

PROTECTING THE WILDLIFE TRUST: A REINTERPRETATION OF SECTION 7 OF THE ENDANGERED SPECIES ACT

BY
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The Endangered Species Act (ESA) was intended not only to prevent the extinction of imperiled species, but also to bring such species back to recovery. Yet in the 30 years since its enactment, only 15 of 1,288 listed species have recovered. This Article attributes the failure in large part to a basic flaw in interpreting one of the ESA's core provisions, section 7. Section 7 imposes a dual mandate on federal agencies to develop programs for the conservation of listed species, and to insure that federal actions are not likely to jeopardize the continued existence of any listed species. The United States Fish and Wildlife Service and NOAA Fisheries Service have failed to develop any regulation implementing the affirmative conservation program requirement, and they have interpreted the no jeopardy prohibition in a manner that allows imperiled species to drift closer and closer to extinction.

This Article suggests a reinterpretation of section 7 in accordance with wildlife trust principles. Such principles are firmly embedded in the common law and draw upon the government's property interest in wildlife to impose trust duties on agencies to manage wildlife populations as enduring trust assets for generations to come. The Article calls for implementing section 7(a)(2)'s jeopardy prohibition to allow no further net harm to species after listing. It suggests implementing section 7(a)(1)'s affirmative conservation mandate by promulgating a regulation that would impose responsibility on federal agencies for replenishing the portion of the wildlife trust that they depleted through their past actions. Grounding implementation of section 7 in normative wildlife trust principles would encourage the

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Services to use the ESA as a tool of stewardship aimed towards recovery of species, rather than as a statutory mechanism allowing further depletion of wildlife resources.

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I. INTRODUCTION

A quarter of a century ago, the United States Supreme Court declared the Endangered Species Act (ESA)¹ to be "the most comprehensive legislation for the preservation of endangered species ever enacted by any nation."² The bold statutory scheme was aimed towards recovery of imperiled species.³ Yet, at the thirtieth anniversary of the ESA, the statute has a dismal record of achieving this central purpose. While the statute seems to be holding a floor of protection preventing extinction of listed

¹ Endangered Species Act of 1973, 16 U.S.C. §§ 1531–1544 (2000).

² *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 180 (1978).

³ See 16 U.S.C. § 1531(b) (2000) ("The purposes of this chapter are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved [and] to provide a program for the conservation of such . . . species."). "Conservation" is defined as "the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this chapter are no longer necessary." *Id.* § 1532(3). See also *Wyo. Farm Bureau Fed'n v. Babbitt*, 199 F.3d 1224, 1237 (10th Cir. 2000) ("Congress' overriding goal in enacting the Endangered Species Act is to promote the protection and, ultimately, the recovery of endangered and threatened species.").

species,⁴ it has failed to bring species to recovery.⁵ Out of 1,288 listed species,⁶ only 15 have been recovered.⁷

This Article argues that the failure to accomplish recovery is largely due to a basic flaw in interpreting one of the ESA's core provisions, section 7.⁸ Section 7 presents a dual mandate applicable to federal agencies. Section 7(a)(2), known as the "jeopardy prohibition," requires federal agencies to insure that their actions are not "likely to jeopardize the continued existence" of any listed species.⁹ Section 7(a)(1), known as the "affirmative conservation mandate," requires federal agencies to develop programs for the conservation of listed species.¹⁰ The Fish and Wildlife Service (FWS) and NOAA Fisheries¹¹ (collectively the Services) are charged with implementing

⁴ See U.S. FISH & WILDLIFE SERVICE, SPECIES INFORMATION: THREATENED AND ENDANGERED SPECIES SYSTEM (TESS), at http://ecos.fws.gov/tess_public/TESSWebpageDelisted?Listing=0 (last visited Apr. 10, 2004) [hereinafter USFWS, SPECIES INFORMATION] (reporting seven listed species that have gone extinct).

⁵ *Id.* (listing 15 species that have been classified as recovered). See also Federico Cheever, *The Road to Recovery: A New Way of Thinking About the Endangered Species Act*, 23 *ECOLOGY L.Q.* 1, 12 (1996) (arguing that the ESA has not promoted widespread recovery of listed species).

⁶ USFWS, SPECIES INFORMATION, *supra* note 4.

⁷ *Id.*

⁸ 16 U.S.C. § 1536 (2000). Courts have emphasized that "[t]he heart of the Endangered Species Act lies in section 7." Fla. Key Deer v. Stickney, 864 F. Supp. 1222, 1226 (S.D. Fla. 1994). Section 7 applies to threatened and endangered species listed under section 4 of the Act. 16 U.S.C. § 1533 (2000).

⁹ 16 U.S.C. § 1536(a)(2) (2000) states:

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 . . . 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.

Id. § 1536(a)(2).

This section also requires federal agencies to insure that their actions do not "result in the destruction or adverse modification of" critical habitat designated pursuant to section 4 of the Act. *Id.* (This Article does not discuss the critical habitat mandate separately from the jeopardy mandate.). For discussion of critical habitat, see Oliver A. Houck, *The Endangered Species Act and Its Implementation by the U.S. Departments of Interior and Commerce*, 64 *U. COLO. L. REV.* 277, 298–99 (1993); Katherine Simmons Yagerman, *Protecting Critical Habitat Under the Federal Endangered Species Act*, 20 *ENVTL. L.* 811, 840–41 (1990). For extensive analysis of section 7, see Daniel J. Rohlf, *Jeopardy Under Endangered Species Act: Playing a Game Protected Species Can't Win*, 41 *WASHBURN L.J.* 114 (2001).

¹⁰ 16 U.S.C. § 1536(a)(1) (2000) ("Federal agencies shall . . . utilize their authorities in furtherance of the purposes of this chapter by carrying out programs for the conservation of endangered species and threatened species listed pursuant to section 1533 of this title."). For an extensive analysis of this section, see J.B. Ruhl, *Section 7(a)(1) of the "New" Endangered Species Act: Rediscovering and Redefining the Untapped Power of Federal Agencies' Duty to Conserve Species*, 25 *ENVTL. L.* 1107 (1995).

¹¹ The agency was formerly known as the National Marine Fisheries Service (NMFS). See *NMFS is Now: NOAA Fisheries*, 19/20 *MMPA BULLETIN* 1 (2000) (describing the reasons for the name change from NMFS to NOAA Fisheries), available at http://www.nmfs.noaa.gov/prot_res/readingrm/MMBulletin/2nd-3rd%20quarter_2000.pdf. For purposes of this Article, the term "Service" will describe both FWS and NOAA Fisheries.

the ESA¹² and play a key role in section 7 through a consultation process with federal action agencies.¹³ This Article suggests reinterpreting section 7 to carry out common law wildlife trust principles that focus on preserving and restoring the wildlife asset in perpetuity.¹⁴

II. THE WILDLIFE TRUST DOCTRINE

The wildlife trust doctrine, a branch of the well-known public trust doctrine,¹⁵ was clearly enunciated by the United States Supreme Court in

¹² 16 U.S.C. § 1532(15) (2000). NOAA Fisheries has jurisdiction over marine and anadromous species; FWS has jurisdiction over terrestrial and freshwater species. 50 C.F.R. § 402.01(b) (2004).

¹³ 16 U.S.C. § 1536(a) (2000). *See infra* Sections III.A–IV.A (analyzing consultation under both section 7 provisions). Most commentators have treated section 7's two mandates separately. This Article suggests a paradigm in which they are combined into a logical, mutually reinforcing framework.

¹⁴ Other commentators have also suggested invoking trust principles to interpret federal statutes. In the public lands context, Professor Charles Wilkinson suggested that courts construe the statutes "to effectuate Congress' intent to act as a trustee charged with the duty of protecting and preserving the public resources." Charles F. Wilkinson, *The Public Trust Doctrine in Public Land Law*, 14 U.C. DAVIS L. REV. 269, 313 (1980). He also suggested using such principles as a "limitation on the discretion of administrative agencies." *Id.* at 310. Professor Richard Lazarus has criticized using trust principles as any substitute for modern statutory law, finding the trust doctrine "a romantic step backward toward a bygone era at a time when we face modern problems . . ." Richard J. Lazarus, *Changing Conceptions of Property and Sovereignty in Natural Resources: Questioning the Public Trust Doctrine*, 71 IOWA L. REV. 631, 715–16 (1986). This Article does not suggest replacing the ESA with trust principles, but rather using trust principles to guide interpretation of the statute.

For general background on the wildlife trust doctrine, see Dale D. Goble & Eric T. Freyfogle, *Wildlife Law: A Coming of Age*, 33 *Envtl. L. Rep.* (Envtl. L. Inst.) 10,132, 10,134–37 (Feb. 2003); Susan Morath Horner, *Embryo, Not Fossil: Breathing Life into the Public Trust in Wildlife*, 35 *LAND & WATER L. REV.* 23 (2000); Gary D. Meyers, *Variation on a Theme: Expanding the Public Trust Doctrine to Include Protection of Wildlife*, 19 *ENVTL. L.* 723 (1989); Deborah G. Musiker et al., *The Public Trust and Parens Patriae Doctrines: Protecting Wildlife in Uncertain Political Times*, 16 *PUB. LAND L. REV.* 87 (1995); Mary Christina Wood, *The Tribal Property Right to Wildlife Capital (Part I): Applying Principles of Sovereignty to Protect Imperiled Wildlife Populations*, 37 *IDAHO L. REV.* 1, 52–86 (2000) (describing the "sovereign trusteeship" over wildlife).

¹⁵ *See* DALE D. GOBLE & ERIC T. FREYFOGLE, *WILDLIFE LAW: CASES AND MATERIALS* 385 (2002) (noting "seminal decisions . . . concluding that sovereign ownership and the accompanying public trust extend not only to navigable waterways and fish, but to all wildlife"). Many courts refer to wildlife as a subset of interests protected by the public trust doctrine. *See, e.g.*, *Baxley v. Alaska*, 958 P.2d 422, 434 (Alaska 1998) (including wildlife in the list of resources the state holds in trust for public use); *Weden v. San Juan County*, 958 P.2d 273, 282 (Wash. 1998) (finding that a county ordinance prohibiting the use of personal watercraft was consistent with the state's public trust responsibility to protect wildlife); *Iowa v. Sorensen*, 436 N.W.2d 358, 362 (Iowa 1989) (noting that the public trust doctrine has evolved to include wildlife, among other things); *see also* Charles F. Wilkinson, *The Headwaters of the Public Trust: Some Thoughts on the Source and Scope of the Traditional Doctrine*, 19 *ENVTL. L.* 425, 465 n.169 (1989) (noting judicial extension of public trust doctrine to wildlife); Meyers, *supra* note 14, at 728 (pointing out that "the common interest in wildlife is sufficiently like the common interest in water to justify similar public trust doctrine protection for wildlife"); Musiker et al., *supra* note 14, at 92–94 (describing how in *Geer v. Connecticut*, 161 U.S. 519 (1896), the United States Supreme Court implicitly adopted the public trust doctrine with respect to wildlife). For a seminal article

*Geer v. Connecticut (Geer)*¹⁶ in 1896. There the Court said that governmental ownership of wildlife should be exercised “as a trust for the benefit of the people.”¹⁷ At the core of this doctrine is the principle that every sovereign government has a property interest in wildlife, in the form of a sovereign trust.¹⁸

on the public trust doctrine, see Joseph Sax, *The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention*, 68 MICH. L. REV. 471 (1970).

¹⁶ 161 U.S. 519 (1896). *Geer* is the flagship decision associated with the doctrine. For a rich discussion of the historical development of the wildlife trust, see GOBLE & FREYFOGLE, *supra* note 15, at 384–87.

¹⁷ *Geer*, 161 U.S. at 529. The *Geer* Court stated:

[T]he power or control lodged in the state, resulting from this common ownership, is to be exercised, like all other powers of government, as a trust for the benefit of the people, and not as a prerogative for the advantage of the government, as distinct from the people, or for the benefit of private individuals as distinguished from the public good.

Id.

The broad principles of sovereign trust over wildlife announced in *Geer* are often confused with a derivative doctrine, known as the state ownership doctrine, that was later repudiated by the Supreme Court in *Hughes v. Oklahoma*, 441 U.S. 322, 335 (1979). Recent cases make clear that the *Hughes* holding is limited to the constitutional context and does not undermine broad wildlife trust principles. See *Montana v. Fertterer*, 841 P.2d 467, 470 (Mont. 1992) (finding *Hughes* not controlling where there are “no federal constitutional questions of interstate commerce, equal protection, or privileges and immunities”). As Professor Houck notes:

[T]he majority [in *Hughes*] did not, and could not, overrule principles dating back to Roman law that wild animals are the common property of the citizens of the state. . . . The trust analogy announced in *Geer* was not overruled in *Hughes* and remains the most accurate expression of this state interest: Wildlife belongs to everyone and the state has a special authority, and obligation, to ensure its perpetuation.

Oliver A. Houck, *Why Do We Protect Endangered Species, and What Does that Say About Whether Restrictions on Private Property to Protect Them Constitute “Takings”?*, 80 IOWA L. REV. 297, 311 n.77 (1995). For commentary on the continued viability of *Geer*’s trust principles, see Wood, *supra* note 14, at 60–64; Musiker et al., *supra* note 14, at 93–94; Horner, *supra* note 14, at 40. Professors Goble and Freyfogle point out that wildlife trust principles are “vitally relevant [and continue to] undergird wildlife law.” GOBLE & FREYFOGLE, *supra* note 15, at 381.

