevent judicial overreach of the executive and legislative branches. But even without judicial overreach, the citizen's suit provision allows "any person" to sue violators and the regulating agency can be disruptive of an agency's operations. Justice Scalia termed citizen's suit application as the:

> Full time public interest law firm, as permanently in place as full-time congressional lobby,' but also full-time advocacy groups dedicated to enforcing drug forfeitures and punishing rapes and robberies. At some point, such groups

[104] Hays, *A History of Environmental Politics Since 1945*, 64-84.
[105] Marshall J. Breger, "Defending *Defenders*: Remarks on Nichol and Pierce," *Duke Law Journal* 42, no. 6 (Apr. 1993): 1205.

> would challenge (or at least seriously interfere with) the government's enforcement policies.[106]

Regarding injury limitations, he stated, "courts need some way to dismiss suits involving parties whose only interest is ideological combat."[107] In response to *Lujan,* Justice Anthony Kennedy stated:

> As Government programs and policies become more complex and far reaching, we must be sensitive to the articulation of new rights of action that do not have clear analogs in our common-law tradition…In my view, Congress has the power to define injuries and articulate chains of causation that will give rise to a case or controversy where none existed before…In exercising this power, however, Congress must at the very least identify the injury it seeks to vindicate and relate the injury to the class of persons entitled to bring suit. [108]

Justice Kennedy was not readily swayed by ideological arguments, but he did not wish to dismiss cases that involved divisive ideologies. In *Lujan*, he agreed with the conservative majority, but he did not wish to outright dismiss the ideological substance of the case as Scalia did.

In her dissent, Justice Sandra O'Connor was concerned about the dismissal of the citizen's suit provision. Kneedler argued the citizen's suit provision gave any person aggrieved the right to sue, but only as a cause of action, meaning the provision did not grant substantive rights. Therefore, he stated the respondents did not have standing because the procedural right demanded by the citizen's suit provision could only be invoked by persons who had a substantive stake in the agency's decision. Justice O'Connor leant more toward the substantive concerns of *Lujan* in her comments:

> Justice O' Connor: Well, I understood the respondents to argue that section 7(a)(2) provides that each Federal agency shall consult with the Secretary when action or funding is likely to jeopardize the continuation of an endangered species.
> Mr. Kneedler: That's correct.

---

[106] Ibid., 1207.
[107] Ibid., 1210.
[108] Farber, 1253-4.

> Justice O' Connor: And they think that is the substantive right that they're seeking to enforce under the citizen's suit provision.[109]

Justice O'Connor argued that the stipulations of the ESA, that federal agencies must consult the Secretary when their action or funding is likely to jeopardize endangered species, substantively satisfied the requirements of the citizen's suit provision. Kneedler responded to O'Connor's comments that the case did not focus on agency abrogation of the ESA, as suggested by O'Connor, but that it focused on Lujan's interpretation of the geographical scope of the ESA. O'Connor was concerned about the quick dismissal of the substance of the case, which was agency abrogation of the ESA directives. If the agency was in abrogation of the ESA, the plaintiffs had standing to sue under the citizen's suit provision.

The expansion of the geographical scope of the ESA would not have necessarily stopped the United States Agency for International Development (AID) funding or the United States' involvement in the Aswan Dam project. The ESA simply required the agencies to assess the environmental impact of their actions in consultation with the US Fish and Wildlife Service (FWS). The Rehnquist Court held a conservative view of environmental law directives because they are founded upon public interest and science, which are fluctuating fields lacking in concreteness and standardization. An ongoing debate within law is whether to treat cases with standard formats or to treat each case as unique. Legal historian Dan Tarlock argued that, "environmental problems are characterized by the need to reduce their inevitable uncertainty through the constant generation and application of new knowledge. They often do not, as do many other areas of the law, display a repetition of similar fact patterns."[110] Considering the Rehnquist Court was a moderate to conservative court, environmental cases presented a major challenge to justices who focused on procedural requirements, a strict view of the Constitution,

[109] Argument of Edwin S. Kneedler.
[110] Tarlock, 220.

and the proper separation of government powers. And yet, the lack of repetition of fact patterns makes procedural treatment of environmental cases superficial and incongruent with contemporary environmental concerns. Tarlock predicted that, "The extremely complex and evolving moral and scientific nature of environmental problems ensures that, for the foreseeable future, environmental law will be a law about the process of decision rather than a process of evolving decision rules."[111] And this "moral nature" must be applied to US agency actions in foreign countries as described by legal historian Daniel Farber:

> While governments such as American states may concern themselves primarily with their own internal affairs, they function as part of a broader community- otherwise, there would be no tribunal judging the impact of their actions on other members of the community. If they are responsible for the economic impact of their actions on other members of the community, they should also have some responsibility to consider the other noneconomic interrelationships.[112]

Farber described globalism as the idea that environmental concerns know no boundaries; meaning, what happens in one place affects everyone else everywhere. The Court rejected the globalist perspective in *Lujan* because the "geographical nexus" concept would have conferred standing to any person who used any part of a "contiguous ecosystem." Any plaintiff would have attained standing if they had an interest in a living organism that was part of the global ecosystem. The Court also rejected the "vocational nexus" and "animal nexus" theories, which sought standing for anyone interested in studying or seeing wildlife anywhere on the planet. The Court felt the plaintiffs did not show how a person with these interests would be harmed by the challenged action.[113]

Farber further stated:

> In the absence of any system for allocating regulatory authority, globalism leaves raw political power as the ultimate source of authority. The United States claims

[111] Ibid.
[112] Farber, 1271.
[113] Ibid., 1204-1205.

> an interest in how Mexico catches tuna; and under globalism, the only test of that claim is whether the United States has enough economic power to impose its will. Thus, from some perspectives, environmental globalism can be a kind of imperialism.[114]

In *Lujan*, the federal government contributed funding to the Mahaweli and Aswan Dam projects, both of which were potentially injurious to local endangered species and their habitats. The agencies involved, such as AID, could have influenced the decision-making processes of both projects due to their financial investments in the projects. But in the case of the Mahaweli project, AID only financed ten percent of the project.[115] Lacking financial clout in the project, AID either would have had to conform to Sri Lankan decisions or revoke its funding. But, as discussed earlier, the Sri Lankan government was eager for the United States' input on reducing the environmental impact of the Mahaweli project, especially considering the country was in the midst of a civil war. Tarlock argued that the United States may not be legally bound, but it is morally bound to uphold and spread through diplomacy environmental conservation and preservation. He stated:

> Although transboundary environmental effects are common, local impacts are usually stronger. It may be true that everyone in the world has some interest in the state of the Sri Lankan elephant, but surely the Sri Lankans have the strongest interest in the issue. Not only do Sri Lankans derive the greatest potential benefit from the elephants, but they are the ones who will inevitably bear much of the burden of environmental protection. A legal order which treats all interests as equally fungible improperly erases the particular concerns of local populations. After all, even Justice Douglas – no captive of legal traditionalism- saw a difference between the actual users of an area and well intentioned bystanders.[116]

He described that the United States had a duty to reduce global environmental impact for the animals, but also for the protection of the interests of native human populations. Especially those whose governments lacked sufficient infrastructure to create environmental programs.

---

[114] Farber, 1273.
[115] *Lujan v. Defenders of Wildlife*.
[116] Farber, 1273.

Beyond the interest of foreign populations, Congress viewed the protection of endangered species so highly that they created the ESA, a near absolute rule for the protection of endangered species and their habitats. It is an entirely substantive statute derived from environmental ideology. It had absolutely no basis in procedural law, so the question is why the Rehnquist Court treated it procedurally? In his work "Justice Rehnquist and the Dismantling of Environmental Law," authors Robert L. Glicksman and James R. May argued that Justice William Rehnquist used environmental law cases to limit the scope of federal authority and congressional power under the commerce clause.[117] The commerce clause permits federal intervention in state authority if the topics involve interstate movement or effects. The use of the commerce clause has resulted in the expansion of federal power over state power. Federal environmental legislation such as the Clean Air Act (CAA), Clean Water Act (CWA), National Environmental Policy Act (NEPA), and the ESA are applied nationally and are implemented by federal agencies, such as the Environmental Protection Agency (EPA) and the FWS, which oversee state adherence to the acts. Naturally, Rehnquist read environmental statutes narrowly because the statutes gave authority to federal agencies rather than state agencies. The expansion of the ESA application internationally would have theoretically expanded federal authority over international actions as well. That would have been too great of an expansion of federal power for Rehnquist. Rather than discarding the substantive argument outright, the Court treated the case procedurally to discard the substance of *Lujan* without judicial usurpation of congressional authority.[118]

[117] James R. May is Professor of Law at the Widener University School of Law, and a Visiting Scholar at the Environmental Law Institute (ELI) and Robert L. Glicksman is the Robert W. Wagstaff Professor of Law at the University of Kansas.
[118] Robert L. Glicksman and James R. May, "Justice Rehnquist and the Dismantling of Environmental Law," *Environmental Law Review* 36 (2006): 4.

In *Lujan*, the Rehnquist Court analyzed the textual ambiguities of the Endangered Species Act, inter-agency authority struggles, the US government balance of power, the relationship between science and law proposed in the "geographical nexus" theory, global versus local views of the environment, the purpose of preventative law, and public participation through the citizen's suit. The Court found the process difficult because they were trying to blueprint something that was inherently organic. Environmental law is complex and involves contentious issues associated with science, law, economics, and politics. Due to the range of topics, courts among all circuits of the legal system lack a consensus on how to decide environmental cases. The ideological separation between the conservatives, liberals, and moderates of the Rehnquist Court was evident in the splintering of the Court in *Lujan*. This splintering could be attributed to the moderate to conservative nature of the Court, but it could also be attributed to the contentious topics debated within the case. *Lujan* is an investigation into whether the aims of the environmental movement of the 1960s and 1970s were too strict for real-world circumstances. Within his argument in *Lujan*, Edwin S. Kneedler was critical that the application of the ESA was far too rigid for real-world circumstances. How then do legal courts deal with environmental policies, such as the ESA, when applied to the real world? The following chapter titled "It's Not About the Whales," focuses on how the Roberts Court (2005-present) dealt with the real-world application of the National Environmental Policy Act (NEPA), when environmental protection was considered a threat to US national security.

CHAPTER V

FACING REALITY: CHOOSING BETWEEN US NATIONAL SECURITY AND ENVIRONMENTAL PROTECTION IN *WINTER*

In 1991, the Department of Defense (DOD) released the statement, "Defending our national security and protecting our environment are closely linked. Both share the ultimate goals of ensuring our well-being and preserving our rich national heritage." But in 2005, the new DOD directive committed government compliance with only applicable laws and DOD policies. A DOD publication declared, "Our strategy seeks to maintain a reasonable balance between test and training requirements, the concerns of our neighbors near our test and training ranges, and the importance of sound stewardship." The DOD transformed its "approach to environmental management, bringing it fully into sync with daily military operations, strategic defense planning, and future procurement of new weapons systems." This change in attitude has been attributed to the terrorist attacks on September 11, 2001 by author Stephen Dycus in his work "Osama's Submarine: National Security and Environmental Protection After 9/11." The terrorist attacks on the World Trade Center and the Pentagon on September 11, 2001, prompted the DOD and others in the George W. Bush administration to argue that laws should be relaxed to enable proper training of US Military forces and for the development of new weapons systems vital to the "war on terrorism."

The change in stance between the DOD's 1991 statement and the 2005 directive could may have also been influenced by the environmental concerns of the executive administrations during the 1990s and early 2000s. President George H.W. Bush entered the White House in 1989 and pledged to be the "environmental president." Initially in his presidency, he seemed to be the president environmentalists had hoped he's be. He supported revisions to the Clean Air Act

(CAA) and international agreements to limit greenhouse gas emissions go reduce global warming. But by the latter half of Bush's term, he opposed international agreements within the United Nations Earth Summit in Rio de Janeiro in 1992 and he would not sign the Biodiversity Convention. He led the opposition to establishing deadlines or targets for reducing greenhouse gasses and refused to commit additional support for the Global Environmental Facility, an agency that funded global research projects on greenhouse gas emissions. Wellock attributed Bush's transition from pro-environmentalist to conservative on the complexity of environmental politics. He seemed to handle domestic environmental controversies well, but when international politics was involved, such as in the UN Earth Summit, the Biodiversity Convention, and the Global Environmental Facility, Bush took a more conservative stance. The situation was made even more complex by the environmental topics. Biodiversity and global warming were threats with no foreseeable end, and basing policies on those threats proved complicated and ever-changing. Bush had proven to be a more conservative republican environmentalist than activists would have preferred. And they were anxious for the election of William (Bill) Clinton in 1992.[119]

Clinton had demonstrated little interest in environmental issues, but Vice President Al Gore was a passionate environmentalist and even wrote a book about environmentalism titled *Earth in the Balance*. The Clinton Administration supported the United Nations Population fund and signed the Biodiversity Convention that Bush had refused to endorse. He also approved goals for stabilizing US greenhouse gasses at the 1990 levels. The pro-environmental stance of the Clinton administration could have been partly responsible for the pro-environmentalist issued by the DOD in 1991. But in 1994, Republicans had won a victory over the Democrats in

[119] Thomas R. Wellock, *Preserving the Nation: The Conservation and Environmental Movements 1870-2000* (Wheeling, IL: Harlan Davidson, Inc., 2007), 237-238.

Congress, which turned the tide against environmentalism. Congress pressured Clinton to oppose the 1997 Kyoto Protocols, which sought binding commitments to reduce greenhouse gas emissions in developed nations. The failure of environmentalism during the 1990s reflected the growing conservatism in the United States. Al Gore's defeat in the 2000 presidential campaign to George W. Bush, and then Bush's reelection in 2004 was viewed as the death of environmentalism. The George W. Bush Administration (2001-2009) did not support environmental concerns and were supporters of the wise use movement. The Bush Administration supported fossil fuel development in wilderness areas and refuges, and withdrew executive support for the reduction of Greenhouse Gases through the Kyoto Accords on Climate Change. Some Republicans in Congress and President George W. Bush even doubted that global warming existed, in opposition to the scientific community's consensus. Senator James Inhofe called global warming "the greatest hoax" to be enforced on the United States. By the early 2000s, the Republican majority in Congress and the Bush Administration did not support environmental objectives over other needs of public interest, and the terrorist attacks on September 11, 2001 made the US national security a top priority. [120]

In 2002, the DOD announced a highly organized, multi-year program called Readiness and Range Preservation Initiative (RRPI). The RRPI involved sweeping changes to environmental laws to make way for national security amendments. Proposals included amendments to the Clean Air Act (CAA), Resource Conservation and Recovery Act (RCRA), Endangered Species Act (ESA), Marine Mammal Protection Act (MMPA), Migratory Bird Treaty Act (MBTA), Superfund law, and even the Clean Water Act (CWA). Yet four of the six statutes targeted by the RRPI were not necessarily obstacles to national security because they already contained executive waiver clauses for national security. But executive waivers have

[120] Ibid., 238-39.

rarely been requested because they must be decided on a case-by-case basis, which makes it a complicated and time-consuming process. The DOD pushed for national security amendments to the environmental statutes because it would have eliminated the need to utilize the complicated executive waiver process. If Congress created national security amendments with requirements, the process for exemptions from environmental laws would have been streamlined and easy to meet, as long as actions satisfied the requirements. In response to the RRPI, Congressman John Dingell, a Democrat from Michigan, stated, "I have dealt with the military for years and they constantly seek to get out from under environmental laws. But using the threat of 9-11 and al Qaeda to get unprecedented environmental immunity is despicable."[121] The resulting question is whether the proposed national security amendments would have weakened the effectiveness of environmental statutes in the future.