¹⁸ Professors Goble and Freyfogle illuminate how the wildlife trust evolved in American common law:

In England, courts would have spoken in terms of the Crown’s “prerogative,” but royal prerogative was an anathema in America. Hence the struggle to find a different terminology. American courts were familiar with two ways to talk about power over things: there was *proprietary* power, embodied in concepts of property and title, and there was *sovereign* power, represented by the government’s authority—granted by the sovereign people—to regulate conduct. In the case of wildlife, however, neither of these powers alone seemed quite right. Sensing that inadequacy—and searching for a better description—courts mingled the categories. . . . But this blended power also was not quite right; the combined categories gave government too much discretion. . . . [C]ourts sought to confine the broad powers vested in government by impressing those powers with duties drawn from property law. The metaphor they employed to describe this mixture of sovereign and proprietary powers was the trust: the state was a trustee for the people and state sovereign ownership was a public trust.

GOBLE & FREYFOGLE, *supra* note 15, at 381.

Numerous cases describe the sovereign trust in wildlife. See *Toomer v. Witsell*, 334 U.S.

385, 400 (1948) (finding support for a description of the trusteeship as a “special property interest, which nations and similar governmental bodies have traditionally had”); Puget Sound Gillnetters Ass’n v. W. Dist. Ct. of Wash., 573 F.2d 1123, 1132 (9th Cir. 1978) (“Wild animals and fish belong to the people of a state as a whole in their sovereign capacity.”); N.M. State Game Comm’n v. Udall, 410 F.2d 1197, 1200 (10th Cir. 1969) (“[W]ild animals . . . are owned by the state in its sovereign capacity.”); Montauk Oil Transp. Corp. v. Steamship Mut. Underwriting Ass’n (Berm.), No. Civ. 5702, 1996 WL 340000, at *3 (S.D.N.Y. 1996) (noting, in action for natural resources damages caused by oil spill, “it is the government that owns the resources”); *In re Steuart Transp. Co.*, 495 F. Supp. 38, 40 (E.D. Va. 1980) (noting that it is the “right and the duty [of the state] to protect and preserve . . . natural wildlife resources”); *Rogers v. State*, 491 So. 2d 987, 990 (Ala. Ct. App. 1985) (“[O]wnership of wild animals is vested in the state.”); *Pullen v. Ulmer* 923 P.2d 54, 60–61 (Alaska 1996) (“[S]almon are public assets of the state.”); *Shepard v. Alaska*, 897 P.2d 33, 40 (Alaska 1995) (“This court has repeatedly observed that the state acts as ‘trustee’ of the naturally occurring fish and wildlife in the state for the benefit of its citizens.”); *Gilbert v. State Dep’t of Fish & Game*, 803 P.2d 391, 399 (Alaska 1990) (migrating fish, while in inland waters of the state, are “the property of the state, held in trust for the benefit of all of the people of the state”); *Farris v. Ark. State Game & Fish Comm’n*, 310 S.W.2d 231, 235 (Ark. 1958) (holding that the state has “trustee” ownership of wildlife); *People v. Brady*, 286 Cal. Rptr. 19, 23 (Cal. App. 1991) (“[A]bolone . . . belong to the state of California in their collective, sovereign capacity.”); *Collopy v. Wildlife Comm’n*, 625 P.2d 994, 999 (Colo. 1981) (referring to “well-established rule that ‘[t]he ownership of wild game is in the state for the benefit of all the people’”); *Maitland v. People*, 23 P.2d 116, 117 (Colo. 1933) (holding that “[t]he ownership of wild game is in the state for the benefit of all the people”); *Attorney Gen. v. Hermes*, 339 N.W.2d 545, 550 (Mich. App. 1983) (holding that the state has a trust form of property interest in fisheries); *State v. Fertterer*, 841 P.2d 467, 471 (Mont. 1992) (noting an “ownership interest in wild game held by it in its sovereign capacity for the use and benefit of the people.”); *State Dep’t of Env’tl. Prot. v. Jersey Cent. Power and Light*, 336 A.2d 750, 757–58 (N.J. Super. Ct. App. Div. 1975) (stating that the “State has not only the right but also the affirmative fiduciary obligation to ensure that the rights of the public to a viable marine environment are protected, and to seek compensation for any diminution in that trust corpus”), *rev’d on other grounds*, 351 A.2d 337 (N.J. 1976); *Ohio v. City of Bowling Green*, 313 N.E.2d 409, 411 (Ohio 1974) (recognizing “[t]he ‘property’ interest which every state holds in its wildlife”); *Fields v. Wilson*, 207 P.2d 153, 156 (Or. 1949) (noting that government owns *ferae naturae* “in its sovereign capacity for the benefit of and in trust for its people in common”); *State v. Bartee*, 894 S.W.2d 34, 41–43 (Tex. App. 1994) (“The power of the state [wildlife] agency is to be exercised like all other powers of government as a trust for the benefit of the people.”); *Wiley v. Baker*, 597 S.W.2d 3, 5 (Tex. App. 1980) (“[A]nimals *ferae naturae* belong to the state.”); *Wash. Dep’t of Fisheries v. Gillette*, 621 P.2d 764, 766–67 (Wash. Ct. App. 1980) (holding that fish are the “sole property of the people and that the state, acting for the people, is dealing with its own property, ‘over which its control is as absolute as that of any other owner over his property’”) (citation omitted); *State ex rel. Bacich v. Huse*, 59 P.2d 1101, 1103 (Wash. 1936) (“Although the state owns its fish in a proprietary capacity, it holds title as a trustee.”); *O’Brien v. State*, 711 P.2d 1144, 1148–49 (Wyo. 1986) (“[W]ildlife within the borders of a state are owned by the state in its sovereign capacity for the common benefits of all its people. . . . [T]he enlightened concept of this ownership is one of a trustee with the power and duty to protect, preserve and nurture the wild game.”); *Horner*, *supra* note 14, at 40 (noting the “unequivocal imposition of the fiduciary duties on the state as trustee”); *Musiker et al.*, *supra* note 14, at 88–90, nn.8–16 and accompanying text (“As trustee, the state must protect the corpus of its wildlife trust by preventing its unreasonable exploitation.”); *Wood*, *supra* note 14, at 55–59 (“As a fundamental matter, governments retain, on behalf of their citizens, the property rights in *ferae naturae*.”).

The wildlife is the corpus, or *res*, of the trust.¹⁹ The government is the trustee of this valuable corpus. The public—including future generations—is the beneficiary.²⁰ While the wildlife trust doctrine traditionally protected game species used by the public,²¹ its foundational principles apply to protecting biodiversity as a whole. The public trust doctrine has advanced from its nineteenth century application to streambeds and now reaches vital public resources, including water, wetlands, and wildlife.²² Its scope extends beyond the traditional public interests of fishing, navigation, and commerce to modern needs such as aesthetics, biodiversity, and even recreation.²³ As a branch of the public trust doctrine, the wildlife trust doctrine places a particular focus on preserving living assets and should be construed to encompass the full realm of biological resources protected under the ESA, including animals, insects, and plant life.²⁴ Trust principles force a

¹⁹ See *Hermes*, 339 N.W.2d at 550 (noting state's authority to "bring suit to protect the trust corpus"); *United States v. Oregon*, 657 F.2d 1009, 1016 (9th Cir. 1981) (noting that the court has the power to protect salmon because the resource is "inextricably linked to the *res* in the court's custody"); see also *Musiker et al.*, *supra* note 14, at 95. The trust construct applies to other natural resources as well. See *Maryland v. Amerada Hess Corp.*, 350 F. Supp. 1060, 1067 (D. Md. 1972) (noting state is trustee of waters, which make up "the corpus of the trust").

²⁰ See, e.g., *Amerada Hess Corp.*, 350 F. Supp. at 1067 (upholding state's claim for damages to waters caused by pollution, noting, "[i]f the State is deemed to be the trustee of the waters, then, as trustee, the State must be empowered to bring suit . . . for the beneficiaries of the trust—*i.e.*, the public"); see also, *Shepard*, 897 P.2d at 40; *Ridenour v. Furness*, 504 N.E.2d 336, 340 (1987) ("Title to wild game and fish is in the state in its sovereign capacity as the trustee of all the citizens in common.").

²¹ See, e.g., *Geer*, 161 U.S. at 535 (regulation applied to woodcock, ruffed grouse, and quail); see also *GOBLE & FREYFOGLE*, *supra* note 15, at 380. The focus on game species reflects the historical imperatives that gave rise to the wildlife trust doctrine. In the nineteenth century, society relied heavily on game species for subsistence and commercial purposes. *Geer*, 161 U.S. at 534 (discussing the duty of a state to preserve a "valuable food supply" for its citizens). The dominant emphasis of state wildlife regulation was regulating harvest of such species. *GEORGE CAMERON COGGINS ET AL.*, *FEDERAL PUBLIC LAND AND RESOURCES LAW* 852 (5th ed. 2002).

²² See *Lazarus*, *supra* note 14, at 640–41 (discussing the history of expanding trust concepts); Patrick A. Parenteau, *Who's Taking What? Property Rights, Endangered Species, and The Constitution*, 6 *FORDHAM ENVTL. L.J.* 619, 631 (1995) (stating that public trust has included wildlife habitat, water quality, recreation, and aesthetics); *Nat'l Audubon Soc'y v. Super. Ct. of Alpine City*, 189 Cal. Rptr. 346 (Cal. 1983) (extending public trust to water).

²³ *Matthews v. Bay Head Improvement Ass'n*, 471 A.2d 355, 363 (N.J. 1984) (discussing the public trust doctrine as it protects navigation, fishing, and recreational uses "including bathing, swimming and other shore activities"). As one court noted:

The public uses to which tidelands are subject are sufficiently flexible to encompass changing public needs. In administering the trust the state is not burdened with an outmoded classification favoring one mode of utilization over another. There is a growing public recognition that one of the most important public uses of the tidelands—a use encompassed within the tidelands trust—is the preservation of those lands in their natural state, so that they may serve as ecological units for scientific study, as open space, and as environments which provide food and habitat for birds and marine life, and which favorably affect the scenery and climate of the area.

Marks v. Whitney, 6 Cal. 3d 251, 259–60 (1971) (internal citations omitted).

²⁴ The ESA provides protection for animals, plants, and insects. See 16 U.S.C. § 1532(16) (2000) (defining "species" to include plants and wildlife); *id.* § 1532(6) (defining "endangered species" to include insects that are not pests "whose protection . . . would present an

perspective that views endangered species not just as regulatory objects under the ESA, but as assets in the property sense that comprise part of the natural trust that belongs to the people as a whole.

Trust principles provide a normative anchor for ESA interpretation. With roots in legal regimes predating the United States,²⁵ such principles derive from ancient formulations. They are basic, logical, and geared towards sustaining society for generations to come. They constrain the natural tendency of governmental officials to exhaust resources in the present generation. Two cardinal principles of the trust doctrine should guide implementation of section 7. First, government trustees are required to preserve wildlife assets and protect them against damage.²⁶ Second, where there has been damage to trust assets, the trustees have an affirmative duty to recoup damages and restore the corpus.²⁷ Sections III and IV of this

overwhelming and overriding risk to man"). However, section 9, which prohibits the taking of listed species, distinguishes between plants and animal species. While section 9(a)(1) prohibits take of endangered species of fish and wildlife, section 9(a)(2)(B) protects endangered plants only to the extent that they are located in areas under federal jurisdiction, or are otherwise protected by state law. *Id.* § 1538(a)(1)(B), (a)(2)(B). Section 7, like section 4, does not distinguish between fish or wildlife and plants. *Id.* §§ 1533, 1536. Plant species, therefore, are protected through the jeopardy consultation procedures of section 7(a)(2), and through the affirmative conservation mandate of section 7(a)(1). For discussion of the ESA's treatment of different categories of species, see Ruhl, *supra* note 10, at 1115–16, 1124–25.

²⁵ See GOBLE & FREYFOGLE, *supra* note 15, at 382–84 (reviewing English common law roots of wildlife trust doctrine); Horner, *supra* note 14, at 31 (exploring Roman antecedents of the doctrine); *Geer*, 161 U.S. at 522–26 (discussing roots of doctrine in ancient law).

²⁶ See *Geer*, 161 U.S. at 534 (stating that “the ownership of the sovereign authority is in trust for all the people of the State, and hence by implication it is the duty of the legislature to enact such laws as will best preserve the subject of the trust and secure its beneficial use in the future to the people of the State”); *United States v. White Mountain Apache Tribe*, 537 U.S. 465, 475 (2003) (recognizing that the fundamental common law duty of a trustee is to maintain trust assets); *State v. City of Bowling Green*, 313 N.E.2d 409, 411 (Ohio 1974) (“[W]here the state is deemed to be the trustee of property for the benefit of the public it has the obligation to bring suit . . . to protect the corpus of the trust property.”); *State Dep’t of Envtl. Prot. v. Jersey Cent. Power & Light*, 336 A.2d 750, 758–59 (N.J. Super. Ct. App. Div. 1975) (finding both right and duty to seek damages for harm to natural resources held in public trust), *rev’d on other grounds*, 351 A.2d 337 (1976); *Fort Mojave Indian Tribe v. United States*, 23 Cl. Ct. 417, 426 (1991) (finding federal trust duty to protect Indian water rights because “the title to plaintiffs’ water rights constitutes the trust property, or the res, which the government, as trustee, has a duty to preserve”). See also GEORGE GLEASON BOGERT, *THE LAW OF TRUST & TRUSTEES* ch. 29, § 582 (2d ed. 1980) (“The trustee has a duty to protect the trust property against damage or destruction. He is obligated to the beneficiary to do all acts necessary for the preservation of the trust res which would be performed by a reasonably prudent man employing his own like property for purposes similar to those of the trust.”); *RESTATEMENT (SECOND) OF TRUSTS* § 176 (1957) (“The trustee is under a duty to the beneficiary to use reasonable care and skill to preserve the trust property.”); see also Musiker et al., *supra* note 14, at 96 (“The [government], as trustee, must prevent substantial impairment of the wildlife resource so as to preserve it for the beneficiaries—current and future generations.”); Wood, *supra* note 14, at 58–59, 92–93 (discussing duty).

²⁷ See *Jersey Cent. Power & Light*, 336 A.2d at 758–59 (finding duty to seek damages for harm to natural resources held in public trust); *City of Bowling Green*, 313 N.E.2d at 411 (noting public trustee’s “obligation . . . to recoup the public’s loss occasioned by . . . damage [to] such property”); *Wash. Dep’t of Fisheries v. Gillette*, 621 P.2d 764, 767 (Wash. Ct. App. 1980) (noting right and “fiduciary obligation of any trustee to seek damages for injury to the object of its

Article suggest a reinterpretation of section 7 of the ESA congruent with these principles.

The sheer scope of ESA regulation now demands that these broader trust principles guide implementation of the statute. No longer is wildlife regulation primarily the domain of state law.²⁸ The ESA has become the overriding wildlife law in this nation, its grasp reaching an ever-growing percentage of known species. When the statute was first enacted, Congress may have envisioned that ESA protection would rarely be needed; in 1973, there were only 119 listed species.²⁹ But now, thirty years later, extinction has become a regular threat across the national landscape. Presently there are 1,288 listed species³⁰ and many others waiting in the pipeline to be protected under the ESA.³¹ A 1990 report issued by the Council on Environmental Quality concludes that a total of 9,000 U.S. plant and animal species may currently be at risk of extinction, noting: “The problem is national in scope, with every region of the country reporting losses of native species Whole plant and animal communities—integrated, resilient systems—are threatened.”³² The unrelenting frenzy of land development and resource depletion in this nation continues to deliver more and more species to the jurisdiction of the ESA.³³ In the absence of more protective statutes,

trust”); Wood, *supra* note 14, at 58–59, 92–93 (discussing duty); Musiker et al., *supra* note 14, at 107–08 (discussing trust obligations as *parens patriae*); Horner, *supra* note 14, at 27–28 (discussing rights and duties).

²⁸ See COGGINS ET AL., *supra* note 21, at 852–54 (discussing rise of federal law in wildlife regulation).

²⁹ See U.S. FISH & WILDLIFE SERVICE, NUMBER OF U.S. SPECIES LISTING PER CALENDAR YEAR 1 (2002) (listing the number of species listed per year since 1973), *available at* http://endangered.fws.gov/stats/List_cy2002.PDF.

³⁰ *Id.*

³¹ U.S. FISH & WILDLIFE SERVICE, GENERAL STATISTICS FOR ENDANGERED SPECIES, *at* http://ecos.fws.gov/tess_public/TessStatReport (last visited Apr. 11, 2004) (listing 256 candidate species and 36 proposed species). Candidate species are “plants and animals for which the Service has sufficient information on their biological status and threats to propose them as endangered or threatened under the Endangered Species Act, but for which development of a listing regulation is precluded by other higher priority listing activities.” U.S. FISH & WILDLIFE SERVICE, CANDIDATE CONSERVATION PROGRAM, *at* <http://endangered.fws.gov/candidates> (last visited Apr. 11, 2004).

³² Houck, *supra* note 9, at 280 n.13 (quoting COUNCIL ON ENVTL. QUALITY, ENVIRONMENTAL QUALITY, 21ST ANNUAL REPORT 137 (1990)). A recent report presents an even more dire situation, estimating that a third of the species in the United States are at risk, and 500 have already gone extinct or cannot be located. See PRECIOUS HERITAGE: THE STATUS OF BIODIVERSITY IN THE UNITED STATES (Bruce A. Stein et al. eds., 2000), *discussed in* GOBLE & FREYFOGLE, *supra* note 15, at 1116 (discussing the status of wildlife in the United States).

³³ The rate of development in the United States has soared in the last half-century. The amount of urban land area in the United States nearly quadrupled between 1954 and 1997, “from 18.6 million acres to about 74.0 million acres in the contiguous 48 states.” U.S. ENVTL. PROTECTION AGENCY, EPA 231-R-01-002, OUR BUILT AND NATURAL ENVIRONMENTS: A TECHNICAL REVIEW OF THE INTERACTIONS BETWEEN LAND USE, TRANSPORTATION, AND ENVIRONMENTAL QUALITY 4 (2001), *available at* <http://www.smartgrowth.org/library/built.html>. As development has increased, so has loss of natural habitat. Many ecosystems in the United States “have already lost more than half of the area they occupied prior to European settlement.” REED F. NOSS & ROBERT L. PETERS, DEFENDERS OF WILDLIFE, ENDANGERED ECOSYSTEMS: A STATUS REPORT ON AMERICA’S VANISHING HABITAT AND WILDLIFE 5 (1995), *available at*

the ESA has become a bottom line—and the only bright line—in general wildlife regulation, operating as a giant vacuum that draws species of all varieties towards its irreducible minimum of protection. In light of the statute's emerging role as a comprehensive wildlife law, the Services should ground their interpretation of the ESA in fundamental normative principles of wildlife regulation designed to preserve the natural plant and animal kingdom at abundant levels.³⁴

The wildlife trust doctrine has rich expression in state court decisions and statutes,³⁵ likely reflecting the traditional primacy of state government in wildlife regulation.³⁶ As yet, there is scant case law imposing the wildlife trust doctrine on the federal government,³⁷ but cases make clear that the wildlife trust arises as an attribute of sovereignty³⁸—a rationale that suggests

<http://www.defenders.org/pubs/endangeredeco.pdf>. Ecosystem destruction is increasing throughout the United States, to the point that the nation faces the loss of hundreds of natural ecosystems. *Id.* at ix-x. Moreover, habitat loss spans a broad variety of ecosystems, including prairies and other grasslands, savannas, forests, coastal areas, and wetlands. *Id.* at 5-6. The United States “has lost 117 million acres of wetlands—more than 50 percent of what was here when Europeans arrived; the Pacific has lost 25 million acres—90 percent—of its ancient forest; California alone has lost 22 million acres of native grassland.” *Id.* at viii. Aquatic communities have also suffered severe degradation throughout the United States. *Id.* The loss of ecosystems imperils species. “Habitat destruction is the major factor threatening 80 percent or more of the species listed under the [ESA].” *Id.* at 46. “More than 95 percent of listed species are imperiled at least in part by habitat loss or alteration.” *Id.*

³⁴ Professor Rohlf has similarly urged the Services to institute major reform in their interpretation of section 7, “[if] the ESA is to serve the United States’ foundation for biodiversity protection and restoration in the twenty-first century.” Rohlf, *supra* note 9, at 163.

³⁵ See *supra* note 18 (listing state court decisions applying the wildlife trust doctrine); see also Houck, *supra* note 17, at 309-11 n.76 (reporting that 31 states assert ownership of wildlife, and citing statutes).

³⁶ See *Kleppe v. New Mexico*, 426 U.S. 529, 541 (1976) (noting states’ “traditional trustee powers over wild animals”).

³⁷ See *Palila v. Haw. Dep’t of Land & Natural Res.*, 471 F. Supp. 985, 995 n.40 (D. Haw. 1979) (noting “[t]he importance of preserving such a national resource [(endangered species)] may be of such magnitude as to rise to the level of a federal property interest”); *In re Stuart Transp. Co.*, 495 F. Supp. 38, 40 (E.D. Va. 1980) (allowing federal government to recover damages for destroyed migratory waterfowl under common law public trust and *parens patriae* theory).

³⁸ See *Geer*, 161 U.S. 519, 526-27 (1896) (referring to wildlife ownership as an “attribute of government” and tracing its historical manifestation “through all vicissitudes of [government]”); *State v. Barte*, 894 S.W.2d 34, 41 (Tex. Ct. App. 1994) (describing wildlife ownership as an “attribute of government”); see also *Rogers v. State*, 491 So. 2d 987, 990 (Ala. Ct. App. 1985) (noting that “[a]ll property rights in *ferae naturae* were in the sovereign” (internal quotation omitted)); Thomas A. Campbell, *The Public Trust, What’s It Worth?*, 34 NAT. RESOURCES J. 73, 79 (1994) (noting that government ownership of wildlife is viewed as a “fundamental attribute of state sovereignty”); Meyers, *supra* note 14, at 729 (noting that the “ownership of wildlife, like water, historically has been treated as an aspect of sovereignty”). In *Minnesota v. Mille Lacs Band of Chippewa Indians*, the State of Minnesota asserted an interest in wildlife within its borders as an “essential attribute of its governmental existence.” 526 U.S. 172, 204 (1999) (internal citations omitted). The Tenth Circuit has recognized that tribal governments, as sovereigns, also have trust interests in wildlife populations. *Mescalero Apache Tribe v. New Mexico*, 630 F.2d 724, 734 (10th Cir. 1980) (referring to “the trusteeship duty imposed on *all* sovereigns” and noting its application to the Mescalero Tribe’s management of wildlife on its reservation (emphasis in original)).

its application to any sovereign, including the federal government.³⁹ Many federal statutes establish a role for the federal government as a trustee of

³⁹ Some courts have alluded to an inherent federal trusteeship in wildlife. See *Kleppe*, 426 U.S. at 537 (noting a possible federal property interest in horses and burros on federal lands “superior to that of the [state]”); *Palila*, 471 F. Supp. at 995 n.40 (“It is also possible that Congress can assert a property interest in endangered species which is superior to that of the state. . . . The importance of preserving such a national resource may be of such magnitude as to rise to the level of a federal property interest.”); *In re Steuart Transp. Co.*, 495 F. Supp. at 40 (allowing federal government to recover damages for destroyed migratory waterfowl under public trust theory). Some commentary suggests the applicability of the wildlife trust doctrine to the federal government. See Wood, *supra* note 14, at 73–76 (“While the states certainly enjoy a general trust interest in wildlife as a result of the federal transfer of land to them, the vital importance of wildlife to national interests seemingly assures a residuary supreme federal trust interest.”); George C. Coggins, *Wildlife and the Constitution: The Walls Come Tumbling Down*, 55 WASH. L. REV. 295, 324–25 (1980) (arguing that the federal government “has a property interest in all wild native fauna”); Parenteau, *supra* note 22, at 629–30 (stating that “history, logic, and the public interest all suggest” a federal responsibility to preserve wildlife); Horner, *supra* note 14, at 40 (“[W]e have within the common law ample authority that the states, and the federal government where applicable, hold wildlife in trust for the benefit of all persons.”).

While it is true that states enjoy a traditional role in wildlife protection by virtue of their police power reserved under the Tenth Amendment of the Constitution, courts have strongly affirmed federal constitutional authority to carry out wildlife protection. An early case, *Missouri v. Holland*, 252 U.S. 416 (1920), upheld federal regulation of migratory birds under the Treaty Clause of the Constitution against a state challenge that such federal regulation intruded into traditional state powers:

Here a national interest of very nearly the first magnitude is involved. It can be protected only by national action in concert with that of another power. The subject matter is only transitorily within the State and has no permanent habitat therein. But for the treaty and the [federal] statute there soon might be no birds for any powers to deal with. We see nothing in the Constitution that compels the Government to sit by while a food supply is cut off and the protectors of our forests and our crops are destroyed. It is not sufficient to rely upon the States. The reliance is vain, and were it otherwise, the question is whether the United States is forbidden to act.

Id. at 435. In *Kleppe v. New Mexico*, 426 U.S. 529 (1976), the Court upheld federal power over wild horses and burros located on federal lands under the Property Clause of the Constitution. *Id.* at 535. The Court flatly rejected the state of New Mexico’s argument that the federal regulation was an “impermissible intrusion on the sovereignty, legislative authority, and police power of the State and . . . wrongly infringed upon the State’s traditional trustee powers over wild animals.” *Id.* at 541. Recent cases have upheld federal ESA regulation under the Commerce Clause of the Constitution, emphasizing the national interest in species protection. *Rancho Viejo v. Norton*, 323 F.3d 1062, 1078–79 (D.C. Cir. 2003) (upholding ESA regulation of activity that substantially affects interstate commerce and noting, “the ESA represents a national response to a specific problem of ‘truly national’ concern”) (citation omitted); *Gibbs v. Babbitt*, 214 F.3d 483, 493 (4th Cir. 2000) (“While a beleaguered species may not presently have the economic impact of a large commercial enterprise, its eradication nonetheless would have a substantial effect on interstate commerce.”); *Nat’l Ass’n of Home Builders v. Babbitt*, 130 F.3d 1041, 1053–54 (D.C. Cir. 1997) (noting that “the extinction of species and the attendant decline in biodiversity will have a real and predictable effect on interstate commerce”); *GDF Realty Investments, Ltd. v. Norton*, 169 F. Supp. 2d 648, 658–59 (W.D. Tex. 2001) (finding ESA’s regulatory scheme was designed to regulate commercial activity covered by the Commerce Clause). For analysis of these cases, see Michael C. Blumm & George Kimbrell, *Flies, Spiders, Toads, Wolves, and the Constitutionality of the Endangered Species Act’s Take Provision*, 34 ENVTL. L. 309 (2004). For general analysis of the broad constitutional authority supporting federal regulation of wildlife, see Coggins, *supra*.

wildlife and other resources for the nation's future generations of citizens. The National Environmental Policy Act (NEPA),⁴⁰ passed just a few years before the ESA, declares that the federal government has the duty "[to] fulfill the responsibilities of each generation as trustee of the environment for succeeding generations."⁴¹ And several federal statutes, including the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA),⁴² the Oil Pollution Act,⁴³ and the Clean Water Act,⁴⁴ contain natural resource damages provisions that charge the federal government with trustee duties to collect damages for harm to natural assets belonging to the public.⁴⁵ As Professor Charles Wilkinson has observed:

The whole of [federal environmental statutory law] is greater than the sum of its parts. The modern statutes set a tone, a context, a milieu. When read together they require a trustee's care. Thus we can expect courts today, like courts in earlier eras, to characterize Congress' modern legislative scheme as imposing a public trust on the public resources.⁴⁶

As the national interest in wildlife regulation expands and the federal government increasingly usurps traditional state functions,⁴⁷ trust principles that inhere in the wildlife regulatory function should gain more force at the federal level. The listing of species under the ESA amounts to a federal assertion of general wildlife regulatory authority over those species and should activate, at the federal level, those longstanding trust principles that have always formed a backdrop for state wildlife regulation. Though Congress did not use the term "trust" in the language of the ESA, the statute creates an implied trust over the imperiled wildlife assets and imposes a public trustee's duty of care on the federal agencies implementing the Act. Under this view of the ESA, listed species are not simply regulatory objects

⁴⁰ National Environmental Policy Act of 1969, U.S.C. §§ 4321–4370e (2000).