The National Environmental Policy Act (NEPA) is the only major protective environmental legislation without a national security clause. In her work, *"NRDC v. Winter*: Is NEPA Impending National Security Interests*?"* author C.C. Vassar, law clerk and graduate of Hamline University School of Law, recommends that the solution to the imbalance between national security and environmental protection is a national security amendment to the NEPA. Vassar argues that NEPA as currently enacted and administered does not adequately consider national security interests and that it should be amended to include a national security exemption. The proposition is sensible and attempts to find a middle ground between environmental protection and government agency action. Vassar supports a national security exemption because it would legally address national security needs and "would provide clearer guidelines as to

[121] Stephen Dycus, "Osama's Submarine: National Security and Environmental Protection after 9/11," *William & Mary Law Review* 30, no. 1 (2005): 3-11; Stephen Dycus is a Professor of Law at Vermont Law School and is an internationally recognized authority on national security law and environmental law.

which types of circumstances should be relieved from the NEPA's procedural requirements."[122] Vassar's proposition clearly favors military interests over environmental interests, although she claims the amendment would strike a balance between the two. Vassar's proposition should be questioned because a national security amendment would weaken the protectionist capabilities of the NEPA. The NEPA is protectionist legislation due to its regulations that function to prevent government agency environmental abuses. These preventative regulations are most effective when applied broadly and with no exceptions. Further clarifications through amendment clauses, such as a national security clause, would compromise its broad application and, therefore, weaken its preventative directive. Preventative law is the only effective means of environmental protection against the onslaught of government agency action. Complying with the NEPA regulations ensures that government agencies research and consider the impact of their actions upon the environment. The essential purpose of the NEPA is to prevent the *unknown* and irreversible environmental impact of government actions.

The balance between national security and environmental protection came to a head in the US Supreme Court case *Winter v. Natural Resources Defense Council* (2008) in which the Natural Resources Defense Council (NRDC) sued for a preliminary injunction against Navy sonar training exercises scheduled between February 2007 and January 2009 off the coast of southern California. The Defenders argued that the Navy violated the NEPA because the Navy's use of mid-frequency sonar would irreversibly harm marine life, and that the Navy should have completed a satisfactory Environmental Impact Statement (EIS) before commencing with the training exercises. In a 5 to 4 decision, the Roberts Court (2005-present) ruled that the Navy's need to conduct realistic training exercises outweighed the plaintiffs' "ecological, scientific, and

[122] C.C. Vassar, "*NRDC v. Winter*: Is NEPA Impending National Security Interests?" *Journal of Land Use & Environmental Law* 24, no. 2 (Spring 2009): 282, 303.

recreational interests in marine mammals."[123] The Court concluded that national security was more important than the protection of marine life and the Navy's compliance with the NEPA regulations. *Winter* falls into the theme of "national security trumps all," but the case is representative of many other legal and historical developments, such as the relationship between science and law, the expansion of executive authority, proving legal injury, defining "emergency circumstances," and legal standardization.

Vassar's proposal for a national security amendment to the NEPA is part of a popular legal strategy to standardize environmental law. An ongoing debate within law is whether to treat cases with standard formats or to treat each case as unique. Standardization favors procedural law, whilst uniqueness favors substantive law. Procedural law is the use of formulas based upon precedent. Essentially, similar cases are ruled in similar ways. Substantive law is the direct opposite; it is mandated by relativity. The benefit of procedural law is that it standardizes legal practices, which helps courts rule in similar ways. The problem with procedural law is that courts may not adequately consider the merits of a case and simply use the legal precedent in their ruling. In substantive law, each case is viewed as unique from all others and is treated for its substantive claims rather than precedent. The benefit of this approach is that courts consider the merits of the case and their real-world effects. The problem with this approach is that it can lead to confusion on how to rule on the substantive topics. This may also result in contrasting court rulings, which breed more confusion. The arguments described in this chapter support that *Winter* should have been judged more substantially because multiple elements within the case were new and underdeveloped scientifically, politically, and legally. Most environmental legislation was created during the 1960s and 1970s and *Winter* demonstrates how environmental topics and controversies are treated in the courts in the early twenty-first century. In *Winter*, the

[123] *Winter v. Natural Resources Defense Council*, 555 US 07-1239 (2008).

lower courts appeared apt to agree with environmental interests while the Roberts US Supreme Court (2006-present) maintained a conservative majority, but with dissents. The case demonstrates the challenge to the US Supreme Court to resolve environmental controversies through judicial ruling. The judiciary has gained an increased role in environmental policy-making, but this greater authority has challenged courts to rule on controversies associated with the real-world implementation of environmental statutes.

In his work, "Is There a There in Environmental Law?, " Dan Tarlock, explained that environmental law largely depends upon the constant generation and application of new knowledge. Unlike other types of legal cases, environmental cases rarely conform to repetitive fact patterns because knowledge of the environment is constantly developing, which changes perspectives about environmental topics. Take *Winter* for an example; the use of sonar by the Navy seemed environmentally sound until the mass strandings of marine life during the 1990s and early 2000s, which proved the use of sonar was harmful to the environment. Tarlock agreed with the theory of reflexive environmental law, which determines that environmental decisions be made based upon scientific knowledge and perspectives developed during the past four decades of environmental law. He stated, "the best we can hope for are presumptions because, in the end, environmental law is a series of hypotheses that must be tested (and often modified) over a long time horizon by rigorous monitoring and experimentation."[124] Summarily, Tarlock argued that environmental law is derived from science and, therefore, depends upon science for legitimacy.

The relationship between environmental law and science is not one-sided; it is a relationship of interdependence, with environmental law stimulating scientific research and

[124] Dan A. Tarlock, "Is There a There in Environmental Law?" *Journal of Land Use & Environmental Law* 19, no. 2 (Spring 2004): 219-20; Dan A. Tarlock is the Distinguished Professor of Law and Director of the program in Environmental and Energy Law at Chicago-Kent College of Law.

technological experimentation. An example relevant to *Winter* is the work of the Office of Naval Research (ONR). Historically, the protection of gray whales fell under a web of protective legislation including the International Agreement for the Regulation of Whaling (1937), the Endangered Species Act (ESA) (1973), and the Marine Mammal Protection Act (MMPA) (1972). The ESA and the MMPA were under the jurisdiction of the Environmental Protection Agency (EPA). The EPA tasked the National Marine Fisheries Service (Fisheries) with regulation enforcement, as well as conducting investigations into unusual mortality events. But Fisheries lacked the funding for proper environmental investigations. Consequently, investigations were largely conducted by the Navy's Office of Naval Research (ONR). Due to Fisheries' dependence upon the Navy's ONR, Fisheries did not generally fraternize with environmentalist organizations, such as the NRDC.[125] With the Navy as the primary source of funding and research for cetology, the study of whales and other marine life, how quickly the discipline has developed is questionable.

Winter highlights a lag between science and law because cetology was vital to the case but was a massively underdeveloped discipline. An informative section of Joshua Horwitz's work *War of the Whales* was the history of the Navy Sound Surveillance System, called SOSUS. The SOSUS program was born during the Cold War in an attempt to detect and destroy Soviet submarines. Surprisingly, cetology and sonar research developed together. Horwitz described the Navy's attempt to train marine mammals to act as biological minesweepers during the 1970s in the Marine Mammal Training Program. The Navy was trying to tame and train marine life because of marine mammals' use of biological sonar in deep waters. The program eventually failed and Sea World used its training techniques, but the program communicates the Navy's

[125] Kenneth M. Murchison, *The Snail Darter Case: TVA versus the Endangered Species Act* (Lawrence, KS: University Press of Kansas, 2007), 69, 74, 81, 92.

utilization and objectification of marine life and its growing interest in deep-sea acoustics, which became sonar.[126]

Active sonar sends out pulses of sound that bounce off of objects, which allows operators to assess the measure, size, and distance of marine objects. Operators must be proficiently trained due to the difficulty of distinguishing between natural marine noise and sonar. Mid-frequency sonar has proven more successful than low-frequency sonar in helping operators distinguish between marine noise and sonar. The top three sources of marine noise pollution are high-energy seismic surveys, commercial shipping, and military active sonar. Military active sonar has proven most successful in detecting enemy submarines during naval anti-submarine warfare. To ensure that sonar operators perform effectively, the Navy regularly executes training exercises under realistic conditions. The Navy has determined that southern California coastal waters and sea conditions are ideal for these regular sonar training exercises. The US Navy uses Mid-Frequency Active (MFA) sonar in fifty percent of its vessels and unfortunately, MFA sonar has been proven harmful to marine mammals.[127]

In his work "Submarines, Sonar, and the Death of Whales: Enforcing the Delicate Balance of Environmental Compliance and National Security in Military Training," author Joel R. Reynolds described mass beachings of marine life between the 1980s and early 2000s the have been firmly linked to the military use of sonar. Between 1985 and 1989, three separate mass strandings of beaked whales occurred in the Canary Islands due to nearby US Navy training exercises. In 1996, twelve Cuvier's beaked whales stranded along the west coast of Greece due

[126] Joshua Horwitz, *War of the Whales: A True Story* (New York: Simon & Schuster Paperbacks, 2014), 50, 232-35.
[127] John C. Stellakis, "U.S. Navy Torpedoes NEPA: Winter v. Natural Resources Defense Council May Sink Future Environmental Pleas Brought Under the National Environmental Policy Act," *Villanova Environmental Law Journal* 21, no. 2 (2010): 356-57; Joel R. Reynolds, "Submarines, Sonar, and the Death of Whales: Enforcing the Delicate Balance of Environmental Compliance and National Security in Military Training," *William & Mary Environmental Law Review* 32, no. 3 (2008): 760-62.

to nearby NATO (North Atlantic Treaty Organization) use of low- and mid-frequency active sonar. In 1998, a NMFS biologist linked a beaked whale stranding in Vieques, Puerto Rico to nearby US Naval training exercises. Another stranding occurred in 1999 in the US Virgin Islands due to US Navy maneuvers offshore. A year later, in 2000, four beaked whales stranded on the beaches of Madeira, Portugal due to NATO naval exercises.[128]

In 2002, whales again stranded near Vieques and the Canary Islands over a period of several days. These strandings were different because they occurred while NATO naval forces were conducting anti-submarine warfare in the vicinity. These exercises included at least one US Navy ship equipped with mid-frequency sonar. A year later, in 2003, the US Navy ship *USS Shoup* was testing its mid-frequency sonar system off the coast of Washington state. Marine experts wrote that "dozens of porpoises and killer whales seemed to stampede all at once in response to a loud electronic noise echoing through" the strait. In the days following the training, fourteen harbor porpoises beached in nearby shores. This was an abnormally high number in comparison to a yearly average stranding rate being six porpoises per year. The most educational demonstration of the effects of sonar was in 2004 when a mass stranding of 150 to 200 whales occurred on the shores of Hawaii near Hanalei Bay, on the island of Kaua'i. The Navy was conducting major training exercising called the RIMPAC (Rim of the Pacific Exercise), which is the world's largest international exercise. The Navy attests that the RIMPAC "provides a unique training opportunity that helps participants foster and sustain cooperative relationships that are critical to ensuring the safety of sea lanes and security on the world's oceans."[129] The whales resided in the shallow bay waters for over twenty-eight hours until they were assisted by members of the local stranding network. The NMFS investigated the event and concluded that

[128] Reynolds, "Submarines, Sonar, and the Death of Whales," 763-64.
[129] America's Navy, "Commander Naval Surface Force, U.S. Pacific Fleet," last modified 2016, accessed June 11, 2016, http://www.public.navy.mil/surfor/Pages/RIMPAC-2016.aspx#.V1xKvVcld0w.

the Navy's nearby use of sonar in the RIMPAC was a "plausible, if not likely contributing factor" in the stranding.[130]

In 2005, the *USS Kearsarge* Naval Expeditionary Strike Group conducted anti-submarine warfare training off the coast of North Carolina in which they used MFA sonar. At least thirty-seven whales of different species were beached. The NMFS investigation found the event highly unusual because the species were off-shore species, meaning they migrated to shallow waters to evade something in their regular territory. A similar beaching occurred on the Almerian coast of southern Spain in 2006. And ongoing US Naval training exercises near the US Naval base in Yokosuka, Japan have resulted in ten reported mass strandings since the 1950s.[131]

The mass strandings described sparked investigations by the Scientific Committee of the International Whaling Commission (IWC) in which they linked the use of MFA sonar to mass beachings of whales and other marine life around the world. It was proven the noise could rupture the ears of and disorient marine life, including blue whales, dolphins, and beaked Curvier whales. Sonar also causes marine mammals to change their migration routes to avoid sonar noise because it interferes with their own biological sonar, echolocation. Echolocation helps marine mammals navigate, communicate, identify food sources, and locate possible threats. To avoid MFA sonar, marine mammals surface too quickly, which results in decompression sickness, known as "the bends." Quick surfacing creates gas bubbles in the blood stream, resulting in fatal hemorrhaging and lesions in the organs. These factors lead to disorientation, causing marine mammals to stray from migration courses, leading to beaching, starvation, and mating and birthing disruptions. Sonar creates other additional problems that include temporary or permanent loss of hearing, which impairs the animal's ability to communicate for avoiding

[130] Reynolds, "Submarines, Sonar, and the Death of Whales," 764-66.
[131] Ibid., 766-68.

predators and capturing prey. The animals demonstrate avoidance behavior and they leave their habitats and migratory pathways, which leads to disruptions in their mating, feeding, nursing, and migration patterns. The frequency of MFA sonar masks their own biological echolocation, which hinders their ability to discern the sounds of predators and potential mates. Another lesser acknowledged effect of sonar is the harmful effects on other marine life, such as fish and shrimp, that serve as prey for whales and dolphins.[132]

The increase in occurrence and size of beachings during the 1990s created concerns throughout the scientific community. It was not until the 1996 mass stranding in Greece that scientists seriously considered the link between sonar and beachings. NATO naval forces had been conducting antisubmarine training exercises near the Hellenic Trench in the Ionian Sea. In 1999, approximately 1,500 marine mammals beached on US shorelines and only five survived. Darlene Ketten was the US Navy's top whale pathologist and an expert for unusual mortality event investigations. She held joint appointments at Harvard Medical School and Woods Hole Oceanographic Institution. Ketten was most concerned about a beaching in the Bahamas in 2000 due to the magnitude, number of different species involved, and the extended geographical area across six islands. The beachings were connected to US Navy testing ranges throughout the Bahamas.[133]

Darlene Ketten proved instrumental to sonar investigations because of her specialty in bioacoustics. Her research attested to the very recent development of cetology as a discipline. She was the "first researcher to study the internal structures of beaked whale phonation and hearing, and the first to trace the path of sound waves all the way from their source in the ocean to the beaked whale's auditory cortex." She was also the first researcher to use CT scans to

[132] Vassar, "*NRDC v. Winter*," 281, 286-88; Reynolds, 769.
[133] Horwitz, 18, 70-71, 110.

create a 3-D composite scans of whale heads. Computerized tomography (CT) was invented in 1980 and Ketten began her work during the 1980s. By 2000, Ketten was the top expert whale coroner and expert in the area of acoustic trauma and whale ear pathology. Horwitz described the beachings as opportunities for advancements in cetology because of a chronic lack of whale specimens for research. Specimens were sought after by zoologists, veterinarians, paleontologists, marine biologists, and toxicologists.[134] Consequently, cetology was a young discipline that developed slowly for a lack of specimens and for a lack of funding as well.