⁴¹ *Id.* § 4331(b)(1).

⁴² Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. §§ 9601–9675 (2000).

⁴³ Oil Pollution Act of 1990, 33 U.S.C. §§ 2701–2761 (2000).

⁴⁴ Federal Water Pollution Control Act, 33 U.S.C. §§ 1251–1387 (2000).

⁴⁵ 42 U.S.C. § 9607(f)(1) (2000); 33 U.S.C. § 2702(b)(2)(A) (2000); 33 U.S.C. § 1321(f)(4) (2000).

⁴⁶ Wilkinson, *supra* note 14, at 299.

⁴⁷ Professor Coggins traced the growth of federal wildlife law and its ascendancy over state wildlife law in Coggins, *supra* note 39, at 303–21. The Supreme Court has recognized "a national interest of very nearly the first magnitude" in wildlife regulation. *Missouri v. Holland*, 252 U.S. 416, 435 (1920).

The recognition of a supreme federal interest in wildlife parallels the context of streambed and water rights ownership, where courts have long recognized a supreme federal interest, characterized as the navigational servitude, that trumps conflicting tribal, state, and private interests in order to protect the national purpose of navigation. *United States v. Rio Grande Dam & Irrigation Co.*, 174 U.S. 690, 703 (1899) ("[A] State cannot, by its legislation, destroy the right of the United States . . . to the continued flow of its waters . . . [I]t is limited by the superior power of the General Government to secure the uninterrupted navigability of all navigable streams within the limits of the United States."). For discussion, see Wood, *supra* note 14, at 74 n.354.

that enter into the federal jurisdictional net through the government's assertion of its legislative authority. Listed species comprise a definable asset in the trust sense and are owed traditional protections deriving from property law accorded to public natural assets. By analogy, courts have made clear that federal agencies act as trustees of Indian wildlife assets, and must implement federal statutes in a way that protects those assets.⁴⁸ The Departments of Interior and Commerce have issued a Joint Secretarial Order designed to integrate federal Indian trust principles into ESA implementation.⁴⁹ This administrative accomplishment may pave the way for injecting wildlife trust principles into the ESA.

III. INTERPRETING "JEOPARDY" UNDER SECTION 7(A)(2) TO PRESERVE THE WILDLIFE TRUST

Trust principles would force a sea-change in the current implementation of the jeopardy standard of section 7(a)(2), which prohibits federal agencies from taking action that is "likely to jeopardize" a listed species.⁵⁰ The Services currently interpret the jeopardy standard in a manner that gives them nearly unreviewable discretion to deplete the wildlife trust.

⁴⁸ See *N. Arapahoe Tribe v. Hodel*, 808 F.2d 741, 750 (10th Cir. 1987) (finding federal trust duty to protect reservation wildlife); *Klamath Tribes v. United States*, No. 96-381-HA, 1996 WL 924509, at *8 (D. Or. 1996) (holding federal government has a "substantive duty to protect to the fullest extent possible the Tribes' treaty rights, and the resources on which those rights depend" (internal quotation omitted)); *Muckleshoot Indian Tribe v. Hall*, 698 F. Supp. 1504, 1510-11 (W.D. Wash. 1988) (finding tribal fisheries are property rights protected by the federal trust responsibility); *Parravano v. Babbitt*, 70 F.3d 539, 546 (9th Cir. 1995) (finding federal trust duty to preserve tribal fisheries in carrying out the Magnuson Fishery Conservation and Management Act); *Northwest Sea Farms, Inc. v. United States Army Corps of Eng'rs*, 931 F. Supp. 1515, 1520 (W.D. Wash. 1996) (finding federal trust duty to protect tribal fisheries in implementing Rivers and Harbors Act); *Pyramid Lake Paiute Tribe of Indians v. Morton*, 354 F. Supp. 252, 256-57 (D.D.C. 1973) (finding federal trust duty to protect water that supports a tribal fishery). For discussion, see Mary Christina Wood, *Indian Land and the Promise of Native Sovereignty: The Trust Doctrine Revisited*, 1994 UTAH L. REV. 1471.

⁴⁹ Secretarial Order No. 3206, American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act § 2(A)-(C) (June 5, 1997), available at http://www.nmfs.noaa.gov/prot_res/readingrm/recoverguide/SECORDER.PDF. For discussion, see Charles Wilkinson, *The Role of Bilateralism in Fulfilling the Federal-Tribal Relationship: The Tribal Rights- Endangered Species Secretarial Order*, 72 WASH. L. REV. 1063 (1997).

⁵⁰ 16 U.S.C. § 1536(a)(2) (2000). For an insightful analysis of section 7's jeopardy provision, see Rohlf, *supra* note 9. The jeopardy standard of section 7 steers virtually all ESA implementation, because the Services use it as the sole standard by which to measure all federal and private actions that affect listed species. Rohlf, *supra* note 9, at 116. While section 7(a)(2) also prohibits agencies from taking action that will have certain impacts on a species' designated critical habitat, the Services interpret that prohibition in a manner coextensive with jeopardy. *Id.* at 116-20. Moreover, the Services use the jeopardy standard in issuing incidental take permits to private parties under the authority of section 10. 16 U.S.C. § 1539(a)(2)(B) (2000). Such permits must be based on a conservation plan, the approval of which amounts to a federal action that triggers the jeopardy standard under section 7(a)(2). Rohlf, *supra* note 9, at 125. Although section 10 states that the action approved under the conservation plan may not "appreciably reduce the likelihood of the survival and recovery of the species in the wild," 16 U.S.C. § 1539(a)(2)(B)(iv) (2000), the Services interpret the standard as equating to jeopardy. Rohlf, *supra* note 9, at 125.

A trust approach would interpret the jeopardy prohibition to allow no further net harm to the species—the wildlife asset—after listing. Any decision to deplete the trust is properly vested in the high-level exemption committee created by section 7(e) of the Act.

*A. Depleting the Wildlife Asset: The Services' "Incremental Harm"
Approach to Jeopardy*

Section 7 is implemented through a consultation process between the Services and the action agencies⁵¹ in which the Services determine whether a proposed federal action is “likely to jeopardize the continued existence of” a listed species.⁵² The jeopardy determination is made in the form of a biological opinion, which may present one of three possible conclusions: 1) the action poses no jeopardy to the species (a “no jeopardy opinion”); 2) the action poses jeopardy to the species, but there are reasonable and prudent alternatives (RPAs) that would avoid jeopardy (a “jeopardy opinion with RPAs”); or 3) the action poses jeopardy to the species, and there are no RPAs that would avoid this jeopardy (a pure “jeopardy opinion”).⁵³

The Services implement the jeopardy standard by asking whether an action will “reduce appreciably the likelihood” of the species’ survival.⁵⁴ In making this determination, the Services typically presume that they can allow further harm to the species after listing before reaching the critical point of jeopardy. Depicted graphically, where the horizontal lines represent

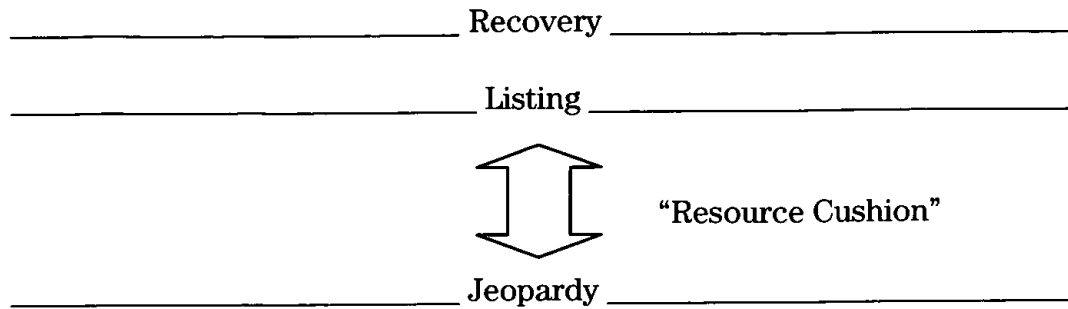
⁵¹ See 16 U.S.C. § 1536(a)–(c) (2000) (discussing federal agency consultation, biological assessments, and the Secretary’s approval process of a proposed action). Regulations implementing section 7 consultation are at 50 C.F.R. § 402 (2004). The Services also follow a consultation handbook. U.S. FISH & WILDLIFE SERVICE, ENDANGERED SPECIES ACT CONSULTATION HANDBOOK: PROCEDURES FOR CONDUCTING SECTION 7 CONSULTATIONS AND CONFERENCES (1998) [hereinafter CONSULTATION HANDBOOK], available at <http://endangered.fws.gov/consultations/s7hndbk/s7hndbk.htm>. The consultation process begins when the action agency requests from the Service information as to whether any listed species may be present in the area affected by the proposed action. 16 U.S.C. § 1536(c)(1) (2000). If a species may be present, the action agency must conduct a biological assessment to analyze whether the listed species “is likely to be affected by” the proposed action. *Id.* Formal consultation is initiated by the action agency upon a determination that the proposed action will likely affect the listed species. *Id.* Consultation results in a biological opinion issued by the Service. *Id.* § 1536(b). The opinion includes an “incidental take statement” that sets forth the allowable take of species. *Id.* § 1536(b)(4). See CONSULTATION HANDBOOK, *supra*, for a detailed overview of the consultation process.

⁵² 16 U.S.C. § 1536(a)(2) (2000). The Service’s opinion also concludes whether the proposed action will cause “adverse modification” to critical habitat. *Id.* § 1536(b)(3)(A). While technically the Service’s determination is advisory, the Supreme Court has described such conclusions as “virtually determinative.” *Bennett v. Spear*, 520 U.S. 154, 170 (1997).

⁵³ 16 U.S.C. § 1536(b)(3)(A) (2000).

⁵⁴ 50 C.F.R. § 402.02 (2004) (regulatory definition of “jeopardize the continued existence of”). Much commentary has focused on this definition because of the ambiguity it leaves with respect to actions limiting the recovery potential of species. As Professor Rohlf explains, the agency’s interpretation is that “an action that merely threatens recovery but does not threaten the survival of the entire listed species or population does not warrant a jeopardy opinion.” Rohlf, *supra* note 9, at 131 (quoting Memorandum from the Associate Director, U.S. Fish & Wildlife Service, to Regional Directors, U.S. Fish & Wildlife Service (Mar. 3, 1986)).

the health of a species or its habitat, the Services nearly always set the jeopardy line below the listing line.



Between these two lines is an amount of incremental harm that the Services refer to as a "resource cushion."⁵⁵ They allocate this cushion, doling out to various federal agencies the right to inflict harm on species.⁵⁶ The Services assess whether an action is likely to cause jeopardy by asking whether, when added to "baseline" conditions, it will appreciably reduce the likelihood of the species' survival.⁵⁷ Professor Daniel Rohlf criticizes this approach: "On its face, this analytical process by its nature makes a jeopardy finding for a particular project extremely unlikely; FWS or NMFS must find that the very project undergoing consultation will be the 'straw that breaks the camel's back' and thus put the entire species into a jeopardy situation. . . . [T]his procedure runs a substantial risk of nickeling and diming species toward extinction."⁵⁸ Rarely do the Services issue jeopardy opinions,

⁵⁵ See Cumulative Impacts Under Section 7 of the Endangered Species Act, 88 Interior Dec. 903, 907 (1981) [hereinafter Cumulative Impacts Memo] (discussing how the resource "cushion" is allocated on a "first in time, first in right" basis to approve projects); see also Rohlf, *supra* note 9, at 151 (discussing the Services' willingness to continue allocating the "cushion" rather than working toward restoring species and habitat); Mary Christina Wood, *Fulfilling the Executive's Trust Responsibility Toward the Native Nations on Environmental Issues: A Partial Critique of the Clinton Administration's Promises and Performance*, 25 ENVTL. L. 733, 784-86 (1995) (discussing resource "cushion" as a "mortality increment").

⁵⁶ See Cumulative Impacts Memo, *supra* note 55, at 907. This allowed harm is formalized by no jeopardy opinions, jeopardy opinions with ineffective RPAs, and inadequate incidental take statements authorized by section 7(b)(4).

⁵⁷ During consultation, the Services evaluate the "effects of the [proposed] action," as well as "cumulative effects" against a baseline. 50 C.F.R. § 402.14(g)(3) (2004). The baseline approach is set forth in 50 C.F.R. § 402.02 (2004), which defines "effects of the action":

Effects of the action refers to the direct and indirect effects of an action on the species or critical habitat, together with the effects of other activities that are interrelated or interdependent with that action, that will be added to the environmental baseline. The environmental baseline includes the past and present impacts of all Federal, State, or private actions and other human activities in the action area, the anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early section 7 consultation, and the impact of State or private actions which are contemporaneous with the consultation in process.

50 C.F.R. § 402.02 (2002). For discussion of the baseline approach, see Cumulative Impacts Memo, *supra* note 55, at 907; Rohlf, *supra* note 9, at 155-58; Wood, *supra* note 55, at 785-86.

⁵⁸ Rohlf, *supra* note 9, at 155-56; see also *id.* at 151 ("Rather than working toward restoring listed species and their habitats, today the Services often merely try to slow their slide toward

and the ones they do issue almost always offer reasonable and prudent alternatives that allow continued harm.⁵⁹ As Professor Oliver Houck summarizes: “[T]he number of projects actually arrested by the ESA is nearly nonexistent. . . . [A]lternatives to avoid jeopardy included a mix of measures neither surprising nor in many cases very demanding. . . . Rather, they reflect the bare minimum of alternatives necessary to keep those species that are listed hanging on, unrecovered, for an indeterminate time.”⁶⁰

extinction, or, in the words of the Solicitor’s Opinion on cumulative impacts, allocate the ‘resource cushion’ to project after project until species reach the brink of extinction.”).

⁵⁹ In an in-depth review of the Services’ administration of section 7, Professor Houck noted the “remarkable infrequency” with which either agency finds jeopardy. Houck, *supra* note 9, at 322. In one report compiled by FWS on consultations over a six-year period, jeopardy opinions blocked only 54 activities out of 2,719 formal USFWS consultations. Rohlf, *supra* note 9, at 151 n.153 (citing U.S. FISH & WILDLIFE SERVICE, FOR CONSERVING LISTED SPECIES, TALK IS CHEAPER THAN WE THINK (1994)). Professor Houck cites two reports issued in 1992, one by the General Accounting Office and one by the World Wildlife Fund, that concluded that over 90% of formal consultations resulted in “no jeopardy” findings, and nearly 90% of those potential “jeopardy” findings arrived at reasonable and prudent alternatives allowing the project to proceed. Houck, *supra* note 9, at 318. Less than 0.02% of consultations overall resulted in terminated projects. *Id.* Many of the reasonable and prudent alternatives fashioned by the agencies are “soft alternatives” such as research, monitoring, stocking, and education, that do not squarely address the threats to the species yet allow the action to go forward. *See id.* at 320–21. For an analysis of this problem in two complex river basin settings, see Mary Christina Wood, *Reclaiming the Natural Rivers: The Endangered Species Act as Applied to Endangered River Ecosystems*, 40 ARIZ. L. REV. 197, 237–43 (1998) (examining ESA implementation in the Colorado and Columbia River Basins).

⁶⁰ Houck, *supra* note 9, at 317–23. He further concludes:

A common theme to all the [biological] opinions reviewed was the Service’s determination to find an alternative within the economic means, authority, and ability of the applicant. Alternative measures which were clearly more protective, but also more difficult to implement, were ruled out; alternatives strongly favored by the applicant and opposed by the Service were, albeit grudgingly, accepted.

....

... [T]here is no evidence that formal consultation under the Endangered Species Act is stopping the world. Indeed, there is little evidence that it is changing it very much at all.

....

Taken together, Interior’s regulations present a composite picture of an agency doing everything possible within law, and beyond, to limit the effect of protection under section 7(a)(2).

....

... Interior has translated an act of mandatory requirements into concentric rings of discretion.

Id. at 320–27. Professor Rohlf reaches a similar conclusion:

[T]he jeopardy standard’s reality is a far cry from its promise. In their day to day implementation of section 7, the Services seldom use the jeopardy standard to draw a clear biological line in the sand; rather, the concept of jeopardy often amounts to little more than a vague threat employed by FWS and NMFS to negotiate relatively minor modifications to federal and non-federal actions. The Services commonly approve project after project that have significant impacts on threatened and endangered species and their habitats, pushing these organisms incrementally closer to extinction. Meanwhile, FWS and NMFS opinions concluding that a proposal is actually likely to jeopardize a threatened or endangered species are extremely rare—a statistic. . . . [T]he

In essence, once a species is listed, it becomes subject to a quasi-permit scheme, not unlike a pollution permit scheme, where the Services continue to allow damage to the asset. As FWS itself has stated in a memorandum outlining the agency's approach to jeopardy analysis: "[A] project passing muster under section 7 is in effect allocated the right to consume [a portion of the] 'cushion' of remaining natural resources which is available . . . until the utilization is such that any future use may be likely to jeopardize a listed species"⁶¹ The Service bluntly describes its approach to section 7 as a "first-in-time, first-in-right" approach to consuming the natural assets, noting that federal projects that are not yet part of the environmental baseline "have not had their priority set under the first-in-time system."⁶² Through section 7, the Services draw the wildlife asset down to the lowest line possible without crossing what they believe to be the jeopardy threshold.

B. Preserving the Wildlife Asset: A "No Further Harm" Approach to Jeopardy

The "incremental harm" approach described above contravenes the cardinal wildlife trust principle requiring the federal trustee to preserve the corpus of the trust.⁶³ The practice of doling out mortality until the last jeopardy line is reached depletes the wildlife trust even further below the already very low level it was at when the species was listed. An agency trustee cannot consciously allow depletion of the corpus of a trust.⁶⁴ As the United States Supreme Court recently emphasized in the Indian trust context, "One of the fundamental common-law duties of a trustee is to preserve and maintain trust assets."⁶⁵ While public trust theory incorporates the power of the sovereign to modify or extinguish the public trust servitude under specific circumstances,⁶⁶ this power logically resides in Congress, not

Services virtually always come up with a reasonable and prudent alternative that allows the action in question to proceed.

Rohlf, *supra* note 9, at 115, 151.

⁶¹ Cumulative Impacts Memo, *supra* note 55, at 907. *See also* Wood, *supra* note 55, at 785–86 (discussing how the Services' approach to allocating the "resource cushion" discriminates against tribal use of species).

⁶² Cumulative Impacts Memo, *supra* note 55, at 607.

⁶³ *See supra* note 26 and accompanying text.

⁶⁴ *Id.*

⁶⁵ *United States v. White Mountain Apache Tribe*, 537 U.S. 465, 475 (2003) (quoting *Cent. States, Southeast & Southwest Areas Pension Fund v. Cent. Transp., Inc.*, 472 U.S. 559, 572 (1985) (citing G. BOGERT & G. BOGERT, *LAW OF TRUSTS AND TRUSTEES* § 582, at 346 (rev. 2d ed. 1980)).

⁶⁶ *See Ill. Cent. R.R. v. Illinois*, 146 U.S. 387, 453 (1892) (noting, in the context of submerged lands held in the public trust, "the control of the State for the purposes of the trust can never be lost, *except* as to such parcels as are used in promoting the interests of the public therein, or can be disposed of without any substantial impairment of the public interest in the lands and waters remaining" (emphasis added)); *Nat'l Audubon Soc'y v. Super. Ct. of Alpine City*, 189 Cal. Rptr. 346, 360–61 (Cal. 1983) (The public trust is "an affirmation of the duty of the state to protect the people's common heritage of streams, lakes, marshlands and tidelands, surrendering that right of protection only in rare cases when the abandonment of that right is consistent with the purposes of the trust."); *Lake Mich. Fed'n v. United States Army Corps of Eng'rs*, 742 F. Supp. 441, 445 (N.D. Ill. 1990) (A grant of property out of the public trust must be "to benefit the

in federal agencies.⁶⁷ As the discussion below elaborates, Congress delegated such power to a high-level exemption committee, not to the Services.⁶⁸

In addition to prohibiting depletion of the corpus, trust principles would not allow federal agencies to put valuable public assets at substantial risk. In the analogous context of tribal natural resources, courts have developed strict sovereign trust principles, emphasizing that agencies are held to the “highest degree of fiduciary care” in protecting Indian trust resources.⁶⁹ The Services’ current implementation of section 7 may create an unacceptable risk of losing the species or the corpus of the trust altogether because in many cases the Services do not have a clear idea of where jeopardy really lies. Professor Rohlf notes that typically the Services fail to track the current status of the species or systematically account for the mortality already allowed as part of the “baseline.”⁷⁰ He concludes: “[The Services’] methodology demands biological distinctions that are virtually impossible, particularly given the paucity of data and even scientific knowledge concerning most species.”⁷¹ As the Services dole out mortality, they push the species closer and closer to that nebulous point of no return.⁷²

Wildlife trust principles geared towards preserving the wildlife asset would require interpreting “jeopardy” to allow no further net harm to the species after listing.⁷³ Under this approach, rather than administering section

public, rather than a private interest.”). Legislative abrogation of a public trust is reviewable by the courts. As the court in *Lake Michigan Federation* indicated, such judicial review should be rigorous:

The very purpose of the public trust doctrine is to police the legislature’s disposition of public lands. If courts were to rubber stamp legislative decisions . . . the doctrine would have no teeth. The legislature would have unfettered discretion to breach the public trust as long as it was able to articulate some gain to the public.

Id. at 446.

⁶⁷ In the Indian law context, for example, trust duties are strictly enforced against federal agencies, but Congress retains the authority to terminate the trust obligation or abrogate treaty rights. For discussion, see Wood, *supra* note 48, at 1508–13.

⁶⁸ See *infra* notes 96–98 and accompanying text.

⁶⁹ *Pyramid Lake Paiute Tribe of Indians v. United States Dep’t of Navy*, 898 F.2d 1410, 1420 (9th Cir. 1990); see *Seminole Nation v. United States*, 316 U.S. 286, 297 (1942) (holding that federal trustees of Indian property should “be judged by the most exacting fiduciary standards”); *Pyramid Lake Paiute Tribe of Indians v. Morton*, 354 F. Supp. 252, 256 (D.D.C. 1972) (finding federal trust duty to protect water that supports a tribal fishery); *Klamath Tribes v. United States*, No. 96-381-HA, 1996 WL 924509, at *7–8 (D. Or. 1996) (holding federal government has a “substantive duty to protect to the fullest extent possible the Tribes’ treaty rights, and the resources on which those rights depend” (internal quotation omitted)).

⁷⁰ Rohlf, *supra* note 9, at 157.

⁷¹ *Id.* at 155. Professor Rohlf also points out an additional flaw in the methodology for determining jeopardy. The Services confine their analysis of the baseline to the “action area,” consciously avoiding consideration of baseline impacts throughout the range of the species, which is the biologically relevant area for assessing jeopardy. This approach is “essentially the equivalent of attempting to forecast the weather for an entire state or region by glancing out the window of one’s home.” *Id.* at 156–57.

⁷² As populations diminish in numbers, the extinction risk may increase exponentially. *Id.* at 151.

⁷³ See *supra* note 26 and accompanying text.

7 as a quasi-permit scheme allowing further harm, the Services would assess whether a given action would in fact cause *any* net harm, and if it did, whether there are reasonable and prudent alternatives to prevent this harm.⁷⁴

A trust approach of “no further harm” is consistent with section 7 of the Act. Section 7 is devoid of any language suggesting that the Services should continue to dole out further harm to the species after listing. To the contrary, Congress repeatedly emphasized that the purpose of the ESA was to bring species back to recovery,⁷⁵ which typically cannot happen as long as further harm is inflicted on the species. Moreover, the definition of “endangered” and “threatened” species strongly suggests that such species are *already* in jeopardy at the time of listing.⁷⁶ An endangered species is, by definition, any species “in danger of extinction.”⁷⁷ A threatened species is nearly indistinguishable, characterized as “likely to become an endangered species within the foreseeable future.”⁷⁸ Allowing any further incremental harm to species after listing may significantly increase the likelihood of extinction. As Professor Rohlf notes, “According to well-established tenets of conservation biology, species near extinction face increasing risks of continuing to decline or actually becoming extinct the longer they remain at depressed population levels. In this light, actions that worsen or even merely

⁷⁴ There is an important exception for the special situation of tribally used species that are listed under the ESA. Many tribes in this country have relied on species for millennia to sustain their economies and to provide subsistence for their people. These species are at the heart of native culture, and native governmental principles have evolved to provide stewardship of these species over hundreds, or even thousands of years—stewardship that is not necessarily cast in formal trust terms, but still draws upon the same ancient wisdom of passing down a natural legacy through the living generations on this Earth. See Wood, *supra* note 14, at 70–71. Tribal use of species such as the magnificent salmon of the Pacific Northwest has always been a use of the yield of the asset, not the capital. *Id.* at 46. Long before Anglos ever arrived in the Northwest, for example, tribes had in place a system of traditional regulation of natural resource use that was executed through customary law, and it allowed only so much harvest of salmon that would not deplete the capital of the asset and diminish returns in future years. *Id.* Allowing take of the *yield* of the asset is not inconsistent with preserving the trust. Of course, the distinction between “yield” and “capital” in the case of returning salmon, particularly when overall populations are low, may be obscure. However, fisheries agencies and courts in the Pacific Northwest have grown accustomed to making this distinction. See Wood, *supra* note 55, at 770–71 (discussion of harvest allocation and “escapement” under the Columbia River Fish Management Plan). Where an ESA listed species is subject to native use, this situation invokes two realms of sovereign trust law, one of which is the federal wildlife trust responsibility, and the other of which is the federal Indian trust responsibility. It is necessary to mesh the two so that they are compatible, though such a discussion is far beyond the scope of this Article.

⁷⁵ See *infra* notes 115–19 and accompanying text.

⁷⁶ As Professor Rohlf has noted:

[B]y definition listed species already face serious threats to their continued existence, additional potential impacts notwithstanding. Again by definition, these threats persist for a given species until over time its status improves to the point at which the Secretary changes it from its classification as threatened or endangered. In this light . . . threatened and endangered species’ continued existence is in doubt as long as they are listed . . .

Rohlf, *supra* note 9, at 126–27.

⁷⁷ 16 U.S.C. § 1532(6) (2000).