The limited knowledge of cetology was evident in the oral argument of US Solicitor General Gregory G. Garre (2008-2009) before the US Supreme Court in 2008 on behalf of the petitioners, the Navy. Justice Samuel Alito questioned whether "temporary" behavioral modifications caused by sonar could be considered injury:

> Justice Alito: In lay terms, what does that mean?
> Does it mean an alteration of their swimming pattern, their migration pattern?
> What does it mean?
> Mr. Garre: In most cases it means that there's an alerting response, they hear the sound and they go in the opposite direction, as one who hears a noise that disturbs them would ordinarily do.
> Justice Alito: It doesn't necessarily mean that there's a physical injury to them, does it?
> Mr. Garre: No.
> Justice Alito: It means that they may just swim in a different direction.
> Mr. Garre: That's right.[135]

And in Garre's response he stated "the Navy acknowledged that there is uncertainty about the effects of sonar on beaked whales." Justice John Stevens concurred with Justices Ruth B. Ginsburg and David Souter by stating:

> The very fact that you need an EIS [Environmental Impact Statement] is—is because you don't know what environmental consequences may ensue. That's the

[134] Ibid., 103-106.
[135] *Winter v. Natural Resources Defense Council*, 555 US 07-1239 (2008), argument of Gregory G. Garre.

> purpose of the EIS. So isn't the normal practice to enjoin government action until the EIS is filed when it is clear there is a duty to file?[136]

Ginsburg and Souter were concerned about the unknown environmental effects of government actions and NEPA was created to directly address these concerns.

The NEPA was created in 1970 to provide a procedural framework federal agencies must work within to ensure policies of the act are implemented. It is the United States' premiere federal legislation for the protection of the environment. The act requires government agencies to consider the adverse environmental impact of their actions and to allow public comment. Section 102 requires that federal agencies submit a report to Congress detailing the environmental impact of proposed actions. The report, referred to as the Environmental Impact Statement (EIS), must describe the environmental impact of the proposed action, any adverse environmental effects that cannot be avoided, alternatives to the proposed action, and irreversible and irretrievable commitments of resources affected. For a satisfactory EIS, federal agencies also have to study, develop, and describe appropriate alternatives to the course of action for consideration. If agency action is taken before completion of the EIS, or the EIS is proven inadequate, injured parties may sue for injunctive relief.[137]

Founded alongside the NEPA in 1970, the Natural Resources Defense Council (NRDC) is a non-governmental organization composed of environmental lawyers and activists who filled a niche in the environmental community by helping draft and enforce environmental legislation. Before the 1970s, environmental lawyers lacked an environmental legal arsenal, attempting to use common law principles for environmental protection. But the gambit of protective environmental legislation created during the 1960s and 1970s gave environmental legal organizations, such as the NRDC, an "abundance of new statutory weapons." The NRDC

[136] Ibid.
[137] Stellakis, 359; National Environmental Policy Act of 1969, Public Law 91-190; Vassar, "*NRDC v. Winter*," 284.

essentially became the regulator of regulatory agencies, especially the Environmental Protection Agency(EPA).[138]

Preliminary injunctions are the most broadly and frequently used remedies employed by federal courts, but they lack clear application standards. A preliminary injunction is issued "to protect plaintiffs from irreparable injury and to preserve the court's power to render a meaningful decision after a trial on the merits." But the plaintiff is required to persuade the court of clear injury.[139] Injunctions have proven vital to the legal regulation of federal agency actions with potential environmental impact. In *Winter,* the NRDC sought an injunction, arguing that the Navy violated the NEPA by failing to prepare an adequate EIS prior to the MFA sonar training exercises. The Navy responded that an EIS was unnecessary because the training exercises would not have had significant impact on the environment. The District Court found this contrary to the Navy's own research proving sonar exercises would injure and disturb thirty-seven species of marine life.[140]

The relationship between the US Navy and marine life was not an entirely new topic by the time of *Winter*, it had a litigation history among the lower courts, which began in 1994 and continued until *Winter* in 2008. The string of cases between 1994 and 2008 describe the initial tension between the Navy and environmental protection, the development of sonar technologies, the emerging role of science (cetology), the role of the courts, and the conflict over whether to uphold national security interests or environmental protection. In the lawsuit *Natural Resources Defense Council v. U.S. Department of the Navy* (1994), the NRDC challenged a proposed Navy five-year underwater explosives program off the California coast, which violated the Marine

[138] Horwitz, 82; "Law and Policy. E-Law: What Started It All?" Natural Resources Defense Council, last modified May 5, 2000, accessed December 1, 2015, http://www.nrdc.org/legislation/helaw.asp; Horwitz, 82.
[139] Bethany M. Bates, "Reconciliation After Winter: The Standard for Preliminary Injunctions in Federal Courts," *Columbia Law Review* 111 no. 7 (Nov. 2011): 1525-27.
[140] Vassar, "*NRDC v. Winter*," 289-90.

Mammal Protection Act (MMPA). The proposed "ship-shock" program would have detonated around 10,000 underwater explosives near the Channel Islands National Marine Sanctuary, which would have incurred incidental damage to protected marine life and species diversity. The MMPA was enacted in 1972 and prohibits the "take" of marine mammals in US waters and by US citizens on the high seas, and the importation of marine mammals and marine mammal products into the United States. The act was created due to some mammal species or stocks being endangered and depleted as a result of human activities. The act also stemmed from a preventative perspective because the drafters included that there was inadequate knowledge of ecology and population dynamics of marine life. An additional reason for the act was that marine mammals had been proven as resources of international significance. But in 1994, the MMPA was amended substantially to create exceptions to its take prohibitions. An amendment relevant to the case was the allowance of small takes incidental to specified activities. The Navy sought permission from the NMFS under the "small take" authorization of the MMPA.[141]

The NMFS is the oldest US conservation agency formed in 1871 "for the protection and preservation of the food fishes of the coast of the United States." Since its inception, the NMFS has become the National Oceanic and Atmospheric Administration (NOAA) Fisheries agency and is responsible for the stewardship of US ocean resources and habitats. The agency provides vital services in productive and sustainable fisheries, safe sources of seafood, the recovery and conservation of protected resources, and healthy ecosystems. All their services involve laboratory science and an ecosystem-based approach to management. More relevant to the case discussed is that the NMFS makes final rulings on questions involving the MMPA and the ESA. In *Natural Resources Defense Council v. U.S. Department of the Navy*, the NMFS conducted

[141] Reynolds, 773; NOAA Fisheries, "Marine Mammal Protection Act (MMPA)", National Oceanic and Atmospheric Administration, last modified May 10, 2016, accessed June 12, 2016, http://www.nmfs.noaa.gov/pr/laws/mmpa/.

Environmental Assessments and approved the Navy's "ship-shock" test. In response, the NRDC challenged the NMFS's ruling as a violation of the MMPA and the NEPA. The District Court ruled in favor of the NRDC's claims and issued an injunction against the Navy's planned test. An interesting aspect of the ruling was that the Court was critical of the NMFS interpreting the ambiguous "small takes" provision of the MMPA when the Court stated, "any other interpretation of the MMPA would allow the NMFS to authorize projects that would result in the taking of an unnecessarily high number of marine mammals." The Court overruled the NMFS's interpretive power over the MMPA and its final ruling that allowed the Navy's "ship-shock" test.[142]

Concern over the Navy's use of sonar began the following year in 1995, when the Navy disclosed its development of Low-Frequency Active Sonar (LFA), sonar with sound received up to 140 decibels more than 300 miles away. The Navy's ONR conducted a five-year scientific program using LFA sonar and the NMFS granted a "small take" permit through the MMPA authorizing the Navy to use LFA sonar in seventy-five percent of the world's oceans. In response, in *NRDC v. Evans* (2003), the NRDC sued for injunctive relief to blockade the Navy's global deployment. The District Court of New York ruled in favor of NRDC for the violations of the MMPA, the ESA, and the NEPA. The most relevant aspect of the court ruling was that it devoted significant attention to the balancing of hardships and competing interests of the two parties. The Court attempted to balance interests of the Navy and national security with protection of the marine environment. An excerpt from the court ruling is very similar the concerns represented in *Winter*:

> As explained below, the Court recognizes the importance of this new sonar technology to national security. The Court also commends defendants'

[142] NOAA Fisheries, "About Us," National Oceanic and Atmospheric Administration, last modified May 10, 2016, accessed June 12, 2016, http://www.nmfs.noaa.gov/aboutus/aboutus.html; Reynolds, 774.

> sponsorship of independent scientific research to advance our limited understanding of the effects of low frequency sound on marine mammals. The Court recognizes and respects the very important interests at stake on both sides of this case and, after reviewing the extensive record, believes that both can be safeguarded. On the one hand, there can be no doubt that the public interest in military preparedness and protection against enemy submarine attacks through early detection is of grave importance…On the other hand, there can also be no doubt that the public interests in protecting the world's oceans and the sea creatures that depend on the oceanic environment to survive is also of the highest importance.[143]

The District Court expressed equal concern for both the preservation of national security and the protection of the environment. Choosing between the two competing interests was identical to the decision in *Winter*.

In 2006, the Ninth Circuit Court dismissed the Navy's appeal of the ruling. The following year, in 2007, the small take permit issued to the Navy by the NMFS expired, and the NMFS issued the Navy a new small take permit for the global deployment of the Navy's LFA sonar system. In response, the NRDC filed a motion for another injunction, which the District Court issued yet again. The history of litigation that led to *Winter* in 2008 had ended in 2007 with a strong division between national security interests and environmental protection. The courts involved upheld environmental law, but they acknowledged the difficulty of choosing between two types of public interest; national security and the environment.

The litigation between 1994 and 2008 created an atmosphere of division between national security and environmental protection, and *Winter* acted as an opportunity to clarify the debate. The *Winter* litigation began in 2005 when the NRDC focused on the Navy's failure to comply with the NEPA, the MMPA, and the ESA in its MFA sonar training exercises. *NRDC v. Winter* was filed in 2006, in which the NRDC challenged the Navy's use of MFA sonar and the NMFS's approval of the use of sonar in the scheduled RIMPAC exercises. The Navy had not completed

[143] *Natural Resources Defense Council, Inc. v. Donald Evans, Secretary of Commerce; the National Oceanic and Atmospheric Administration; the National Marine Fisheries Service*, 254 F. Supp. 2d 434 (SD NY 2003).

the EIS requirement of the NEPA and the NMFS had violated the MMPA by allowing the Navy's use of MFA sonar. These violations resembled those in *NRDC v. Evans* (2003), but the new development was that in 2007, the Secretary of Defense Robert Gates granted a two-year exemption for the exercises from the MMPA requirements for the necessity of national defense. But the exemption was conditioned to include seven mitigation procedures to reduce the exercises' environmental impact.

In 2007, the Navy completed an Environmental Assessment (EA) in which the Navy concluded the proposed fourteen SOCAL training exercises scheduled through January 2009 would not have had a significant impact on the environment. Within the EA, injuries were separated into Level A and Level B takes. Level A takes were defined as irreversible and direct physical injuries, and Level B takes were defined as temporary injuries or disruption of behavioral patterns, such as migration, feeding, surfacing, and breeding. In the EA, the Navy predicted that Level A takes would have been avoided through the seven prescribed mitigation measures, but that the 274 Level B takes could not have been avoided, but that they were not permanent injuries of Level A takes. But due to the lack of knowledge about beaked whales, the Navy classified all injuries toward them as Level B takes. The NRDC was not satisfied by the Navy's EA and sought injunctive relief against the Navy's SOCAL exercises for violation of the NEPA, the ESA, and the Coastal Zone Management Act (CZMA). The CZMA was passed in 1972 to help preserve, protect, develop, and, where possible, restore or enhance the resources of US coastal resources. The program "aims to balance competing land and water issues through state and territorial coastal management programs, the reserves serve as field laboratories that provide a greater understanding of estuaries and how humans impact them, and the CELCP

provides estuarine lands or obtain conservation easements."[144] The Navy's violation of the CZMA was due its use of sonar harming the coastal marine life.

The District Court confirmed the Navy's violation of the NEPA and the CZMA and granted the injunction, concluding that there was a "near certainty" of irreparable harm to the environment, which outweighed any injury to the Navy. The Court injunction completely prohibited the Navy's use of MFA sonar during its remaining training exercises. After hearing the Navy's appeal, the Ninth Circuit Court of Appeals agreed with the District Court's decision. The appellate court, however, found the injunction's prohibiting entirely the use of MFA sonar to be too extreme. So the court remanded the case back to the District Court "to narrow its injunction so as to provide mitigation conditions under which the Navy may conduct its training exercises." In response, the District Court issued a new injunction that allowed the Navy's use of MFA sonar, but under mitigation measures which were additional to those the Navy adopted pursuant its MMPA exemption. In response, the Navy filed a notice of appeal to challenge two of the six mitigation measures.

The Navy sought assistance from the executive branch and Council on Environmental Quality (CEQ) to gain exemptions from both the NEPA and the CZMA. The Bush Administration determined the Navy's exercises were essential to national security and granted them exempt from the CZMA restrictions. To circumnavigate the NEPA's EIS requirement, the Navy also sought an emergency circumstances exemption through the Council on Environmental Quality (CEQ). The CEQ is a governmental agency created through NEPA to advise the executive branch of government, providing guidance and advice on environmental policy. The CEQ functions to ensure compliance with the NEPA and assists in interpreting the procedural

[144] Office for Coastal Management, "Coastal Zone Management Act," National Oceanic and Atmospheric Administration, accessed June 15, 2016, https://coast.noaa.gov/czm/act/.

requirements. The CEQ helps determine which agency actions require the completion of an EA or an EIS. According to the NEPA regulations, agencies are required to complete a brief EA with sufficient evidence and analysis to help determine if the more in-depth EIS is necessary. If the agency determines an EIS is unnecessary, they must issue a Finding of No Significant Impact (FONSI), which explains how the agency action would not have significant impact on the environment. But the FONSI does not forgo the necessity of an EIS. The FONSI can be challenged and set aside if the challengers prove the decision was "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law." In *Winter*, the NRDC challenged the Navy's FONSI and argued the Navy's EA was not detailed enough and that an EIS was necessary. The CEQ approved the Navy's request and issued additional alternative arrangements in accordance with the emergency circumstances regulation and the Navy was allowed to continue its trainings. The CEQ determined that the District Court's injunction "creates a significant and unreasonable risk that Strike Groups will not be able to train and be certified as fully mission capable." [145]

Courts generally defer to an agency's interpretation of its own regulations, unless the agency's interpretation opposes the original intent of the regulation. The phenomenon of court deference to agency interpretations was set forth in the US Supreme Court case *Chevron U.S.A. Inc. v. Natural Resources Defense Council, Inc.* (1984), in which the Rehnquist Court held that judicial courts must defer to a federal agency interpretation that is reasonable and is not contrary to specific congressional intent on the issue.[146] The NEPA conferred authority upon the CEQ to advise and insure agency compliance, but by overriding the NEPA's EIS requirement, the CEQ was clearly not acting in the interests of environmental protection. The District Court noted the

[145] Stellakis, 363.
[146] Robert A. Anthony, "Which Agency Interpretations Should Get Judicial Deference? – A Preliminary Inquiry," *Administrative Law Review* 40, no. 1 (Winter 1988): 121-122.