⁷⁸ *Id.* § 1532(20).

perpetuate the status quo for listed species appreciably reduce their chances of continuing to exist over time"⁷⁹

C. Policy Discretion to Diminish the Wildlife Trust: Who Holds It?

The Services' current approach of allowing further incremental harm to species after listing opens the door to a vast amount of agency discretion⁸⁰ that Congress arguably did not intend to confer on the Services. The Services' approach to jeopardy essentially puts those agencies in the position of deciding how much of the wildlife asset to deplete. This decision is manifest only when the Services draw the line at some nebulous point after listing to "call jeopardy" on all further harm. Such a decision, while nearly always masked as a technical determination, actually has a discretionary policy judgment at its core. As Professor Rohlf observes, determining what amount of harm a species can absorb without constituting "jeopardy" depends on the agency's view as to what constitutes an "acceptable risk" to the species.⁸¹

⁷⁹ Rohlf, *supra* note 9, at 152. Over the long term, the distinction between survival and recovery becomes meaningless. If the Service fails to advance a species towards recovery, it is *per se* increasing the likelihood of extinction. Recognizing this dynamic, NMFS departed from the agency's approach towards jeopardy in the context of the imperiled Pacific salmon. In assessing whether federal actions amounted to jeopardy, NMFS took the position that any action "impeding a species' progress toward recovery" amounts to jeopardy. See NAT'L MARINE FISHERIES SERVICE, THE HABITAT APPROACH: IMPLEMENTATION OF SECTION 7 OF THE ENDANGERED SPECIES ACT FOR ACTIONS AFFECTING THE HABITAT OF PACIFIC ANADROMOUS SALMONIDS (1999) (on file with author). See also Rohlf, *supra* note 9, at 136, 152 ("NMFS moved its consideration of jeopardy for Pacific salmon away from analyses geared principally toward survival and instead to assessments geared principally toward recovery. . . . [It] thus recognizes a crucial temporal link between 'survival' and 'recovery': unless the population and habitat of a listed species are in the process of improving toward 'recovery' levels, the species' likelihood over time of simply continuing to survive decreases.").

In light of the dubious distinction between "survival" and "recovery," Professor Rohlf urges the Services to interpret "jeopardy" as any action that impairs the recovery of species. See *id.* at 152-53. This Article does not take issue with his suggested approach, but rather situates the recovery mandate within the terms of section 7(a)(1). As Section IV of this Article suggests, it is quite plausible that Congress intended sections 7(a)(1) and 7(a)(2) to be implemented as a dual mandate, linked administratively through the consultation process. The recovery mandate of section 7(a)(1) combined with a "no further harm" approach to jeopardy under section 7(a)(2) would comprise a clear and forceful regulatory package that would both further the goals of the ESA and carry out wildlife trust duties.

⁸⁰ See Houck, *supra* note 9, at 317 (noting the "extremely discretionary attitude" taken by the Services to analyzing most federal proposals under section 7).

⁸¹ Rohlf, *supra* note 9, at 158-59. Professor Rohlf continues:

[T]he Services must decide what level of risk to a species or populations is too much, *i.e.*, draw the line between 'acceptable' risk and the level of risk that constitutes 'jeopardy' to listed species. Next, biologists must apply this standard to individual cases by using their scientific expertise. . . . [T]he first step involves a policy judgment, whereas the latter calls for a scientific determination.

Id. See also NATIONAL RESEARCH COUNCIL, SCIENCE AND THE ENDANGERED SPECIES ACT 124 (1995) (analyzing the role of risk assessment in ESA decisions).

Without any statutory guidance in section 7, there are simply no normative principles by which to measure how much risk to a species is too much risk. Does “jeopardy” mean anything exceeding a 50% risk that the species will not survive into the future? Does it mean anything exceeding a 5% risk?⁸² Once the Services enter the territory of defining acceptable risk—a question that is virtually mandated by their interpretation of jeopardy to allow some further harm—they enter a world of standardless discretion.⁸³

Any policy judgment of “acceptable” risk intuitively involves assessing the degree of benefit associated with the proposed action, and asking whether that benefit is worth the corollary risk associated with the action.⁸⁴ The Services’ approach to jeopardy thus inherently requires the agencies to balance the merits of the proposed action against the risk to the species. In the context of section 7, the Services have no formal, objective method of weighing benefits (economic, social, or political) of the proposed action. Congress failed to define “jeopardy,” much less clarify what level of risk implicit in the jeopardy call is appropriate. Accordingly, the Services’ risk acceptance is, by its very nature, arbitrary.

Moreover, political realities capriciously inject perceived benefits into the agency’s decision-making process.⁸⁵ Economic and political interests

⁸² See NATIONAL RESEARCH COUNCIL, *supra* note 81, at 152 (noting lack of any agency guidance on the “appropriate degrees of extinction risk for making the different decisions required by the act”).

⁸³ Professor Rohlf notes:

As currently implemented by FWS and NMFS . . . the ESA’s jeopardy standard . . . lacks any semblance of biological standards, thus enabling the Services to employ nearly unfettered discretion under the guise of applying their scientific expertise. As a result, modern section 7 consultations . . . are often little more than negotiating sessions in which FWS and NMFS attempt to find common ground with project proponents, then pronounce the resulting deal biologically sound based on criteria so vague as to be essentially meaningless.

Rohlf, *supra* note 9, at 163.

⁸⁴ For example, a person might choose to drive a car in treacherous road conditions in order to arrive at an interview for an important job, but the same person may choose not to venture out to perform errands that can otherwise be postponed. The decision to drive turns on the individual’s assessment of the benefits associated with the risk of driving.

⁸⁵ See Houck, *supra* note 9, at 319 (noting the existence of “recurring evidence that—whatever the law—the [reasonable and prudent] alternatives found for controversial projects have been strongly influenced by local and national politics”); Rohlf, *supra* note 9, at 160 (“When the Services put themselves in a position to either approve or disapprove actions [depending on their assessment of risk to the species] based on identical biological analyses, factors other than risks to the species—including economics, politics, public controversy and the like—are much more likely to influence the Services’ jeopardy assessments.”); Daniel J. Rohlf, *Six Biological Reasons Why the Endangered Species Act Doesn’t Work—And What to Do About It*, 5 CONSERVATION BIOLOGY 273, 276 (1991) (noting that making decisions “on a case by case basis without relevance to objective standards necessarily injects political and economic consideration into making what by law are supposed to be biological decisions”). For a discussion of political influence on section 7 regulation in the Columbia and Colorado River Basins, see Wood, *supra* note 59, at 242–45. For a discussion of the agencies’ politicization of ESA critical habitat decisions, see Yagerman, *supra* note 9, at 847–55.

constantly pressure the Services to allow activities to proceed despite harm to species.⁸⁶ A jeopardy opinion, in reality, creates political jeopardy for the Services. Whenever and wherever the Services attempt to draw the final line, to “just say no” to further harm, they are accused of being “unreasonable.”⁸⁷ Accordingly, the Services may tend to make section 7 decisions that will best promote their own political welfare.⁸⁸ Overall, this tendency has resulted in the issuance of very few jeopardy opinions.⁸⁹ Professor Houck noted in his thorough review of the Services’ ESA implementation the “suspicion that the biological agencies are bending over backward to identify alternatives that send the project forward in the face of potential jeopardy—at some risk to the species.”⁹⁰

It is unlikely Congress intended biological opinions to be vehicles for the Services’ policy preferences. Section 7 requires that jeopardy determinations be based on the “best scientific and commercial data available,”⁹¹ which indicates they must be factually based, not policy based.⁹²

Politicization of agency decisions is a common feature of modern agency behavior and threatens the bureaucratic “neutrality” upon which our system of administrative law is based. As Professor Sax notes:

[Agencies tend to make the] decision . . . that seem[s] best to those who [have] power to decide when all the many constraints, pressures, and influences at work [are] taken into account.

. . . .
 . . . The danger is that in each little dispute—when the pressure is on—the balance of judgment will move ever so slightly to resolve doubts in favor of those with a big economic stake . . . and with powerful allies.

. . . .
 . . . [T]he administrative process tends to produce not the voice of the people, but the voice of the bureaucrat—the administrative perspective posing as the public interest.

JOSEPH L. SAX, *DEFENDING THE ENVIRONMENT: A HANDBOOK FOR CITIZEN ACTION* 53–56 (1972).

⁸⁶ See Rohlf, *supra* note 9, at 160 n.177 (describing agency practices during consultation that “increase the likelihood that politics, economics, and the like will influence [the Services’] jeopardy analyses”). In some respects, the Services invite this pressure by interpreting “jeopardy” in a way that has no clear bottom line. Moreover, the agencies submit “draft” biological opinions to both the action agency and private applicants for review and comment, but exclude the public from such review. As Professor Houck notes, “Without public participation, findings of ‘no jeopardy’ are far easier to reach.” See Houck, *supra* note 9, at 326.

⁸⁷ Ruhl, *supra* note 10, at 1111 (noting the common perception that core ESA programs such as section 7 have been used in a “rigid, coercive manner”); *id.* at 1123 (noting that “jeopardy findings can lead to outcry from the regulated community”); *id.* at 1125 (referring to jeopardy determinations as “potentially explosive”); *id.* at 1126 (noting that the economic dislocation has “inflamed . . . consternation over the ESA among the regulated community”); Houck, *supra* note 9, at 317 (noting a “rolling drumfire of criticism” of section 7).

⁸⁸ See *supra* note 85.

⁸⁹ See *supra* note 59.

⁹⁰ Houck, *supra* note 9, at 319; see Rohlf, *supra* note 9, at 163 (noting that the agencies’ approach to analyzing jeopardy “renders a jeopardy conclusion for any given agency proposal all but impossible”).

⁹¹ 16 U.S.C. § 1536(a)(2) (2000).

⁹² Congress specified elsewhere in the Act whether Service decisions should be based on purely scientific information or a range of policy factors. For example, Congress required listing decisions to be scientifically based. See *id.* § 1533(b)(1)(A) (“The Secretary shall make [listing determinations] solely on the basis of the best scientific and commercial data available to

When the Services implement section 7 in a manner calculated to be “reasonable,” they tread into territory that the Supreme Court explicitly cautioned against in *Tennessee Valley Authority v. Hill* (*TVA v. Hill*).⁹³ There, the Court declared that section 7 “admits of no exception.”⁹⁴ Enjoining the operation of a virtually completed \$100 million dam, the Court stated:

Here we are urged to view the Endangered Species Act “reasonably” and hence shape a remedy “that accords with some modicum of common sense and the public weal.” But is that our function? We have no . . . mandate from the people to strike a balance of equities on the side of the Tellico Dam. Congress has spoken in the plainest of words, making it abundantly clear that the balance has been struck in favor of affording endangered species the highest of priorities, thereby adopting a policy which it described as “institutionalized caution.”⁹⁵

Congress specifically provided a mechanism in section 7 by which to “balance” the interests of species against proposed actions. Section 7(e)–(o) provides a detailed process for exemptions from section 7 to allow truly compelling agency actions to go forward despite harm to a species.⁹⁶ Congress vested that balancing function in a special high-level Exemption Committee popularly known as the “God Squad”—notably not in the Services.⁹⁷ From a trust perspective, this committee has the delegated

him . . .”). By comparison, Congress made it clear that the decision to designate critical habitat was in part a policy decision:

The Secretary shall designate critical habitat . . . on the basis of the best scientific data available and after taking into consideration the economic impact, and any other relevant impact, of specifying any particular area as critical habitat. The Secretary may exclude any area from critical habitat if he determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless he determines, based on the best scientific and commercial data available, that the failure to designate such area as critical habitat will result in the extinction of the species concerned.

Id. § 1533(b)(2).

⁹³ 437 U.S. 153 (1978).

⁹⁴ *Id.* at 173; see also *House v. United States Forest Serv.*, 974 F. Supp. 1022, 1027 n.8 (E.D. Ky. 1997) (“[T]he Court . . . does not agree with [the government’s] assertion that [it] may balance competing agency interests with the conservation of an endangered species, as this flies smack in the face of the Supreme Court’s holding in *Tennessee Valley Authority v. Hill*.”) (citation omitted). After *TVA v. Hill*, Congress “softened” the section 7 mandate slightly by changing the original language, which required federal agencies to insure their actions “do not” jeopardize a listed species, to the present requirement of insuring that their actions are “not likely to” jeopardize a listed species. Houck, *supra* note 9, at 316–17. But as Professor Houck notes, this new standard seems merely aimed at “exclud[ing] minor intrusions and remote occurrences.” *Id.* at 317.

⁹⁵ *TVA v. Hill*, 437 U.S. at 194 (internal citations omitted).

⁹⁶ The exemption provision in section 7 was added in 1978, after the *TVA v. Hill* ruling. See COGGINS ET AL., *supra* note 21, at 449–50 (discussing the exemption process in the “[a]ftermath of *TVA v. Hill*”). It provides the only mechanism for an exception to section 7’s strict provisions. The rest of section 7, as construed by the *TVA v. Hill* Court, “admits of no exception.” *TVA v. Hill*, 437 U.S. at 173.

⁹⁷ 16 U.S.C. § 1536(e), (h) (2000).

authority to allow depletion of the trust for the public benefit. The Exemption Committee is comprised of several members of the President's cabinet, reflecting the important consequences at stake in balancing the survival of species against significant projects.⁹⁸

The statute sets forth explicit criteria for granting an exemption. These criteria reflect the quintessential fiduciary balance used in making a choice between true public need and trust depletion. An exemption can be granted only if: 1) there are "no reasonable and prudent alternatives" to the agency action; 2) the benefits of the action "clearly outweigh" the benefits of conserving the species; 3) the action is "in the public interest;" and 4) the action is "of regional and national significance."⁹⁹ The statute sets forth a detailed administrative fact-finding process for evaluating these criteria based on evidence in the record.¹⁰⁰ The creation of such a high-level committee and a detailed public process to identify and weigh policy concerns before depleting the wildlife trust is solid indication that Congress did not intend the Services to engage in such policy making when rendering biological opinions.