NEPA had no national security defense exemption, therefore, regardless of the CEQ interference; the Navy was still required to complete the EIS requirement of the NEPA. The only way to bypass the EIS requirement was through direct legislation by Congress. The CEQ could not bypass the NEPA regulations "simply by characterizing an ordinary, planned activity as an emergency." The District Court held the CEQ's action invalid and the Navy not exempt from either the EIS requirement or the preliminary injunction. In *Winter*, Justices Ruth Bader Ginsburg and David Souter confirmed the CEQ's lack of statutory authority to override the EIS requirement of the NEPA. Justice John Roberts agreed that the NEPA gives no body regulatory authority, neither the EPA nor the CEQ. He recognized the CEQ as "more or less an office in the White House, rather than a free-standing agency." And Ginsburg stated the purpose of the CEQ was "To set up an orderly regime for Federal agencies to carry out their obligations under NEPA." In Justice Ginsburg's dissent, to which Justice Souter joined, the Navy should have consulted Congress for legislative override of the NEPA, not the executive branch.[147]

The alternative arrangements issued by the CEQ were issued in conjunction with those exempting the trainings from the MMPA, not those issued through the District Court injunction. So, the Navy appealed to vacate the alternative arrangements issued through the District Court injunction. The District Court refused and the Court of Appeals affirmed, citing the Navy's own figures that the exercises would have caused 564 physical injuries to marine mammals and 170,000 behavioral disturbances. The Court of Appeals was most concerned with the balance of hardships as it emphasized the negative impact on the Navy's training exercises was purely speculative because the Navy had not operated under the procedures prescribed by the District Court injunction. Even so, the Navy had previously trained under alternative arrangements

[147] *Winter v. Natural Resources Defense Council*; Argument of Gregory G. Garre; Dissent of Justice Ruth Bader Ginsburg.

prescribed in the MMPA exemption and had certified the strike groups even though they had not completed all the requisite training exercises. The Ninth Circuit Court concluded that the District Court had struck a fair balance between the national security interests of the Navy and environmental interests.[148]

The Ninth Circuit also questioned whether the Navy's predicament was even a true emergency. At the US Supreme Court, after disproving the CEQ as an overriding authority of the NEPA regulation, the Court addressed the case timeline. Justice Souter stated:

> I guess my question is, to the extent that there was an emergency, wasn't the emergency created by the failure of the Navy to take any timely action? So it sounds to me as though that, if there is an emergency, it's one that the Navy created simply by failing to start an EIS preparation in a timely way at which it trained in effect to sort of neutralize by keeping everybody in the dark until the last moment…there was no emergency here except one which was created by the Navy's apparently deliberate inattention?[149]

Aiming to create a narrow definition, the Court investigated what constituted an emergency. In *Valley Citizens for a Safe Environment v. Ves*t (1991), a sudden change in hostility in a region of the world permitted Air Force use of sonar before completing an EIS. In contrast, the Navy in *Winter* experienced no such change in need for sonar training. Also, as described in the Garre's argument, the Navy had plenty of notice to complete a satisfactory EIS. The District Court found "the Navy's current emergency was simply a creature of its own making, i.e., its failure to prepare an adequate environmental documentation in a timely fashion, via the traditional EIS process or otherwise."[150] The Court's reference to *Valley Citizens* infers that what constitutes an emergency is the timing and level of threat.

The overriding of congressional legislation for the preservation of national security has a history throughout the twentieth century, but cases were primarily during actual wartime and

[148] *Winter v. Natural Resources Defense Council*; Stellakis, 375.
[149] *Winter v. Natural Resources Defense Council.*
[150] Vassar, "*NRDC v. Winter*," 292.

perceived national emergencies. A theme throughout the national security cases was the use of the "clear and present" danger test, as demonstrated in the beginning of the Free Speech Tradition. During World War I, the Espionage Act (1917), the Enemy Act (1917), and the Sedition Act (1918) were passed for the protection of US national security and the protection of democracy. But the acts also invaded civil liberties, especially free speech as demonstrated first in the US Supreme Court case *Schenck v. United States* (1919). The Sedition Act forbade the uttering, printing, writing, or publication of any disloyal, profane, scurrilous, or abusive language concerning the war. In *Schenck*, Charles Schenck, Secretary of the Philadelphia Socialist Party, was indicted for urging resistance to the draft during World War I. He had sent out circulars condemning conscription as despotic and unconstitutional and calling on draftees to assert their rights and refuse induction. The White Court (1910-1921) majority found Schenck in violation of the Espionage Act and Justice Wendell Holmes attempted to define the limits on free speech by confining them to "proximity and degree" and that an action must have been in clear and present danger to be in substantial violation of the law. This "clear and present" danger test became precedent for later national security cases during the rest of World War I, World War II, and the Cold War.[151]

In 1942, following the Japanese attack on Pearl Harbor, President Franklin D. Roosevelt signed Executive Order 9066, which authorized the Japanese Relocation program. For the preservation of national security, the entire Pacific Coast was designated as a military zone susceptible to military attack by the Japanese. Japanese nationals and US citizens of Japanese ancestry were required to report to designated central military locations and were transported to "relocation centers" in the interior United States. Those who were assigned to the detention camps were forced to surrender their property, homes, and jobs. This relocation program is

[151] Finkelman and Urofsky, *A March of Liberty*, 684-87.

regarded as the most serious invasion of civil liberties by the federal government in US history. A series of cases, titled the "Relocation Cases," attempted to challenge the program, the most famous being *Hirabayashi v. United States* (1943) and *Korematsu v. United States* (1944). Gordon Hirabayashi violated the enforced curfew and the Stone Court (1941-1946) unanimously upheld the presidential and congressional authority to impose curfew during wartime. The Court opinion included remarks that discrimination based on race, while in violation of civil rights, had been clearly relevant to the situation. Korematsu refused the leave military war zone and the Court found the war powers of Congress sufficient to sustain the order. The Court held that in wartime, civilians had to defer to military judgment and bear the resulting hardships that accompanied war. In both relocation cases, the Court still avoided addressing the substantive issue of race. The violations of civil liberties in the Relocation Cases were confirmed through military necessity and the preservation of internal national security.

Following World War II, the Cold War led to additional legal cases where authorities disregarded constitutional rights for the supposed preservation of US national security. The Red Scare took place during the 1940s and 1950s and subverted civil liberties, destroyed reputations of innocent people, and gave congressional investigations a bad reputation. The American fear of communist spies during the Cold War prompted the creation of the Committee on Un-American Activities to root out alleged internal security risks. The Committee prosecuted twelve leaders of the American Communist party under the Smith Act of 1940. The Smith Act made it a crime to conspire, teach, or advocate the overthrow of the government by force, or to belong to a group advocating such overthrow. The "belonging to a group" part of the statute bypassed the "clear and present" danger test created in *Schenk*. But the cases involving the statute resulted in split decisions, which signified that the US Supreme Court was not in complete support of the act

because the Court wanted proof of intent of subversion. In the case *Dennis v. United States* (1951), eleven defendants were members of the Communist Party and had violated the Smith Act and the Taft-Hartley Act, which required all union officers to submit non-Communist affidavits. The Vinson Court (1946-1953) determined that the defendants' filing of false affidavits was intentional with the purpose of defrauding the government. There was no proof of intent, simply a belonging to the Communist Party. Dennis was symbolic of the violation of free speech for the preservation of national security.[152]

The Free Speech cases during WWI, the Japanese Relocation cases during WWII, and the Smith Act cases during the Cold War violated constitutional rights for the preservation of national security. The difference between these cases and *Winter* was that the cases took place during times of war and perceived threats. The current War on Terror can be considered a threat to US national security, but a difference between *Winter* and the previous cases can be deduced using the clear and present danger test. Courts have used the clear and present danger test to judge the proximity and degree of a threat. Threats with close proximity or of high degree were considered emergencies and, therefore, required more drastic legal action. The Free Speech cases, Japanese Relocation cases, and the Smith Act cases involved threats that were within the United States and were during perceived high degrees of threat, meaning WWI, WWII, and the early stage of the Cold War. Stephen Holmes, Walter E. Meyer Professor of Law at New York University School of Law, analyzed the distinction between novel and urgent threats. Urgent threats require an immediate response and have precedents and protocols to follow. Novel threats lack a precedent and therefore lack a protocol to follow. But a novel threat is not considered an "emergency" like a sudden event requiring split-second decision-making. Urgent threats require quick reaction, with no opportunity for serious consultation and debate. Holmes argued that an

[152] Finkelman and Urofsky, 835-39.

enduring novel crisis, national-security personnel have time to think and rethink, plan ahead and revise their plans. The War on Terror can be considered an enduring, novel crisis because it lacks proximity to the U.S., does not present a high degree of actual physical threat, and has no foreseeable end. But the Roberts Court treated it as a national emergency in *Winter* by allowing the Navy to violate the NEPA for the preservation of national security. The ultimate question is regarding national security decisions, "Is it the kind of emergency that requires the government to rewrite radically, or flatly disregard, previously binding rules?"[153]

Winter was not simply about choosing between national security and the protection of marine life. *Winter* was about government agency adherence to the laws enacted by Congress, and the Navy's refusal to do so. The Navy had broken the law and *Winter* was pivotal in establishing whether or not the preservation of national security is reason enough for disregarding the laws created through the democratic process. Finding a middle ground between the Navy and the NRDC has proven difficult, especially involving the use of sonar. MFA sonar has proven vital to detecting silent submarines, which threaten the safety of the United States and its military. Vassar argued "the Ninth Circuit Court of Appeals correctly determined that an emergency cannot refer to pre-planned, long-term training exercises as part of a military policy that has no foreseeable end." But, he stated, "The intent behind the adoption of the emergency circumstances regulation only contemplates unexpected, unplanned circumstances that arise independent of agency action."[154] Vassar's proposal is logical; it would allow abrogation in emergency circumstances, such as those in *Valley Citizens*, but would still prevent agency action abuses, such as in *Winter*. But an emergency circumstance amendment to the NEPA should be considered with caution because of the legal history of the ESA.

[153] Stephen Holmes, "In Case of Emergency: Misunderstanding Tradeoffs in the War on Terror," *California Law Review* 97 no. 2 (April 2009): 309-11.
[154] Vassar, "*NRDC v. Winter*," 281-82.

Similar to NEPA, the ESA was enacted in 1973 with broad-sweeping legal protections for endangered species and their habitats, initially with absolutely no exceptions. Section 7 of the act prohibits the taking of any listed endangered species and their habitat by any person or governmental agency.[155] In the US Supreme Court case *TVA v. Hill* (1978), in a 6-3 decision, the Burger Court (1969-1986) approved an injunction against the Tennessee Valley Authority because completion of the Tellico Dam would have violated the ESA by harming the endangered snail darter species and its habitat. The Court really had no choice because there were no avenues for exemptions from the ESA prohibitions. Six months after *TVA*, Congress amended the ESA to create an Endangered Species Committee with the authority to grant exemptions from Section 7 prohibitions. *TVA* was a victory for the ESA, but also a loss with the creation of the Endangered Species Committee and the right of public interest in abrogating the ESA. Enforcement of the ESA has relied on administrative deference rather than the text of the law, de facto gutting the purpose of the ESA; the protection of endangered species. This is due to the very broad reading of the committee duties being, "the Committee shall grant exemption for any agency action is the Secretary of Defense finds that such exemption is necessary for reason of national security."[156] This broad reading does not specify what circumstances composes "reason of national security." This same ambiguity is present in *Winter*, but, unlike the ESA, there was no national security exemption within the NEPA.

The NEPA regulations should be read narrowly with no exceptions. *Winter* was not about the Navy harming marine life; it was about the *law* and the Navy's blatant disregard for it. The outcome of *TVA* rendered the ESA ineffective. But the ESA and the NEPA drastically differ on one crucial point; the ESA is prohibitory legislation and the NEPA is regulatory legislation. The

[155] Endangered Species Act of 1973, Public Law 93-205.
[156] *TVA v. Hill,* 437 US 153 (1978); Murchison, *The Snail Darter Case,* 1-2, 141, 153, 168-69; Vassar, "*NRDC v. Winter*," 297.

ESA strictly prohibits any action in violation of its mandates. The ESA demands strict protections for listed endangered species. Section 7 prohibits the taking of any listed endangered species and their habitat by any person or governmental agency.[157] But the NEPA is merely part of the decision-making process and does not determine the decision outcome. The NEPA provides a step-by-step procedural framework federal agencies must work within to ensure policies of the act are implemented. The NEPA technically does not prohibit government action, it merely requires compliance to its procedural regulations.

Returning to *TVA*, the reaction of Justice Lewis F. Powell was, "The majority's interpretation of the ESA established 'a continuing threat to the operation of every federal project, no matter how important to the Nation.'"[158] Justice Powell viewed the ESA as a threat to any government action. The NEPA was viewed with this same perspective in *Winter*. Assume, hypothetically, that the Navy had completed an adequate EIS and that the level of irreversible environmental effects prohibited the sonar trainings altogether. The US Supreme Court still could have overridden the decision for the preservation of national security. A change of perspective is needed for environmental law to succeed in its directives. The NEPA should not be viewed as an enemy and rather be viewed as an ally to help agencies make better-informed decisions.

The purpose of the NEPA is to prevent irreparable environmental impact by federal agencies. Thirteen-thousand marine mammal injuries have been attributed globally to the US Navy's use of sonar. [159] In *Winter*, it was difficult for the NRDC to prove legal injury because cetology was an underdeveloped discipline due to a lack of funding and specimens. Research toward cetology was left to the Navy's ONR because the EPA and Fisheries lacked sufficient

[157] Endangered Species Act of 1973.
[158] Ibid., 138-39
[159] Ibid., 351.

funding. Obviously, the Navy was biased because it held a stake in the use of MFA sonar and its effect upon marine life. But the Navy was entirely knowledgeable about the environmental effects of sonar upon marine life. The Navy's environmental assessment predicted that no marine mammals would have been killed by the sonar, but that 564 physical injuries and 170,000 behavioral disturbances would occur over the two-year training course. As explained in this work, the cases of behavioral disturbance most often, in the case of marine life, result in death.

Beachings are a recent phenomenon, occurring primarily during the 1990s. So the rarity of specimens slowed the development of cetology. As exemplified in *Winter*, we still do not fully understand the effects of sonar upon marine life. The issue of noise pollution and its effects upon marine life is still being debated politically, scientifically, and legally. The purpose of the NEPA and its EIS regulation is to investigate the unknowns of government agency action, such as in *TVA* and in *Winter*. Dan Tarlock argues that "environmental law is fated to be about process rather than predictable outcomes" because environmental protection is a process evolving along with the discovery of new information.[160] A fear of the unknown fuels scientific investigations, educates the public, and informs the decision-making process. The NEPA should contain absolutely no amendments and no exceptions should be permitted by any authority. The regulations set forth in the NEPA are the most effective safeguards against federal environmental abuses, many of which are merely the result of a lack of information. William Rodgers summarized the relationship between science and law by stating, "Without demeaning the many distinctions between the exercise of science and the practice of law, let me cut to the chase and declare that science is mostly about the 'pursuit of truth' and law is mostly about 'who wins.'"[161]

[160] Tarlock, "Is There a There in Environmental Law?" 220.
[161] William H. Rodgers, Jr., "Giving Voice to Rachel Carson: Putting Science into Environmental Law," *Journal of Land Use & Environmental Law* 28, no. 1 (Fall 2012): 61; William Rodgers is the Stimson Bullitt Endowed Professor of Environmental Law at University of Washington School of Law.

The most intriguing aspect of *Winter* was that the Roberts Court actually granted the Navy's request for exemption from the NEPA. The Navy's national security "emergency" was plainly the result of the Navy's failure to complete a satisfactory EIS before its proposed trainings. Then the Navy attempted to override the NEPA by consulting the CEQ for alternative arrangements, but the Court determined that only Congress could alter the NEPA regulations, and that the CEQ held no override authority. And yet, after the Court dispensed with all the Navy's arguments, the Court majority granted the Navy's request. In the Court opinion, Justice Roberts stated:

> Military judgments and interests do not always trump other considerations and the Court has not held that they do. But the public interest in ensuring that the Navy is prepared to counter the serious risks to national security posed by modern diesel-electric submarines in the hands of potential adversaries clearly outweighs the interests of the plaintiffs in this case.[162]

The opinion in *Winter* paints the Roberts Court (2005-present) as an activist court for national security interests because the Court usurped the authority of Congress by overriding the NEPA, an authority it stated belonged only to Congress.

A legacy of *Winter* is that the majority's decision placed the burden of proof on those in favor of the NEPA regulations. The District Court required the plaintiffs to prove a likelihood of success on the merits of the case and the *possibility* of irreparable injury. *Winter* demanded the plaintiffs prove that irreparable injury is *likely* and imminent. More importantly, *Winter* demonstrates a meritorious imbalance of the equities of the case. The Roberts Court ruled that the District Court abused equitable discretion when it issued the injunction because it had not considered the hardships of the case equally.[163] But the District Court had considered the hardships equally because it had issued alternative arrangements so that the Navy could still

[162] *Winter v. Natural Resources Defense Council*.
[163] Stellakis, 379-80, 370.

conduct sonar training exercises, but with less harm to the environment. The District Court created a compromise so that both interests could have been preserved to a certain degree.

Author Stephen Dycus stated:

> Environmental sacrifices may sometimes be required to preserve national security. But it is difficult to know when these sacrifices are truly necessary. Because of the potential gravity of a wrong decision, doubts are usually resolved against environmental interests, especially during wartime or a great national emergency. To respond to these kinds of crises, Congress included provisions in most environmental statutes that allow for their temporary waiver on a case-by-case basis. The question facing the nation now is whether the threat of another terrorist attack justifies the permanent suspension of environmental protections that do not appear to have materially affected military readiness.[164]

Dycus conceded that compromises in environmental law for the sake of national security may sometimes be necessary. He quoted the Court in saying, "this concept of 'national defense' cannot be deemed an end in itself, justifying any exercise of legislative power designed to promote such a goal."[165] He argued that if trade-offs between national security and environmental protection are to be made, then the results should be the result of thorough analysis of the interests in question, and involve more public discussion. The use of sonar and its harmful effects upon marine life is still a topic of international debate within the scientific, political, and legal arenas, which imbues *Winter* with relevancy and importance. This work is neither a defense for environmental interests nor a critique of the Navy or the Roberts Court. The litigation history of *Winter* has proven that strict adherence to the NEPA regulations ensures better-informed decisions by government agencies and increased public involvement in the decision-making processes. A national security amendment would reduce the effectiveness of the NEPA regulations, which are to prevent unknown environmental abuses by government agencies. As evident in the argument of Gregory G. Garre, the Navy's training exercises would

[164] Dycus, 5.
[165] Ibid., 53.

have resulted in unavoidable and irreversible environmental harms, but they argued that the alternative arrangements issued to them by the District Court would have impeded their ability to train properly, and therefore endanger national security. The CEQ and the Roberts Court agreed with the Navy's claims, but neither held the authority to do so. The Roberts Court had usurped Congressional authority by overriding the NEPA EIS requirement.

It would be simple to conclude that the Roberts Court simply did not support environmental protection or that "national security" is just a card government agencies use to disregard congressional legislation. *Winter*, however, was about the role of the judiciary in environmental politics in the early twenty-first century. The judiciary has gained greater authority in environmental politics due to the legislative deadlock. But with that increased authority, courts are called upon to rule on controversial topics. And *Winter* was one of those hard decisions that the judiciary had to make. A further inquiry is whether the increased role of the judiciary will support or debilitate the environmental statutes created in the golden era of the environmental movement.

CHAPTER VI

CONCLUSION

The US Supreme Court case *TVA v. Hill* (1978) was the first major case that illustrated the crucial role of the courts in the future of environmental policymaking. The Supreme Court ruled that the Tennessee Valley Authority, a government agency, was not permitted to complete the Tellico Dam because it would have violated the Endangered Species Act (ESA). The Little Tennessee River was the protected habitat of a listed endangered species of fish called the snail darter. Congress responded with the creation of the Endangered Species Committee, which permitted the completion of the Tellico Dam. *TVA v. Hill* was a monumental success and failure for the ESA. The act was upheld in the highest court in the United States, but its statutes were also weakened by the creation of the Endangered Species Committee. The greatest legacy of the case was that it illustrated the pivotal role judicial courts would play in future environmental politics.

Relaxed legal standing rules and provisions for citizen suits opened the judicial pathway to environmental policy supporters and opponents alike. Through litigation, environmental organizations essentially became the regulators of corporations and regulatory government agencies. The agencies tasked with implementing environmental statutes lacked the adequate funding and political support to properly administer statutes. As a result, the agencies were overwhelmed with lawsuits. In the case of the ESA, most species listings have been the result of legal pressures placed on the implementing agencies. Between 2000 and 2003, every single species listed was the result of lawsuits. The environmental organization Center for Biological Diversity (Center) is responsible for ninety-five percent of the species listings since 2000. The

Center's director Kieran Suckling observed that "the only place the ESA exists today is in the federal courts."[166]

As of 2016, 2272 species are listed as endangered or threatened within the United States and foreign countries. Only 1156 of those are involved in the FWS recovery plans, however. So nearly half of listed species are part of recovery plans. The total for species only within the United States is 1603, which is nearly seventy percent of the total listed species. Of that total, 1228 are listed as endangered and only 375 are listed as threatened. Interestingly, 675 of the 906 listed plant species are part of recovery plans, while only 481 of the 1366 listed animal species are part of recovery plans, which is nearly thirty-five percent compared to the plants' seventy-five percent. As of 2016, seventy-one species have been proposed for listing under the ESA and only fifteen species have been considered for delisting (fig. 3).[167]

[166] Christopher M. Klyza and David J. Sousa, *American Environmental Policy, 1990-2006: Beyond Gridlock*, (Cambridge, MA: MIT Press, 2008), 153-54.

[167] U.S. Fish & Wildlife Service, "Listed Species Summary (Boxscore)," ECOS Environmental Conservation Online System, last updated October 25, 2016, accessed October 25, 2016, http://ecos.fws.gov/ecp0/reports/box-score-report; U.S. Fish & Wildlife Service, "Species Proposed for Listing," ECOS Environmental Conservation Online System, accessed October 25, 2016, http://ecos.fws.gov/ecp0/reports/ad-hoc-species-report?status=P&header=Species+Proposed+for+Listing&fleadreg=on&fstatus=on&finvpop=on.; U.S. Fish & Wildlife Service, "Species Proposed for Status Change or Delisting," ECOS Environmental Conservation Online System, accessed October 25, http://ecos.fws.gov/ecp0/reports/ad-hoc-species-report?status=SC&header=Species+Proposed+for+Status+Change+or+Delisting&fleadreg=on&fstatus=on&finvpop=on.

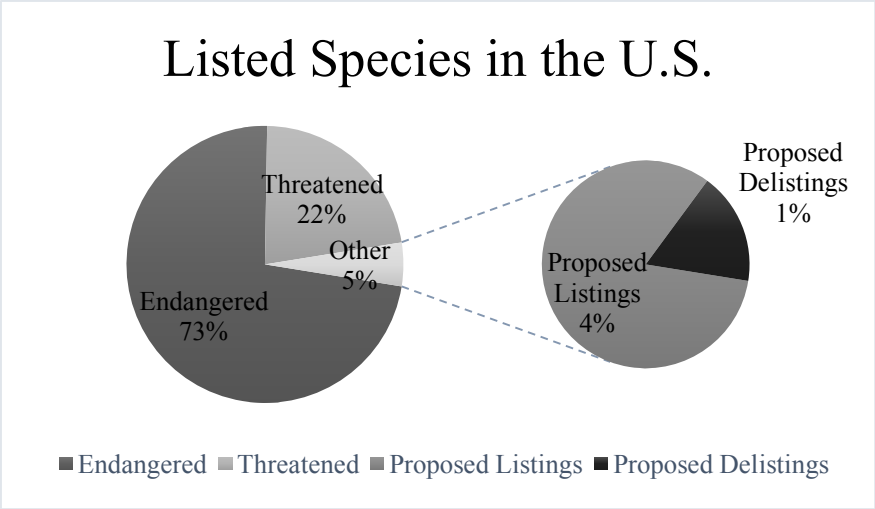

Figure 3. "Listed Species in the U.S." Data obtained from: U.S. Fish & Wildlife Service, "Listed Species Summary (Boxscore)," ECOS Environmental Conservation Online System, last updated October 25, 2016, accessed October 25, 2016, http://ecos.fws.gov/ecp0/reports/box-score-report; U.S. Fish & Wildlife Service, "Species Proposed for Listing," ECOS Environmental Conservation Online System, accessed October 25, 2016, http://ecos.fws.gov/ecp0/reports/ad-hoc-species-report?status=P&header=Species+Proposed+for+Listing&fleadreg=on&fstatus=on&finvpop=on.; U.S. Fish & Wildlife Service, "Species Proposed for Status Change or Delisting," ECOS Environmental Conservation Online System, accessed October 25, http://ecos.fws.gov/ecp0/reports/ad-hoc-species-report?status=SC&header=Species+Proposed+for+Status+Change+or+Delisting&fleadreg=on&fstatus=on&finvpop=on.

A total of seventy-six species have been delisted since 1967. Ten were delisted due to extinction, nineteen were delisted due to data errors and taxonomic revisions, and the remaining forty-seven species were delisted due to recovery. Advocates and opponents have expressed dissatisfaction with the limited number of delistings since the enactment of the ESA. Opponents view the lack of delisting as confirmation that the ESA regulations do not justify the societal costs. And advocates of the act view the lack of delistings demonstrates the need for further protections and increased recovery efforts. However, authors Holly Doremus and Joel E. Pagel argue that delistings are not the proper way to assess whether or not the ESA is fulfilling its purpose in protecting species from extinction. They viewed delisting as a long-term goal rather than a short-term measure of success. They found that after a year of enlistment, more than half of listed species have gained statuses of stable or improving. The longer a species is listed, the

more it appeared to improve. But the authors predicted that most species will be listed in perpetuity because the risks to their survival more often remain after their enlistment. This has been attributed to the politics involved in species conservation, which often slows or prevents species listing and recovery. As a result, species are more commonly listed when their populations are critically low and unlikely to recover quickly, if at all. This is attributable to the threats that remain after the enlistment.

The greatest threat to endangered species survival is habitat loss and modification. Of the 1603 domestic US species listed under the ESA, 792 have been assigned designated critical habitat. That means that nearly half of all listed US species are in danger of extinction because they lack viable habitat to reside within. Doremus and Pagel found that 85 percent of all listed species are threatened by habitat degradation and that 49 percent were threatened by competition and predation by invasive species. The case of the northern spotted owl was evidence of both threatened habitat and competition with invasive species. The northern spotted owl's habitat was protected under the ESA, but habitat destruction in the surrounding region caused species to invade the spotted owl's habitat. Unable to compete with the influx of additional species, the spotted owl reached extinction, even though its designated habitat remained protected. For species to be delisted reasonably, the law requires assurances that threats will be sufficiently controlled for the foreseeable future to prevent species extinction. But if habitat loss and invasive species competition are the greatest threats to species survival, then species could never reasonably be delisted. The root of species habitat loss and increased species competition is human development.[168]

[168] U.S. Fish & Wildlife Service, "Delisting Report," ECOS Environmental Conservation Online System, last modified September 12, 2016, accessed October 25, 2016, http://ecos.fws.gov/ecp0/reports/delisting-report; U.S. Fish & Wildlife Service, "U.S. FWS Threatened & Endangered Species Active Critical Habitat Report," ECOS Environmental Conservation Online System, last modified October 24, 2016, accessed October 25, 2016,

Despite its shortcomings, the ESA is the only law in the United States that provides habitat protection for protected species, even placing substantive restrictions on private land-use decisions. The Marine Mammal Protection Act (1972), Migratory Bird Treaty Act (1918), and the Bald Eagle Protection Act (1940) prohibit the direct taking of members of protected species, but do not extend protections to the species' habitats. The ESA, in theory, addresses all the threats to listed species, but the real-world practice of the statute has proven difficult due to the politics surrounding the act. As a result, Doremus and Pagel argue that delisting should be approached with caution. If species are delisted prematurely or before the threats to their survival are still present, their survival is unlikely. Opponents of the act argue that the cautious approach impedes economic progress. But it only prohibits actions that contribute to species' extinctions. Section 7 requires federal agencies to consider the effects of their actions and whether they will jeopardize listed species' continued existence. Of the nearly 100,000 consultations between 1987 and 1994, only fifty-four actions were halted. Section 9 of the act protects listed species against taking without a permit, but section 10 allows USFWS to permit takings as long as those takings would not jeopardize the species' continued existence. The consultation process required by the ESA required by sections 7, 9, and 10 is similar to the consultation process in the National Environmental Policy Act (NEPA), which contains regulations requiring federal agencies to assess the environmental effects of their proposed actions. Both acts were the product of humanity's acknowledgement of the relationship between humanity and the environment. And the purpose of both consultation processes is to regulate and mitigate humanity's effect upon the environment in an effort to avoid further environmental abuses.[169]

---

http://ecos.fws.gov/ecp/report/table/critical-habitat.html; Holly Doremus and Joel E. Pagel, "Why Listing May Be Forever: Perspectives on Delisting Under the U.S. Endangered Species Act," *Conservation Biology* 15, no. 5 (Oct. 2001): 1260-1261, 1266.

[169] Doremus and Pagel, "Why Listing May Be Forever," 1262-1263, 1266-1267.

In her work "The Endangered Species Act: Static Law Meets Dynamic World," author Holly Doremus was interested in the development of the ESA from its enactment in 1973 to its form in 2010. She found that the original drafting and implementation of the ESA reflected the context of the time, including the prevailing scientific beliefs, the political context, and the legal context. The original drafting was based on the static conception of nature and of law. Humans viewed nature as always striving towards equilibrium and balance. But over the past four decades, science has evolved and humans now know nature to be in a state of constant flux. And that nature is not always progressing toward equilibrium; it is dynamic and is capable of rapid change. For the ESA to be effective, scientific, political, and legal authorities must adopt a more realistic view of nature's dynamic qualities and avoid the static viewpoints of the past.[170]

Support for environmental protection functions in ebbs and flows based upon the scientific, political, economic, and legal circumstances of the time. The historical context is important for understanding the motivations of judicial, executive, and legislative decisions. The listing of endangered species can serve as an example in understanding the relationship between context and authority decisions. As demonstrated in figure 3, the listing of species between 1967 and 2016 does not form a linear progression towards more or less species being listed each year. The graph is comprised of ebbs and flows because the listing of species depends upon the moving parts in the machine of environmental policy. A comprehensive analysis of the data in figure 3 would be a separate work, but some of the peaks of valleys in the data can be partly explained by the work of environmental historians.