If pressed into the interpretation of section 7(a)(2), wildlife trust principles would eliminate the unbounded policy discretion created by the Services' current approach to jeopardy.¹⁰¹ A "no further harm" approach to

⁹⁸ The Exemption Committee is chaired by the Secretary of the Interior and includes the Secretary of Agriculture, the Secretary of the Army, the Chairman of the Council of Economic Advisors, the Administrators of the EPA and the National Oceanic Atmospheric Administration, and a presidential appointee representing each state affected by a particular application. *Id.* § 1536(e)(3), (e)(5)(b). For a discussion of the exemption process, see Lawrence R. Liebesman & Rafe Petersen, *Federal Agency Conservation Obligations and Consultation Under Section 7 of the ESA*, 33 *Envtl. L. Rep. (Envtl. L. Inst.)* 10,939 (Dec. 2003); Jared des Rosiers, Note, *The Exemption Process Under the Endangered Species Act: How the "God Squad" Works and Why*, 66 *NOTRE DAME L. REV.* 825 (1991).

⁹⁹ 16 U.S.C. § 1536(h)(1)(A) (2000). The third exemption criterion parallels the common law requirement that conveyances of public trust property out of government ownership must be in the public interest. *See Lake Mich. Fed'n v. United States Army Corps of Eng'rs*, 742 F. Supp. 441, 445 (N.D. Ill. 1990) (reviewing a legislative grant of submerged lands to a private university, stating that "in order to satisfy the public trust doctrine, the primary purpose of the challenged grant must be to benefit the public, rather than a private interest. Moreover, . . . the public purpose advanced by the grant must be direct.").

The God Squad has convened only twice in its history. *See Parenteau, supra* note 22, at 624 (describing Grayrocks Dam/Tellico Dam in 1979 and 44 Bureau of Land Management timber sales in 1991). The dearth of projects receiving God Squad review may cause some to view the process as unworkable or impracticable. To the contrary, the process relies on an administrative hearing, which by its nature is well-defined, has strict time limits, and incorporates procedural protection for the public interest. 16 U.S.C. § 1536(e)-(h) (2000). The fact that the exemption process is so little used may simply reflect its effectiveness at filtering out cases that could not meet the exemption criteria. The few applicants that receive jeopardy opinions may choose not to pursue the exemption process upon a calculation that their projects are not regional or national and do not carry sufficient benefits to justify the extinction of a species. *See id.* § 1536(h)(1)(A) (setting forth exemption criteria).

¹⁰⁰ *Id.* § 1536(g)(4), (6), (8). The ESA provides for a public administrative hearing according to the provisions of the Administrative Procedure Act. *Id.* § 1536(g)(6). The Secretary of Interior must prepare a report for the Exemption Committee summarizing the evidence from the hearing. *Id.* § 1536(g)(5).

¹⁰¹ Professor Rohlfs suggests a different approach towards constraining the Services'

jeopardy reflects the central principle that public agency trustees must preserve the wildlife trust, not allow further damage to it.¹⁰² Under this approach, any further net harm to a species after listing is *per se* jeopardy,¹⁰³ and the Services' section 7(a)(2) function is simply to assess whether, as a purely scientific matter, the proposed action will cause further harm to the species. The exemption procedure provides the appropriate forum for the weighty policy decision of whether to allow depletion of the wildlife trust in light of truly compelling circumstances.

The trust approach to section 7 implementation would allow for stronger judicial review of the Services' decisions. Courts would be guided by the principle of "no further harm" which amounts to a clear, enforceable bottom line. At present, courts have difficulty reviewing the Services' biological determinations under section 7. The Services rarely shed light on the policy decisions underlying their current section 7 determinations, instead maintaining a facade that such decisions are purely technical.¹⁰⁴ No court has yet unraveled the actual decision-making process to reveal that, under the Services' present approach, section 7 determinations *inherently* incorporate a policy component.¹⁰⁵ Without such understanding, courts continue to view section 7 determinations as purely scientific determinations and, accordingly, grant a high degree of deference to the

discretion. He calls upon the Services to initiate "a policy-making process—with public participation—to develop an explicit biological standard for use in assessing jeopardy. The agencies could then employ this standard in all section 7 consultations." Rohlif, *supra* note 9, at 161. While the suggested process would likely bring more order to the Services' current open-ended policy discretion (gained through their interpretation of the jeopardy standard), Congress vested policy decisions in the God Squad, not the Services.

¹⁰² To be sure, this approach will preclude some economic activity that otherwise would have been sanctioned by the Services' self-defined discretion. But it is clear that Congress enacted section 7 with the understanding that economic fallout would occur from rigorous protection of species. In the opening sentence of the ESA, Congress declared that wildlife species had been rendered extinct as a consequence of "economic growth and development untempered by adequate concern and conservation." 16 U.S.C. § 1531(a)(1) (2000). As the Supreme Court found in *TVA v. Hill*, "The plain intent of Congress in enacting [the ESA] was to halt and reverse the trend toward species extinction, whatever the cost." 437 U.S. 153, 184 (1978). Congress considered economic arguments against the backdrop of the nation's collective genetic heritage, which it deemed "quite literally, incalculable." *Id.* at 178.

¹⁰³ This standard does not necessarily foreclose any and all further take of individual animals that are members of a listed species. It is possible in some cases that individual members may be taken with no net effect on the species as a whole. Moreover, as noted earlier, the take of some species protected by tribal treaty rights might be allowed to carry out the Indian trust obligation. *See supra* note 74. Any bar against further harm to the species must be understood as temporary until the species has fully recovered and is delisted. That process is likely to accelerate substantially if the Services carry out their section 7(a)(1) duties as suggested in Section IV of this Article. *See infra* Section IV.

¹⁰⁴ *See* Rohlif, *supra* note 9, at 160 (asserting that the Services "hide the true reasons for their decisions behind claims of scientific expertise"); Yagerman, *supra* note 9, at 854–55 (discussing agency "manipulat[ion] [of] scientific concepts for political ends"); Wood, *supra* note 59, at 242–45 (discussing politicization of science in ESA implementation).

¹⁰⁵ *See supra* notes 81–84, and accompanying text.

Services.¹⁰⁶ This judicial deference renders the Services' policy determinations essentially unreviewable.¹⁰⁷ Even if policy determinations

¹⁰⁶ Professor Rohlf describes the judicial treatment of the Services' section 7 determinations in detail. See Rohlf, *supra* note 9, at 144–50 (analyzing cases and concluding that courts give “substantial deference to what judges perceive as ‘scientific’ issues within the Services’ expertise”). Examples of cases that accord significant deference to the Services’ biological opinions include *Greenpeace, American Oceans Campaign v. National Marine Fisheries Serv.*, 237 F. Supp. 2d 1181, 1187 (W.D. Wash. 2002) (“Courts will defer to an agency’s technical or scientific expertise” when reviewing a challenge to a biological opinion, although agency’s decisions must still be “reasonable.”); *Lone Rock Timber Co. v. United States Dep’t of Interior*, 842 F. Supp. 433, 437 (D. Or. 1994) (“[C]ourts give great deference to the expertise of the FWS [in reviewing biological opinions].”); *Strahan v. Linnon*, No. 97-1787, 1998 WL 1085817, at *3 (1st Cir. 1998). (“In the absence of any meaningful challenge to the decision making process, or some reason to think that there has been a clear error of judgment, the court must defer to the agency’s [biological opinion].”). Courts will, however, overturn biological opinions that lack adequate factual or analytical grounding. See *Nat’l Wildlife Fed’n v. Nat’l Marine Fisheries Serv.*, 254 F. Supp. 2d 1196, 1212 (D. Or. 2003) (overturning NOAA’s biological opinion on the Federal Columbia River Power System); *Am. Rivers v. United States Army Corps of Eng’rs*, 271 F. Supp. 2d 230, 255, 262 (D.D.C. 2003) (finding plaintiffs were likely to succeed in establishing that FWS’s biological opinion violated the ESA and enjoining United States Army Corps from implementing its Annual Operations Plan for the Missouri River Basin); *Ctr. for Biological Diversity v. Rumsfeld*, 198 F. Supp. 2d 1139, 1157 (D. Ariz. 2002) (overturning FWS’s biological opinion on United States Army activities affecting the San Pedro River in Arizona). A district court in Kentucky noted in the ESA context:

The Court is not empowered to substitute its judgment for that of the agency. . . . [H]owever, it must act as a check on administrative decisions. . . . “While it is generally accepted that federal agencies are entitled to a presumption of good faith and regularity in arriving at their decision, that presumption is not irrebutable. [This Court] would be abdicating [its] Constitutional role were [it] simply to ‘rubber stamp’ this complex agency decision rather than ensuring that such decision is in accord with clear congressional mandates. It is [the Court’s] role to see that important legislative purposes are not lost or misdirected in the vast hallways of the federal bureaucracy.”

House v. United States Forest Serv., 974 F. Supp. 1022, 1026 (E.D. Ky. 1997) (quoting *Sierra Club v. Thomas*, 105 F.3d 248, 250 (6th Cir. 1997), *rev’d on other grounds*, *Ohio Forestry Ass’n, Inc. v. Sierra Club*, 523 U.S. 726 (1998) (modification in original)).

For an argument that courts should modify the deference doctrine in reviewing section 7 biological opinions, see Wood, *supra* note 59, at 255–68.

¹⁰⁷ Professor William Rodgers has commented on the overall unwillingness of courts to scrutinize agency scientific decisions, including those made under the ESA:

The enduring challenge of the courts in contributing to better decisions on environmental restoration is that they must take their facts from somebody else. Courts must decide what knowledge is legitimate

. . . Have [the courts] worked to overcome their ignorance [of scientific knowledge]? With rare exceptions, no. They have made ignorance a virtue and have disclaimed responsibility by deferring to the administrative agencies. Do these courts “integrate” scientific findings into law? Rarely. Their tolerance is so broad that if there is a hint of scientific “conflict” before the agencies, the courts readily surrender their decisionmaking powers.

. . . .
I have no solutions to this state of affairs. A generation of federal judges has been selected for their docility. Advancement and honors are reserved for those who show the greatest deference. Fortunately, there is still a skeleton crew still on the job. Their work shows familiarity with the aggressive hard-look doctrine of judicial review that is at the foundation of modern environmental law. There are still some judges to be found who

were subject to judicial scrutiny, it would be nearly impossible to second-guess particular risk acceptance decisions on the part of the Services because such informal decisions are not guided by any statutory standards.¹⁰⁸ By contrast, Congress specifically envisioned judicial review of policy decisions made by the Exemption Committee according to criteria set forth in section 7(h)(1)(A).¹⁰⁹ Such judicial review is based on the factual record developed during the deliberate, public administrative hearing under the Administrative Procedure Act.¹¹⁰

IV. PROMOTING RECOVERY UNDER SECTION 7(A)(1) TO REPLENISH THE WILDLIFE TRUST

The wildlife trust doctrine offers a second fundamental principle that should guide section 7 implementation. Governmental trustees have an affirmative obligation to restore the wildlife trust where it has been damaged or depleted.¹¹¹ Restoration of the wildlife trust simply returns to the public its rightful property interest in the wildlife asset. As one court stated in the context of a state's suit against a city for pollution that resulted in a fish kill:

We conclude that where the state is deemed to be the trustee of property for the benefit of the public it has the *obligation* to bring suit . . . to protect the corpus of the trust property

An action against those whose conduct damages or destroys such property, which is a natural resource of the public, must be considered an essential part of a trust doctrine, the vitality of which must be extended to meet the changing societal needs.

. . . The state's right to recover exists simply by virtue of the public trust property interest which is protected by traditional common law. . . .¹¹²

take seriously their duty to make science a part of their mandate.

William H. Rodgers, *The Myth of the Win-Win: Misdiagnosis in the Business of Reassembling Nature*, 42 ARIZ. L. REV. 297, 302-04 (2000).

¹⁰⁸ See *supra* notes 82-83 and accompanying text.

¹⁰⁹ 16 U.S.C. § 1536(n) (2000).

¹¹⁰ *Id.* (allowing judicial review under 5 U.S.C. chapter 7); *supra* note 100.

¹¹¹ See *supra* note 27.