[170] Holly Doremus, "The Endangered Species Act: Static Law Meets Dynamic World," *Washington University Journal of Law & Policy* 32 (Jan. 2010): 175-176, 234-235.

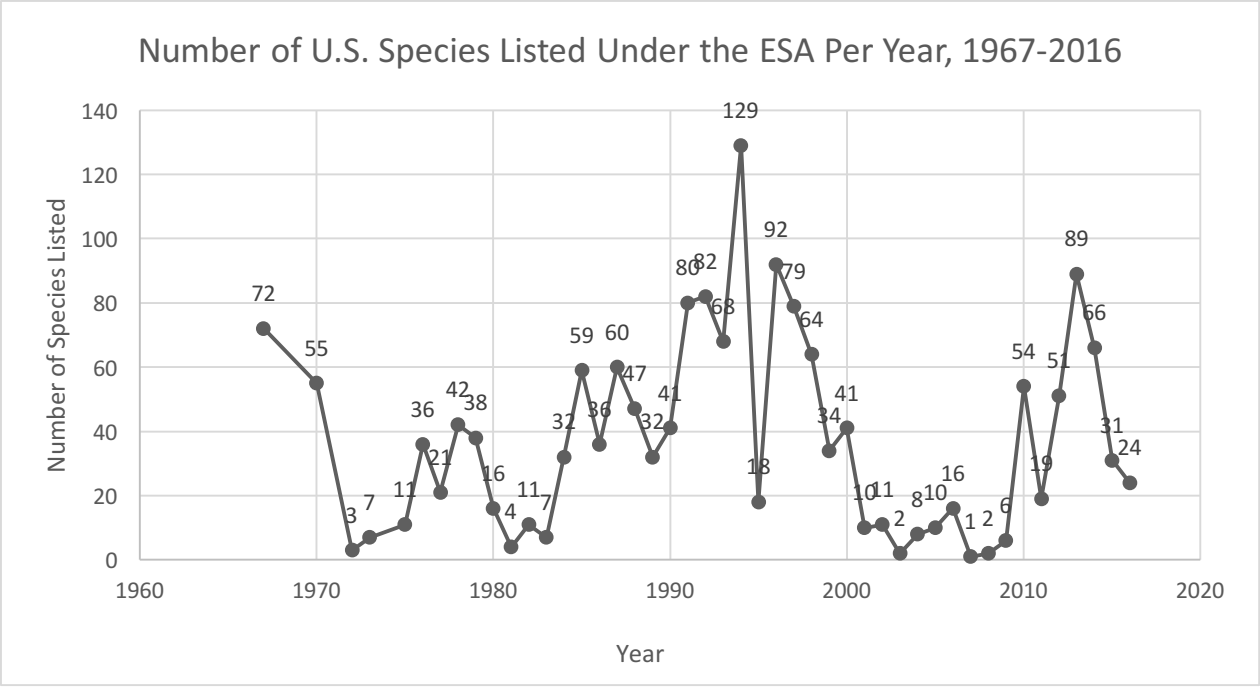

Figure 4. The number of U.S. species listed under the ESA per year from 1967 to 2016. The data is the number of species listed per that calendar year. Data obtained from: U.S. Fish & Wildlife Service, "U.S. Federal Endangered and Threatened Species by Calendar Year," last modified 2016, accessed October 25, 2016, http://ecos.fws.gov/ecp0/reports/species-listings-count-by-year-report.

In his work *Preserving the Nation: The Conservation and Environmental Movements 1870-2000*, author Thomas R. Wellock explained some of the reasons environmental interests increased then decreased through analysis of presidential administrations. The initially high listings can be attributed to the success of the environmental movement during the 1960s and early 1970s and the creation of the ESA in 1973. Beginning in 1977, the James (Jimmy) Carter administration leaned in favor of environmental interests and was composed of environmental players, such as Gus Speth, founder of the Natural Resources Defense Council (NRDC), who was appointed chairman of the Council on Environmental Quality (CEQ). Environmental organizations became more professional in their outlook, structure, and staffing. These factors may have influenced the success of listings during the late 1970s.[171]

[171] Thomas R. Wellock, *Preserving the Nation: The Conservation and Environmental Movements 1870-2000* (Wheeling, IL: Harlan Davidson, Inc., 2007), 217-218.

The election of Ronald Reagan in 1980 signaled the victory of a conservative ideology, which included a desire to roll back environmental regulations to "set business free again." The neoconservative administration sought to transfer power from the public to business and from the federal government to the states. The neoconservative movement was anti-environmentalist because environmental regulation had expanded federal power at the expense of the states, had hindered private property rights, and had harmed business interests. Among other anti-environmentalist appointees in his cabinet, Reagan appointed James Watt as Secretary of the Interior. Watts' strategy was the deregulation of natural resource management and to transfer federal lands to private interests. Wellock termed this movement as "Reagan's anti-environmental revolution." By the mid-1980s, a series of environmental disasters caused a rejection of Reagan's anti-environmental revolution. Families were removed from Times Beach, Missouri due to dioxin contamination, thousands died at a Union Carbide plant in Bhopal, India, scientists were worried about ozone depletion due to carbon emissions, and the Chernobyl disaster in 1986 provided environmentalists cause to push back at the Reagan administration. Key leaders of the administration resigned in disgrace, including James Watt. The Reagan years of the 1980s are regarded as a stalemate for environmentalists, which may have contributed to the low number of listings under the ESA during the early 1980s.[172]

After eight years of the Reagan anti-environmental revolution, President George H.W. Bush entered the White House in 1989 and pledged to be the "environmental president." Initially in his presidency, he seemed to be the president environmentalists had hoped he would be. He supported revisions to the Clean Air Act (CAA) and international agreements to limit greenhouse gas emissions to reduce global warming. But by the latter half of Bush's term, he opposed international agreements within the United Nations Earth Summit in Rio de Janeiro in 1992 and

[172] Ibid., 218-222.

he would not sign the Biodiversity Convention. He led the opposition to establishing deadlines or targets for reducing greenhouse gasses and refused to commit additional support for the Global Environmental Facility, an agency that funded global research projects on greenhouse gas emissions. Wellock attributed Bush's transition from pro-environmentalist to conservative on the complexity of environmental politics. He seemed to handle domestic environmental controversies well, but when international politics were involved, such as in the UN Earth Summit, the Biodiversity Convention, and the Global Environmental Facility, Bush took a more conservative stance. The situation was made even more complex by the environmental topics at hand. Biodiversity and global warming are threats with no foreseeable end, and basing policies on those ongoing threats proved complicated and ever-changing. Bush had proven to be a more conservative Republican environmentalist than activists would have preferred and environmentalists were anxious for the election of William (Bill) Clinton in 1992.[173]

Clinton had demonstrated little interest in environmental issues, but Vice President Al Gore was a passionate environmentalist and even wrote a book about environmentalism titled *Earth in the Balance*. The Clinton Administration proved to be the pro-environmental administration that environmentalists had hoped for in President Bush. Clinton supported the United Nations Population fund and signed the Biodiversity Convention that Bush had refused to endorse. He also approved goals for stabilizing US greenhouse gasses at the 1990 levels. The pro-environmental stance of the Clinton administration could have been partly responsible for the surge of listings under the ESA during the early to mid-1990s.[174]

But in 1994, Republicans had won a victory over the Democrats in the House of Representatives, which turned the tide against environmentalism. This can be observed in figure

[173] Ibid., 237-238.
[174] Ibid., 238.

4 with the massive drop in listings from 129 in 1994 to eighteen in 1995. Congress pressured Clinton to oppose the 1997 Kyoto Protocols, which sought binding commitments to reduce greenhouse gas emissions in developed nations. The failure of environmentalism during the 1990s reflected the growing conservatism in the United States. The Republican majority in the House offered the "Contract with America," which promised to cut government regulations, spending, and taxes. The result was the "Wise Use Movement," which was a new form of conservation without government regulation. The movement favored individual property rights in opposition to community and government power. It further argued that local control was more appropriate than federal control because it was the local populations that would be affected by the decisions.[175]

Parties have questioned whether environmental authority should be reverted back to the states rather than resting with the federal government. An early example of this type of criticism was the Sagebrush Rebellion during the 1980s. The Sagebrush Rebellion was a grass-roots movement that supported Reagan's anti-environmental revolution. The rebellion involved western ranchers and livestock raisers who wanted federal lands reverted back to state and private control. They argued that states should have more rights to determine what happens to the lands within their borders. They also argued that western states held less authority than eastern states because of large federal land holdings in the West. The rebellion had a strong political backing, such as senators Barry Goldwater (R) and Dennis DeConcini (D) of Arizona, Orrin Hatch (R) of Utah, and Malcom Wallop (R) of Wyoming. The states where the federal government held most of the state's lands, such as Nevada, Wyoming, Utah, and New Mexico,

[175] Ibid., 238-39.

had the strongest emotional appeal and state legislatures passed resolutions calling for the transfer of the lands back under state ownership.[176]

The valleys within the data in figure 4 can be attributed to the advent of the Wise Use Movement, which had coalesced during the 1980s. The movement was funded by corporate interests who viewed federal environmental power as a threat to private property and industry, and formed the Center for the Defense of Free Enterprise (CDFE). By 1994, it had a backing of powerful politicians, such as senators Jesse Helms and Ted Stevens and former Secretary of Defense Dick Cheney. Support was also found within the George W. Bush Administration (2001-2009), as Interior Secretary Gale Norton was a key representative of the movement. The George W. Bush Administration did not support environmental concerns, which is evident in figure 4 with the deep valleys of the ESA listings between 2000 and 2010. Supporters of wise use claimed that their movement represented grass-roots control and local authority and often agreed on the statement that "environmentalists care more about animals and habitats than about people's jobs." The Bush Administration supported fossil fuel development in wilderness areas and refuges, and withdrew executive support for the reduction of Greenhouse Gases through the Kyoto Accords on Climate Change. Some Republicans in Congress and President George W. Bush even doubted that global warming existed, in opposition to the scientific community's consensus. Senator James Inhofe called global warming "the greatest hoax" to be enforced on the United States.[177]

Al Gore's defeat in the 2000 presidential campaign to George W. Bush, and then Bush's reelection in 2004 was viewed as the death of environmentalism. Former president of the Sierra Club, Adam Werbach, announced that "Environmentalism is dead" and that "Environmentalism

[176] Ibid., 220-221.
[177] Ibid., 239-242.

has become a tradition, not a movement" and that traditions "hold on to the past for a sense of security." It seemed that all three branches of government were hostile toward environmentalists. Wellock quoted columnist Nicholas Kristof from the *New York Times* when he stated that "Environmentalists had so often predicted calamity in the past that they were 'like car alarms, they are now just an irritating background noise.'" Wellock responded that environmentalists had suffered from a credibility problem as public polls expressed a public opposition toward environmentalists. Wellock stated, "It was as if the jaded public had heard it all before, and they had. Every decade of the postwar period had its prophets of doom."[178] In response, environmentalists attempted to espouse more positive visions and increased their bipartisan coalition building in Congress.[179]

A recent environmentalist coalition was with hunters and fishermen, whose alliance defeated the Republican effort in 2005 to open up public lands for purchase by mining companies. Even the primarily Republican organization Trout Unlimited was part of the alliance. A Wilderness Society member stated that "The White House's pillaging of public lands has driven hunters and ranchers into the trenches with environmentalists." The death of the environmental movement was substituted by the multi-use progressive movement and coalitions with other alienated groups, such as hunters and fishermen. Environmental organizations have made the greatest difference to the environmental movement by integrating environmental values into government institutions, laws, and the minds of the American public. A poll in 2005 found that 75 percent of the respondents agreed that "Protecting the environment is so important that requirements and standards cannot be too high, and continuing environmental improvements must be made regardless of the cost." Although some viewed the 2000 presidential election as

[178] Ibid., 242-244.
[179] Ibid., 244-246.

the death of environmentalism, the membership of environmental organizations soared between 1997 and 2005. The Audubon Society gained over 450,000 members, the Sierra Club 200,000, the Nature Conservancy 280,000, and Environmental Defense gained 100,000 members. Due to the membership and ongoing activity of these organizations, one could deduce that environmentalism has been a resilient, popular, and progressive movement during the past five decades.[180]

Environmentalists have expressed mixed views of President Barrack Obama as an environmental president. Some say he failed to fulfill his campaign promises or that the Republicans in Congress stunted his proposed environmental policies. But some have defended Obama and have focused on his efforts in climate change mitigation. During his first term (2009-2013) was focused on economic policies because of the U.S. economic recession in during 2007 to 2008. Then he focused on the enactment of the Affordable Care Act, commonly referred to as Obamacare, which was signed into law in 2010 and aimed to provide more affordable healthcare to the American public. It was not until Obama's second presidential term (2013-2017) that he focused on environmental issues. In September of 2016, Obama sidestepped the Republic Senate majority and formally entered the U.S. into an international climate change agreement with the Chinese President Xi Jinping. The presidents also agreed on curbing other pollutants in the U.S. and China. Obama and Jinping support the U.N. climate-change pact one of his prime legacy goals, which requires 55 nations representing 55 percent of worldwide carbon emissions to formally ratify the agreement. Since the U.S. and China entered the agreement, 25 nations

[180] Ibid., 245-247.

have joined representing more than forty percent of total emissions. Obama is pushing the completion of the agreement by the end of the year as one of his legacy goals.[181]

The 2016 presidential election resulted in a victory for Republican conservative Donald Trump over the Democratic candidate Hillary Clinton. In his article "Donald Trump's Victory Could Mean Disaster for the Planet," Justin Worland argued that environmentalists will have to play defense during Trump's presidency, which begins in 2017. In his campaign speeches, Trump promised to disassemble environmental regulation and favor other sources of industry, even the reintroduction of the ailing coal industry. One of Trump's top priorities is to withdraw the U.S. from the Paris Agreement, which is a prominent agreement on reducing emissions that contribute to climate change. Trump also promised to scrap Obama's Clean Power Plan, which enacted carbon cuts on industry. But author Worland argues that Trump's anti-environmental goals are unlikely to succeed because there is widespread public and political opposition to weakening laws that protect public health, such as the Clean Power Plan and the Clean Air Act. And market forces will likely continue to avoid polluting energy sources, especially coal, because clean sources, such as solar and wind power, have become cheaper. The Sierra Club has stated, "There's progress that's being made on climate change that can't and won't be stopped…We may slow down the rate but that's progress that can't be reversed."[182] We can judge the policies of past executive administrations to gage environmental support and

[181] Darren Samuelsohn, "The Greening of Barack Obama," *Politico*, last updated November 18, 2016, accessed December 4, 2016, http://www.politico.com/story/2014/11/barack-obama-environment-112974; "History and Timeline of the Affordable Care Act (ACA)," eHealth, last updated September 22, 2016, accessed December 4, 2016, https://resources.ehealthinsurance.com/affordable-care-act/history-timeline-affordable-care-act-aca; Dave Boyer, "Obama, Chinese President Ratify Climate-Change Agreement," *The Washington Times*, last updated September 3, 2016, accessed December 4, 2016, http://www.washingtontimes.com/news/2016/sep/3/obama-xi-ratify-climate-change-agreement/.

[182] Justin Worland, "Donald Trump's Victory Could Mean Disaster for the Planet," *Time,* last updated November 9, 2016, accessed December 4, 2016, http://time.com/4564224/donald-trump-climate-change/.

opposition, and try to predict the future of environmental interests under the Trump administration. But the presidency is only one part of the machine of environmental policy.

Since the enactment of environmental legislation during the 1960s and 1970s, executive administrations have both used and abused their implementing authority. They have used their authority to determine which species are protected and when. Environmentalists have regulated authority actions through the ESA's citizen suit provision. The judiciary has responded to these suits by either expanding or limiting the scope of environmental laws. There is a lack of standardization in environmental decisions because cases greatly depend upon the deeper changes in science, culture, politics, and law. As displayed in figure 4, the peaks and valleys in the listing of species under the ESA may have been influenced by the executive branch, but they may also have been influenced by changes in science, politics, and law as well.

The cases discussed within this work highlight three major controversies associated with environmental law and wildlife conservation. The Oregon District Court case Defenders of *Wildlife; et al. v Secretary of the United States Department of the Interior* (2005), referred to as the "wolf case," focused on the role of science, politics, economics, and law in the management and conservation of the gray wolf under the Endangered Species Act (ESA). The case was illustrative of the controversies involved in wildlife conservation, such as perspectives concerning the conservation of predatory wildlife and different approaches to species management. But the major theme in the case was the question of "how much conservation is enough?" This question is still in debate among scientists, politicians, and legal scholars.

As of 2016, the gray wolf (*Canis lupus*) is still listed as endangered, but the FWS has proposed the delisting of gray wolves in California, Michigan, Oregon, Washington, and Wisconsin. The wolves in Minnesota and the western Great Lakes region were considered

recovered and delisted in 2011. The population in Wyoming at Yellowstone National Park was not part of the recovery plan because they were an introduced, experimental population. But their protection as an experimental population was stripped in 2011 because they were considered a viable population. So they ceased to receive legal protection as of 2011. The Northern Rocky Mountain Distinct Population Segment was delisted in 2011 due to recovery, which encompassed Idaho, Montana, Oregon, Utah, Washington, and Wyoming. The only DPS where the gray wolf is listed and is still protected under the ESA is in the Pacific Northwest, Northeast, and Southeast.[183]

A major controversy in current conservation politics involving the gray wolf is species hybridization. In her 2016 work "How Do You Save a Wolf That's Not Really a Wolf?," author Virgina Morell explained that the question, "When is a wolf a wolf?" has plagued scientists, policymakers, and legal scholars for more than three decades as they have attempted to restore and protect wolves throughout North America. A study published in 2016 analyzed the complete genomes of twenty-eight canids. The study revealed that, despite their differences in body size and behavior, the gray wolf and coyote are closely related, and only recently split into two lineages. The same study found that the endangered red and eastern wolves are not unique lineages with separate evolutionary histories, they are actually recent hybrids of gray wolves and coyotes. Gray wolves (*Canis lupus*) and coyotes (*Canis latrans*) have long been accepted North American canid species. Some scientists have recognized the red wolf (*Canis rufus*) and the eastern wolf (*Canis lycaon*) as separate species. As seen in figure 5, the gray wolf and coyote

[183] U.S. Fish & Wildlife Service, "Gray wolf (Canis lupus): Species Profile for Gray wolf (Canis lupus)," ECOS Environmental Conservation Online System, accessed October 25, 2016, http://ecos.fws.gov/ecp0/profile/speciesProfile?sId=4488.

historical roamed the contiguous United States. The red wolf is found in the southeastern United States and the eastern wolf ranges from the Great Lakes region into eastern Canada.[184]

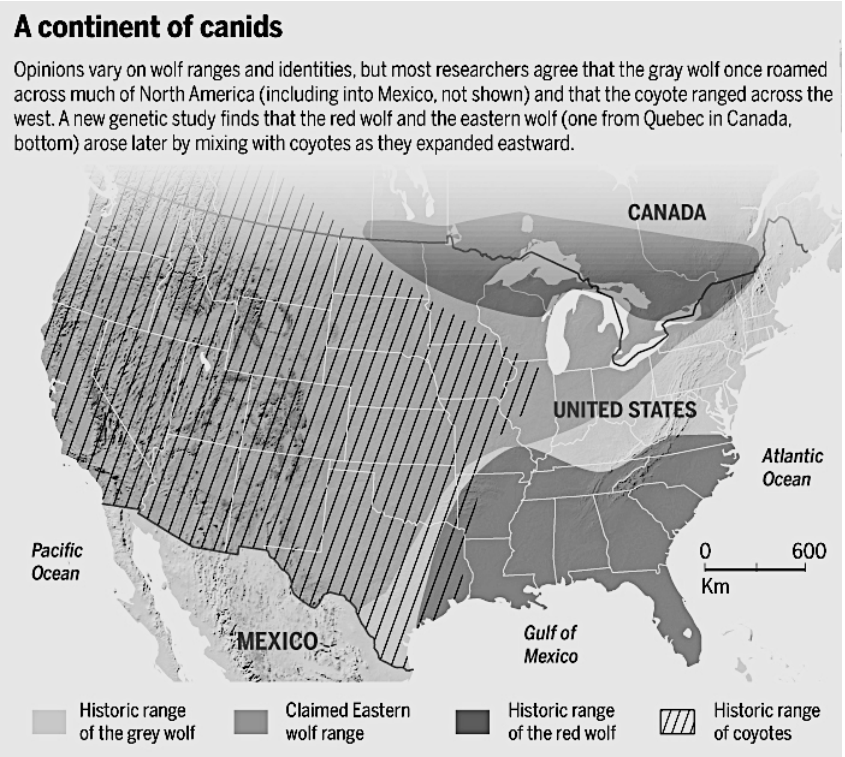

Figure 5. "A Continent of Canids." From Virginia Morell, "How Do You Save a Wolf That's Not Really a Wolf?," *Science Magazine*, last updated July 27, 2016, accessed December 4, 2016, http://www.sciencemag.org/news/2016/07/how-do-you-save-wolf-s-not-really-wolf.

The FWS distinguishes the red wolf and the eastern wolf as species separate from the gray wolf the coyote. The red wolf was added to the Endangered Species List in 1973 and the FWS began a captive breeding program. The reintroduction of the red wolf into the wild has proven difficult because red wolves readily mate with coyotes. The eastern wolf has not been listed under the ESA even though it only occupies a small portion of its historical range. Some researchers, however, have suspected that both the red wolf and the eastern wolf are not their own species separate from the gray wolf and the coyote. Red wolves and eastern wolves are

[184] Virginia Morell, "How Do You Save a Wolf That's Not Really a Wolf?," *Science Magazine*, last updated July 27, 2016, accessed December 4, 2016, http://www.sciencemag.org/news/2016/07/how-do-you-save-wolf-s-not-really-wolf.

actually hybrids created through the mating of gray wolves and coyotes. Conservationists are concerned that reclassifying the red wolf and the eastern wolf would further endanger the species because, legally, hybrid species are not protected under the ESA. Some conservationists argue that both wolves should still receive protection under ESA as hybrids because their hybridization was the result of natural, evolutionary processes. More pointedly, scientists attribute their hybridization to anthropogenic causes. The human-dominated landscape has reduced the wolves' habitats and populations. To adapt to their change in circumstances, the species may have mated to preserve their genomes. Humans caused the creation of the hybrid red and eastern wolves, but, unless the ESA is amended, the red and eastern wolves will not be afforded protection because they are hybrids. A change in perspective is needed in politics and law to incorporate the realities of science for the improvement of environmental policy in the twenty-first century.[185]

The US Supreme Court case *Lujan v. Defenders of Wildlife* (1992) demonstrated the conservative nature of the Rehnquist Court (1986-2006) and its effect on legal standing in environmental cases. The Court's conservative treatment of *Lujan* demonstrated the Court's strategy to limit judicial legislative overreach and maintain the government balance of powers. The case arguments also contained disputes over additional controversies in environmental law, including the textual ambiguities of the ESA, inter-agency authority struggles, the relationship between science and law proposed in nexus theories, and new approaches to legal standing. But the major theme in *Lujan* was that what is considered constitutional or not is largely a matter of interpretation. Court rulings greatly depend upon the philosophical dispositions and personal sensibilities of the court judges and justices.

As of 2016, the geographical application of the ESA is still limited to the United States and upon the high seas. But the act still requires the FWS to list foreign species that are

[185] Ibid.

endangered or threatened, regardless of which country the species resides in. The total number of foreign species listed in 2016 as endangered or threatened is 669. The protections the ESA provides for listed foreign species are primarily commercial, including import, export, take, interstate commerce, and foreign commerce. But the act still only applies to people subject to the jurisdiction of the United States. The FWS argues that the listing of foreign species can generate conservation benefits by increasing awareness for listed species, which may promote research efforts. The act also provides limited financial assistance to develop and manage programs to conserve listed species in foreign countries and encourages conservation programs. Apart from the prohibitions on commerce, the ESA holds limited legal weight for protecting listed foreign species.[186]

The US Supreme Court case *Winter v. Natural Resources Defense Council* (2008) highlighted the conflict between US national security and environmental protection invested in the protection of marine life from US Navy sonar. The Roberts Court (2005-present) ruled that national security was more important than the protection of marine life and the Navy's compliance with the NEPA regulations. *Winter* falls under the theme of "national security trumps all," but the case is representative of many other legal and historical developments, including the relationship between science and law concerning the discipline of Cetology, the potential expansion of executive authority involving the CEQ, proving legal injury, defining "emergency circumstances," and legal standardization proposed in a national security amendment to the NEPA. The major theme in *Winter* is that the relationship between science and law is crucial to the decision-making process concerning environmental policy. Preventative legislation, such as

[186] U.S. Fish and Wildlife Service, "Foreign Species Overview," Endangered Species, last updated October 17, 2016, accessed October 26, 2016, https://www.fws.gov/Endangered/what-we-do/international-activities.html; U.S. Fish & Wildlife Service, "Listed Species Summary (Boxscore)."

the ESA and the NEPA, help authorities make better-informed decisions to prevent unknown and irreversible harms to the environment.

The balance between national security and environmental protection demonstrated in *Winter* had been a legal debate since 1994, and the fourteen-year debate led to the Roberts Court's siding with national security interests in 2008. The scientific, political, and legal debates about the use of sonar and its effects upon marine life continued after the 2008 ruling. In 2012, the US National Marine Fisheries Service permitted the US Navy to use high-intensity sonar, called low-frequency active sonar (LFA), for five years and across more than 70 percent of the Earth's oceans. But the permit required the training vessels to shut down and delay the use of sonar when a marine mammal was detected near the ships. In response, the Natural Resources Defense Council filed a lawsuit, claiming that the permit violated the Marine Mammal Protection Act (MMPA). The San Francisco federal appeals court ruled that the permit failed to satisfy the section of the MMPA that required permit programs to have "the least practicable adverse impact on marine mammals." Fisheries was targeted for not providing adequate protection to "biologically important" areas for the protection of marine life, which was confirmed by the agency's own experts. Recent cases have confirmed the relationship between sonar and marine life injury, but the debate between US national security and environmental protection continues.[187]

The cases presented in this work explore how supporters and opponents of environmental statutes have used the judicial system to achieve their respective policy goals. The legislative gridlock has relegated the environmental movement to the courts. Therefore, agency decision-

[187] Alessandra Potenza, "Navy Sonar that Harms Whales and Dolphins was Improperly Approved, US Court Finds," *The Verge*, last updated July 18, 2016, accessed October 26, 2016, http://www.theverge.com/2016/7/18/12213780/low-frequency-sonar-navy-whales-dolphins-marine-mammals-us-court; BBC News, "Navy Sonar Broke Whale Protection Laws, Says US Court," last updated July 19, 2016, accessed October 26, http://www.bbc.com/news/technology-36834457.

making authorities operate in an environment in which their choices are vulnerable to judicial scrutiny. Non-governmental organizations have proven instrumental to bringing environmental suits before the courts and have essentially become the regulators of regulatory government agencies. The greatest threat to this judicial pathway is the issue of legal standing. The further narrowing of legal standing requirements, such as in *Lujan*, would weaken the ability of courts to rule on the substance of future environmental cases. In light of the increase role of the judiciary in environmental policy-making, the continued ability of citizen groups to participate in litigation is essential to the furthering of environmental objectives and the proper application of environmental statutes. As demonstrated in all the legal cases described in this work, law is a matter of interpretation. The implementation of environmental statutes largely depends upon the personal dispositions and legal philosophies held by court judges and justices. These differing perspectives influence rulings about who participates in the legal process and who holds the authority in policy-decisions. Judicial decisions also depend upon the context in which they reside. As demonstrated in *Winter*, the judiciary does not make rulings without considering the real-world consequences of their decisions. The legislative branch has found difficulty reacting to court decisions, on whether their policies should endorse court rulings or not. Courts and policy-making authorities need rely less on traditional practices in law and politics and need to adopt new innovations in science, politics, and law. This would not necessarily further environmental objectives, but it would provide a more balanced and standardized approach to environmental politics in the twenty-first century.[188]

The cases included in this work were chosen because all of the topics within them are still being debated in the current year of 2016; the conservation and management of endangered

[188] Christopher M. Klyza and David J. Sousa, *American Environmental Policy, 1990-2006: Beyond Gridlock* (Cambridge, MA: MIT Press, 2008), 190-193.

species, the geographical scope of the ESA, the role of the judiciary in environmental policy, and the effects of sonar upon marine life. Of the cases included, the lower courts appear apt to agree with environmental interests, but the Rehnquist Court (1986-2005) and the Roberts Court (2005-present) ruled in favor of the environmental opposition. It would be simple to conclude that the US Supreme Court may not be the appropriate authority for resolving environmental policies. But this work proves that the situation is more complicated than simply who is for or against environmental objectives. As demonstrated within *Lujan*, environmental cases have exposed the ideological and philosophical divisions within the judiciary. But the cases also highlighted the philosophical and ideological divisions within the environmental field. The increased role of the judiciary in environmental policy has given the judiciary the difficult responsibility of resolving divisive controversies associated with implementing environmental policies. The decisions they are requested to make are literally "hard decisions." How does one determine when a species is recovered? How can one determine the constitutionality of an interpretation that resulted from textual ambiguities of the law in question? And how can one determine which is more important, national security or environmental protection? All three of these questions consider areas of public interest. Scientists, politicians, and legal scholars still debate these questions, but only the judiciary has the power to judge whether their decisions are constitutional or not.

BIBLIOGRAPHY

PRIMARY SOURCES

Defenders of Wildlife v. Secretary, United States Department of the Interior. 354 F.Supp.2d 1156 (D. Or. 2005).

Endangered Species Act of 1973. Public Law 93-205.

Lujan v. Defenders of Wildlife. 90 US 1424 (1992).

———. Argument of Edwin S. Kneedler.

———. Argument of Justice Scalia.

———. Justice Blackmun dissents.

———. Justice Stevens concurring in judgment.

———. Response of Brian B. O'Neill.

National Environmental Policy Act of 1969. Public Law 91-190.

Natural Resources Defense Council, Inc. v. Donald Evans, Secretary of Commerce; the National Oceanic and Atmospheric Administration; the National Marine Fisheries Service. 254 F. Supp. 2d 434 (SD NY 2003).

Planned Parenthood of Southeastern Pennsylvania v. Robert P. Casey. 91 US 744 (1992).

———. Justice Scalia dissenting.

TVA v. Hil. 437 US 153 (1978).

Winter v. Natural Resources Defense Council. 07 US 1239 (2008).

———. Argument of Gregory G. Garre.

———. Dissent of Justice Ruth Bader Ginsburg.

SECONDARY SOURCES

"Environmental Politics Since 1945. Hays, Samuel." University of Pittsburgh Press. Accessed October 20, 2016. https://www.upress.pitt.edu/BookDetails.aspx?bookId=35297.

"History and Timeline of the Affordable Care Act (ACA)." eHealth. Last updated September 22, 2016. Accessed December 4, 2016. https://resources.ehealthinsurance.com/affordable-care-act/history-timeline-affordable-care-act-aca.

"Medal of Freedom Awards by President Carter 1977-1981." Jimmy Carter Presidential Library & Museum. Last modified April, 28, 2016. Accessed October 20, 2016. https://www.jimmycarterlibrary.gov/documents/jec/medal.phtml.

Alagona, Peter S. *After the Grizzly: Endangered Species and the Politics of Place in California*. Oakland, CA: University of California Press, 2013.

America's Navy. "Commander Naval Surface Force, U.S. Pacific Fleet." Last modified 2016. Accessed June 11, 2016. http://www.public.navy.mil/surfor/Pages/RIMPAC-2016.aspx#.V1xKvVcld0w.

Andre, Claire, and Manuel Velasquez. "The Spotted Owl Controversy." Markkula Center for Applied Ethics. Ethics and the Environment. Santa Clara University. Last modified November 13, 2015. Accessed June 29, 2016. https://www.scu.edu/ethics/focus-areas/more/environmental-ethics/resources/ethics-and-the-environment-the-spotted-owl/.

Anthony, Robert A. "Which Agency Interpretations Should Get Judicial Deference?-A Preliminary Inquiry." *Administrative Law Review* 40, no. 1 (Winter 1988): 121-137.

Bates, Bethany M. "Reconciliation After Winter: The Standard for Preliminary Injunctions in Federal Courts." *Columbia Law Review* 111, no. 7 (Nov. 2011): 1522-1556.

BBC News. "Navy Sonar Broke Whale Protection Laws, Says US Court." Last updated July 19, 2016. Accessed October 26, 2016. http://www.bbc.com/news/technology-36834457.

Bean, Michael J. and Melanie Rowland. *The Evolution of National Wildlife Law*. 3rd ed. Santa Barbara, CA: Praeger, 1997.

Boyer, Dave. "Obama, Chinese President Ratify Climate-Change Agreement." *The Washington Times*. Last updated September 3, 2016. Accessed December 4, 2016. http://www.washingtontimes.com/news/2016/sep/3/obama-xi-ratify-climate-change-agreement/.

Breger, Marshall J. "Defending *Defenders*: Remarks on Nichol and Pierce." *Duke Law Journal* 42, no. 6 (Apr. 1993): 1202-18.

Burt, Christopher T. "Procedural Injury Standing after Lujan v. Defenders of Wildlife." *The University of Chicago Law Review* 62, no. 1 (Winter 1995): 275-299.

Cannon, Jonathan Z. *Environment in the Balance: The Green Movement and the Supreme Court.* Cambridge, MA: Harvard University Press, 2015.

Carson, Rachel. *Silent Spring*. Boston, MA: Houghton Mifflin, 1962.

Cash, David W. "Beyond Cute and Fuzzy: Science and Politics in the U.S. Endangered Species Act." In *Protecting Endangered Species in the United States: Biological Needs, Political Realities. Economic Choices,* edited by Jason F. Shogren and John Tschirhart. 106-138. New York: Cambridge University Press, 2001.

Clark, Tim W., Murray B. Rutherford, and Denise Casey, eds. *Coexisting with Large Carnivores: Lessons from Greater Yellowstone*. Washington, DC: Island, 2005.

——— and Jason Wilmot. "Wolf Restoration: A Battle in the War over the West," in *Coexisting with Large Carnivores*, edited by Tim W. Clark, Murray B. Rutherford, and Denise Casey, 138-174. Washington, DC: Island, 2005.

Donovan, Craig T. "Delisting the Eastern Gray Wolf: Has the Species Truly Recovered?" *Natural Resources & Environment* 20, no. 2 (Fall 2005): 17-21.

Doremus, Holly. "The Endangered Species Act: Static Law Meets Dynamic World." *Washington University Journal of Law & Policy* 32 (Jan. 2010): 175-235.

——— and Joel E. Pagel. "Why Listing May Be Forever: Perspectives on Delisting Under the U.S. Endangered Species Act." *Conservation Biology* 15, no. 5 (Oct. 2001): 1258-1268.

Dunlap, Thomas R. *Saving America's Wildlife: Ecology and the American Mind, 1850-1990*. Princeton, NJ: Princeton University Press, 1991.

Dycus, Stephen. "Osama's Submarine; National Security and Environmental Protection After 9/11." *William & Mary Environmental Law & Policy Review* 1 (2005): 1-54.

Farber, Daniel A. "Is the Supreme Court Irrelevant- Reflections on the Judicial Role in Environmental Law." *Minnesota Law Review* (1996): 547-569.

———. "Stretching the Margins: The Geographic Nexus in Environmental Law." *Stanford Law Review* 48 no. 5 (May, 1996): 1247-78.

Favre, David S. "Wildlife Jurisprudence." *Journal of Environmental Law & Litigation* 25 (2010): 459-510.

Finkelman, Paul, and Melvin I. Urofsky. *A March of Liberty: A Constitutional History of the United States. Vol. II, From 1898 to the Present*. 3rd ed. New York: Oxford University Press, 2011.

———. *A March of Liberty: A Constitutional History of the United States. Vol. I: From the Founding to 1900.* 3rd ed. New York: Oxford University Press, 2011.

Gatchel, Brian J. "Informational and Procedural Standing After 'Lujan v. Defenders of Wildlife.'" *Journal of Land Use & Environmental* Law 11, no. 1 (Fall 1995): 75-109.

Glicksman, Robert L., and James R. May. "Justice Rehnquist and the Dismantling of Environmental Law." *Environmental Law Review* 36 (2006): 1-32.

Hays, Samuel P. *A History of Environmental Politics Since 1945*. Pittsburgh, PA: University of Pittsburgh Press, 2000.

Holmes, Stephen. "In Case of Emergency: Misunderstanding Tradeoffs in the War on Terror." *California Law Review* 97 no. 2 (April 2009): 301-55.

Hornby, D. Brock. "Summary Judgment Without Illusions." *Green Bag: An Entertaining Journal of Law* (Spring 2010): 273-288.

Horwitz, Joshua. *War of the Whales: A True Story*. New York: Simon & Schuster Paperbacks, 2014.

Hyman, Diana R. "Hyman on Petersen, 'Acting for Endangered Species: The Statutory Ark'." Review of *Acting for Endangered Species: The Statutory Ark* by Shannon Peterson. H-Law, H-Net Reviews. Last modified January, 2003. Accessed October 24, 2016. https://networks.h-net.org/node/16794/reviews/17000/hyman-petersen-acting-endangered-species-statutory-ark.

Kalen, Sam. "Standing on its Last Legs: Bennett v. Spear and the Past and Future of Standing in Environmental Cases." *Journal of Land Use & Environmental Law* 13, no. 1 (Fall 1997): 1-68.

Klyza, Christopher M., and David J. Sousa. "From 'Who Has Standing?' to 'Who is Left Standing?': The Courts and Environmental Policymaking in the Era of Gridlock." *From American Environmental Policy, 1990-2006: Beyond Gridlock*, 153-194. Cambridge, MA: MIT Press, 2008.

———. *American Environmental Policy, 1990-2006: Beyond Gridlock*. Cambridge, MA: MIT Press, 2008.

Leonard, Jonathan Norton. "Rachel Carson Dies of Cancer; 'Silent Spring' Author Was 56." New York Times (April 15, 1964). http://www.nytimes.com/books/97/10/05/reviews/carson-obit.html.

Mladenoff, David J. and Theordore A. Sickley. "Assessing Potential Gray Wolf Restoration in the Northeastern United States: A Spatial Prediction of Favorable Habitat and Potential Population Levels." *Journal of Wildlife Management* 62, no. 1 (Jan., 1998): 1-10.

Morell, Virginia. "How Do You Save a Wolf That's Not Really a Wolf?" *Science Magazine*. Last updated July 27, 2016. Accessed December 4, 2016. http://www.sciencemag.org/news/2016/07/how-do-you-save-wolf-s-not-really-wolf.

Murchison, Kenneth M. *The Snail Darter Case: TVA versus the Endangered Species Act*. Lawrence, KS: University Press of Kansas, 2007.

National Research Council. *Science and the Endangered Species Act*. Washington DC: National Academy Press, 1995.

Natural Resources Defense Council. "Law and Policy. E-Law: What Started It All?" Last modified May 5, 2000. Accessed December 1, 2015. http://www.nrdc.org/legislation/helaw.asp.

NOAA Fisheries. "About Us." National Oceanic and Atmospheric Administration. Last modified May 10, 2016. Accessed June 12, 2016, http://www.nmfs.noaa.gov/aboutus/aboutus.html.

———. "Marine Mammal Protection Act (MMPA)." National Oceanic and Atmospheric Administration. Last modified May 10, 2016. Accessed June 12, 2016. http://www.nmfs.noaa.gov/pr/laws/mmpa/.

Office for Coastal Management. "Coastal Zone Management Act." National Oceanic and Atmospheric Administration. Accessed June 15, 2016. https://coast.noaa.gov/czm/act/.

Petersen, Shannon. *Acting for Endangered Species: The Statutory Ark*. Lawrence, KS: University Press of Kansas, 2002.

Pierce, Richard J., Jr. "Making Sense of Procedural Injury." *Administrative Law Review* 62, no. 1 (Winter 2010): 1-18.

———. "Lujan v. Defenders of Wildlife: Standing as a Judicially Imposed Limit on Legislative Power." *Duke Law Journal* 42, no. 6 (Apr., 1993): 1170-1201.

Potenza, Alessandra. "Navy Sonar that Harms Whales and Dolphins was Improperly Approved, US Court Finds." *The Verge*. Last updated July 18, 2016. Accessed October 26, 2016. http://www.theverge.com/2016/7/18/12213780/low-frequency-sonar-navy-whales-dolphins-marine-mammals-us-court.

Reitze, Arnold W. "Book Review." Review of *The Politics of Conservation* by Frank E. Smith. *Case Western Reserve Law Review* 18, no. 5 (1967): 1827.

Reynolds, Joel R. "Submarines, Sonar, and the Death of Whales: Enforcing the Delicate Balance of Environmental Compliance and National Security in Military Training." *William & Mary Environmental Law Review* 32, no. 3 (2008): 759-802.

Rodgers, William H., Jr. "Giving Voice to Rachel Carson: Putting Science into Environmental Law." *Journal of Land Use & Environmental Law* 28, no. 1 (Fall 2012): 61-69.

Rosenbaum, Walter A. *Environmental Politics and Policy*. 2nd ed. Washington, DC: Congressional Quarterly Inc., 1991.

Samuelsohn, Darren. "The Greening of Barack Obama." *Politico*. Last updated November 18, 2016. Accessed December 4, 2016. http://www.politico.com/story/2014/11/barack-obama-environment-112974.

Sax, Joseph L. Preface to *Creative Common Law Strategies for Protecting the Environment*, edited by Clifford Rechstaffen & Denise Antolini, xvii-xxii. Washington, DC: Environmental Law Institute, 2007.

Schneider, Keith, and Cornelia Dean. "Stewart L. Udall, Conservationist in Kennedy and Johnson Cabinets, Dies at 90." *New York Times* (March 20, 2010). http://www.nytimes.com/2010/03/21/nyregion/21udall.htm.

Smith, Frank E. *The Politics of Conservation.* New York: Pantheon Books, 1966.

Stellakis, John C. "U.S. Navy Torpedoes NEPA: Winter v. Natural Resources Defense Council May Sink Future Environmental Pleas Brought Under the National Environmental Policy Act." *Villanova Environmental Law Journal* 21, no. 2 (2010): 353-381.

Strauss, David A. "The Living Constitution." *The Record* (Alumni Magazine) (Fall 2010). Excerpt from *The Living Constitution*, by David A. Strauss. Oxford: Oxford University Press, 2010. Accessed October 4, 2016. http://www.law.uchicago.edu/alumni/magazine/fall10/strauss.

Sunstein, Cass R. "What's Standing After Lujan? Of Citizen Suits, 'Injuries,' and Article III." *Michigan Law Review* 91, no. 2 (1992): 163-236.

Tarlock, Dan A. "Is There a There in Environmental Law?" *Journal of Land Use and Environmental Law* 19, no. 2 (Spring, 2004): 213-54.

———. "Environmental Law: Ethics or Science?" *Duke Environmental Law & Policy Forum* 7 (Fall 1996): 193-224.

Tear, Timothy H., Peter Kareiva, Paul L. Angermeier, Patrick Comer, Brian Czech, Randy Kautz, Laura Landon, David Mehlman, Karen Murphy, Mary Ruckelshous, J. Michael Scott, and George Wilhere. "How Much is Enough? Recurrent Problem of Setting Measurable Objectives in Conservation." *BioScience* 55, no. 10 (Oct. 2005): 835-849.

U.S. Fish & Wildlife Service. "Delisting Report." ECOS Environmental Conservation Online System. Last modified September 12, 2016. Accessed October 25, 2016. http://ecos.fws.gov/ecp0/reports/delisting-report.

———. "Gray wolf (Canis lupus): Species Profile for Gray wolf (Canis lupus)." ECOS Environmental Conservation Online System. Accessed October 25, 2016. http://ecos.fws.gov/ecp0/profile/speciesProfile?sId=4488.

———. "Listed Species Summary (Boxscore)." ECOS Environmental Conservation Online System. Last updated October 25, 2016. Accessed October 25, 2016. http://ecos.fws.gov/ecp0/reports/box-score-report.

———. "Species Proposed for Listing." ECOS Environmental Conservation Online System. Accessed October 25, 2016. http://ecos.fws.gov/ecp0/reports/ad-hoc-species-report?status=P&header=Species+Proposed+for+Listing&fleadreg=on&fstatus=on&finvpop=on.

———. "Species Proposed for Status Change or Delisting." ECOS Environmental Conservation Online System. Accessed October 25, 2016. http://ecos.fws.gov/ecp0/reports/ad-hoc-species-report?status=SC&header=Species+Proposed+for+Status+Change+or+Delisting&fleadreg=on&fstatus=on&finvpop=on.

U.S. Fish & Wildlife Service. "U.S. FWS Threatened & Endangered Species Active Critical Habitat Report." ECOS Environmental Conservation Online System. Last modified October 24, 2016. Accessed October 25, 2016. http://ecos.fws.gov/ecp/report/table/critical-habitat.html.

———. "Foreign Species Overview." Endangered Species. Last updated October 17, 2016. Accessed October 26, 2016. https://www.fws.gov/Endangered/what-we-do/international-activities.html.

Udall, Stewart L. *The Quiet Crisis*. New York: Avon, 1965.

University Press of Kansas. "About the Author." The Snail Darter Case: TVA Versus the Endangered Species Act. Accessed October 26, 2016. https://kansaspress.ku.edu/978-0-7006-1504-9.html.

Vassar, C.C. "NRDC v. Winter: Is NEPA Impending National Security Interests?" *Journal of Land Use & Environmental Law* 24, no. 2 (Spring 2009): 279-307.

Wellock, Thomas R. *Preserving the Nation: The Conservation and Environmental Movements 1870-2000.* Wheeling, IL: Harlan Davidson, Inc., 2007.

Worland, Justin. “Donald Trump’s Victory Could Mean Disaster for the Planet.” *Time.* Last updated November 9, 2016. Accessed December 4, 2016. http://time.com/4564224/donald-trump-climate-change/.