¹¹² *State v. City of Bowling Green*, 313 N.E. 2d 409, 411 (Ohio 1974) (emphasis added); see also *State Dep't of Env'tl. Prot. v. Jersey Cent. Power & Light Co.* 336 A.2d 750, 759 (N.J. Super. App. Div. 1975) ("The State has not only the right but also the affirmative fiduciary obligation to ensure that the rights of the public to a viable marine environment are protected, and to seek compensation for any diminution in that trust corpus."), *rev'd on other grounds*, 351 A.2d 337, 344 (N.J. 1976); *In re Stuart Transp. Co.*, 495 F. Supp. 38, 40 (E.D. Va. 1980) (finding a "duty to protect and preserve the public's interest" in the context of federal and state claims for damages to migratory waterfowl caused by oil spill); *Selma Pressure Treating Co. v. Osmose Wood Preserving Co.*, 271 Cal. Rptr. 596, 606 (Cal. Ct. App. 1990) (holding that either the public trust doctrine or the state's role as *parens patriae* gives the state a "legally cognizable interest" in protecting its groundwaters from contamination); *State Dep't of Fisheries v. Gillette*, 621 P.2d 764, 767 (Wash. Ct. App. 1980) ("Representing the people of the state—the owners of the property [(spawning grounds)] destroyed . . . —the Department of Fisheries thus has a right of action for damages. In addition, the state, through the Department, has the fiduciary *obligation*

The Services have rarely replenished the wildlife trust,¹¹³ largely because they have failed to invoke a primary mechanism Congress devised in section 7(a)(1) for achieving recovery. Wildlife trust principles would suggest an affirmative duty on the part of the Services to use their section 7(a)(1) authority in furtherance of species restoration. Moreover, such principles provide a logical basis for allocating recovery liability among federal agencies within the section 7(a)(1) structure.¹¹⁴

A. The Section 7(a)(1) Mandate

The entire thrust of the ESA reflects Congress's emphasis on recovering species and thereby restoring the wildlife trust. The Act's stated purpose is to provide a "program for the conservation of . . . endangered species and threatened species."¹¹⁵ The opening provision of the ESA states the express policy that "all Federal departments and agencies shall seek to conserve endangered species and threatened species and shall utilize their authorities in furtherance of the purposes of this chapter."¹¹⁶ As the Court in *TVA v. Hill* recognized:

Lest there be any ambiguity as to the meaning of this statutory directive, the Act specifically defined "conserve" as meaning "to use . . . *all methods and procedures which are necessary* to bring *any endangered species* or threatened species to the point at which the measures provided pursuant to this chapter are no longer necessary."¹¹⁷

Congress devised a central mechanism to restore populations—section 7(a)(1), which immediately precedes the jeopardy provision. That section presents what is generally called the "affirmative conservation mandate," incumbent on all federal agencies: "All . . . Federal agencies *shall* in consultation with and with the assistance of the Secretary, utilize their authorities in furtherance of the purposes of this chapter by carrying out programs for the *conservation* of [listed] species . . ."¹¹⁸ "Conservation" is defined to mean recovery of species.¹¹⁹ In short, this section requires all federal agencies to embark on conservation programs and to do so in consultation with the Services. Because this directive is mandatory, not

of any trustee to seek damages for injury to the object of its trust."(emphasis added)). These cases recognize a common law form of natural resource damage which is similar in nature to that allowed by statute. See *supra* note 45 (reviewing natural resource damage provisions in federal environmental statutes).

¹¹³ See *supra* note 5.

¹¹⁴ See *infra* notes 148–50 and accompanying text.

¹¹⁵ 16 U.S.C. § 1531(b) (2000). That section also states: "The purposes of this chapter are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." *Id.*

¹¹⁶ *Id.* § 1531(c)(1).

¹¹⁷ *TVA v. Hill*, 437 U.S. 153, 180 (1978).

¹¹⁸ 16 U.S.C. § 1536(a)(1) (2000) (emphasis added). For a thorough analysis of this mandate, see Ruhl, *supra* note 10.

¹¹⁹ 16 U.S.C. § 1532(3) (2000). See *supra* note 117 and accompanying text.

discretionary, it clearly amounts to an essential tool Congress devised to structure recovery on a broad level. By enacting this section, Congress specifically required federal agencies to replenish the wildlife trust.

When read in conjunction with section 7(a)(2), section 7(a)(1) presents a powerful dual mandate. As originally enacted, the two requirements were merged together in a one-sentence command to federal agencies,¹²⁰ indicating that they were to be construed together. The jeopardy prohibition was to hold the line against further harm to species incurred by federal agencies on a project-by-project basis, and the affirmative conservation mandate was designed to force federal agencies to enact broad programs for the recovery of species, using all of their authorities. Consultation with the Services was the mechanism Congress designed to carry out both mandates. Jeopardy consultation operated on a project level, triggered by federal “actions” authorized, funded, or carried out by agencies. Conservation consultation was designed to be a broader sort of interaction between federal agencies and the Services, geared towards developing entire programs aimed towards recovery of species.

B. The Services’ Abdication of Statutory Authority Under Section 7(a)(1)

Remarkably, the Services have all but ignored their consulting role under section 7(a)(1). In thirty years, they have failed to develop any set of regulations to implement the section 7(a)(1) conservation mandate.¹²¹ A regulation is vital to establish parameters as to what those agency conservation programs must contain, and how ambitious they must be.¹²² Absent such regulatory content, the section 7(a)(1) mandate amounts to a vague and standardless “pretty please” for action agencies to engage in active species conservation—something clearly not intended by Congress when it drafted the word “shall” into the provision.

¹²⁰ Section 7 of the 1973 ESA read in pertinent part:

All other Federal departments and agencies shall, in consultation with and with the assistance of the Secretary, utilize their authorities in furtherance of the purposes of this chapter while carrying out programs for the conservation of endangered species and threatened species listed pursuant to section 4 of this act and by taking such action necessary to insure that actions authorized funded, or carried out by them do not jeopardize the continued existence of such endangered species and threatened species or result in the destruction or modification of habitat of such species which is determined by the Secretary, after consultation as appropriate with the affected States, to be critical

Endangered Species Act of 1973, Pub. L. No. 93-205, § 7, 87 Stat. 884, 892.

The two mandates were bifurcated into sections 7(a)(1) and 7(a)(2) in the 1979 amendments. Pub. L. No. 96-159, § 4, 93 Stat. 1226, 1229 (1979).

¹²¹ See Ruhl, *supra* note 10, at 1128–29 (noting that “unlike virtually all its ESA siblings, section 7(a)(1) is not the subject of FWS or NMFS implementing regulations”).

¹²² The Administrative Procedure Act gives the right of citizens to petition agencies for the issuance of rules. 5 U.S.C. § 553(e) (2000).

The consultation contemplated by section 7(a)(1) is simply not done.¹²³ The only hint of conservation consultation is found in regulations developed under section 7(a)(2) stating that, as part of jeopardy consultation, the Services “may provide” some “discretionary” conservation “recommendations.”¹²⁴ These conservation “recommendations” amount to no more than an ad-hoc, random set of voluntary measures tacked on to biological opinions.¹²⁵ They certainly do not come close to implementing section 7(a)(1)’s *mandate* that every federal agency carry out programs for the conservation—meaning recovery—of listed species.¹²⁶

Failure to develop a regulation and engage in program consultation amounts to a wholesale abdication of the authority vested in the Services under section 7(a)(1). It also represents a glaring transgression of trustee duties to replenish the wildlife trust. As the Supreme Court declared long ago in *Illinois Central Railroad v. Illinois*,¹²⁷ a landmark public trust case involving streambeds, “[A]bdication is not consistent with the exercise of that trust which requires the government of the State to preserve such waters for the use of the public. . . . Every legislature must, at the time of its existence, exercise the power of the State in the execution of the trust devolved upon it.”¹²⁸

Early judicial decisions that drew the broad parameters of section 7(a)(1) signaled that the affirmative conservation mandate would be a powerful force in the recovery of species. As the court stated in *Carson-Truckee Water Conservancy District v. Clark*:¹²⁹ “ESA 7(a)(1) . . . specifically directs that the Secretary [of Interior] ‘shall’ use programs administered by him to further the conservation purposes of ESA. Those sections . . . direct that the Secretary actively pursue a species conservation policy.”¹³⁰ Many courts continue to emphasize that section 7(a)(1) provides an independent

¹²³ See Ruhl, *supra* note 10, at 1128–29 (“FWS and NMFS appear . . . to have thrown in the towel on the conservation consultation process, relegating it to a backwater of the jeopardy consultation process.”).

¹²⁴ 50 C.F.R. § 402.14(g)(6), (j) (2004).

¹²⁵ See Ruhl, *supra* note 10, at 1128–29 (stating that “although the joint regulations of the FWS and NMFS . . . do contain a step in which FWS or NMFS may make species conservation recommendations in their biological opinions, following those recommendations is expressly described in the regulations as merely a discretionary option of the action agency”); *Coalition for Sustainable Res., Inc. v. United States Forest Serv.*, 48 F. Supp. 2d 1303, 1315 (D. Wyo. 1999) (noting that the recommendations in a biological opinion are “advisory only—therefore, how to implement ‘conservation’ is ultimately left to the discretion of the agency”), *aff’d in part, vacated in part*, 259 F.3d 1244 (10th Cir. 2001); *Or. Natural Res. Council Fund v. United States Army Corps of Eng’rs*, 2003 WL 117999, *4 (D. Or. 2003) (holding that action agencies are not bound to accept conservation recommendations).

¹²⁶ 16 U.S.C. § 1536(a)(1) (2000).

¹²⁷ 146 U.S. 307 (1892).

¹²⁸ *Id.* at 453, 460.

¹²⁹ 741 F.2d 257 (9th Cir. 1984).

¹³⁰ *Id.* at 261–62 (citation omitted). See *Nat’l Wildlife Fed’n v. Hodel*, 15 *Envtl. L. Rep.* (Envtl. L. Inst.) 20,891, 20,893 (E.D. Cal. 1985) (finding section 7(a)(1) language “mandatory”); *Pyramid Lake Paiute Tribe of Indians v. United States Dep’t of the Navy*, 898 F.2d 1410, 1416–17 (9th Cir. 1990) (noting that section 7(a)(1) places “affirmative obligations to conserve” listed species on federal agencies).

mandate separate from section 7(a)(2)'s jeopardy prohibition,¹³¹ and require action agencies to develop conservation programs in consultation with the Services.¹³² As the court in *Sierra Club v. Glickman*¹³³ emphatically stated:

[W]e find that § 7(a)(1) contains a clear statutory directive (it uses the word 'shall') requiring the federal agencies to consult and develop programs for the conservation of each of the endangered and threatened species listed pursuant to the statute. That Congress has passed a statute that is exceptionally broad in its effect, in the sense that it imposes a tremendous burden on the federal agencies to comply with its mandate, however, does not mean that it is written in such broad terms that in a given case there is no law to apply. . . . According to the USDA, because it enjoys a substantial amount of discretion as to ultimate program decisions, it has unreviewable discretion to ignore § 7(a)(1) altogether. This argument is entirely without merit. A mission agency's discretion to make the final substantive decision under its program authorities does not mean that the agency has unlimited, unreviewable discretion.¹³⁴

In the sense that courts still enforce the basic requirement of developing conservation programs, section 7(a)(1) maintains considerable

¹³¹ Several courts have made clear that section 7(a)(1) applies to agency "programs" while section 7(a)(2) applies to agency "actions." *Or. Natural Res. Council Fund*, 2003 WL 117999, at *4 (citing *Hells Canyon Pres. Council v. United States Forest Serv.*, Civ. No. 00-755-HU (D. Or. Mar. 30, 2001), to support the proposition that distinct application of section 7(a)(1) to agency programs and of 7(a)(2) to agency actions "is clear on the face of the statute"); *Strahan v. Linnon*, 967 F. Supp. 581, 596 (D. Mass. 1997). Some courts, however, have muddled the two requirements, deeming section 7(a)(2) "no jeopardy" findings sufficient for section 7(a)(1) consultation. *See, e.g.*, *S.F. Baykeeper v. United States Army Corps of Eng'rs*, 219 F. Supp. 2d 1001, 1026 (N.D. Cal. 2002) (rejecting section 7(a)(1) claim where consultation under section 7(a)(2) resulted in no jeopardy finding); *Leatherback Sea Turtle v. Nat'l Marine Fisheries Serv.*, No. 99-00152 DAE, 1999 WL 33594329, at *13 (D. Haw. 1999) ("[The Services] issued both conservation recommendations and several biological opinions. Each biological opinion made a 'no jeopardy' finding Thus, Defendants were clearly focused on their obligations under section 7(a)(1).").

¹³² *See Fla. Key Deer v. Stickney*, 864 F. Supp. 1222, 1238 (S.D. Fla. 1994) ("FEMA has failed to consider or undertake *any* action to fulfill its mandatory obligations under Section 7(a)(1), and is therefore in violation of that provision of the ESA. Indeed, FEMA has *refused* to consult with the USFWS even after formal request to do so. FEMA's actions, and inaction, violate Section 7 of the ESA." (emphasis in original)); *Or. Natural Res. Council Fund*, 2003 WL 117999, at *4 ("[A]n agency can defeat a section 7(a)(1) claim by showing that it has a program for conservation of listed species and that the appropriate agency was consulted."); *WaterWatch v. United States Army Corps of Eng'rs*, 2000 WL 1100059, at *11 (D. Or. 2000) (same); *Leatherback Sea Turtle*, 1999 WL 33594329, at *12 ("Section 7(a)(1) requires each federal agency in consultation with and with the assistance of the NMFS or the Fish and Wildlife Service to adopt programs for the conservation of endangered species."); *but see S.F. Baykeeper*, 219 F. Supp. 2d at 1026 (finding section 7(a)(1) duty satisfied by a NMFS finding of no jeopardy on project challenged under section 7(a)(2)).

¹³³ 156 F.3d 606 (5th Cir. 1998).

¹³⁴ *Id.* at 617; *see also House v. United States Forest Serv.*, 974 F. Supp. 1022, 1027 n.8 (E.D. Ky. 1997) ("While the Court agrees that defendants have some discretionary powers as to the methods of conservation it desires to implement, it does not agree with defendants' assertion that defendants may balance competing agency interests with the conservation of an endangered species, as this flies smack in the face of the Supreme Court's holding in *Tennessee Valley Authority v. Hill*, 437 U.S. 153 (1978).").

“latent power” in spurring agency action towards recovery.¹³⁵ However, the lack of any regulation to interpret the affirmative conservation mandate has left the “latent power” of section 7(a)(1) largely untapped. Though courts clearly recognize the mandatory nature of section 7(a)(1), and maintain a reviewing role,¹³⁶ they have no basis upon which to evaluate the content of section 7(a)(1) programs. Without regulatory definition of the section 7(a)(1) obligation, the courts simply cannot find any substantive basis by which to measure the conservation programs beyond the broad requirement that such programs may not be arbitrary or capricious. Despite the emphatic statement in *Glickman* that an agency does not have “unlimited, unreviewable discretion,”¹³⁷ most courts take a hands-off approach and accord nearly complete deference to the action agency to define its own section 7(a)(1) conservation obligations.¹³⁸

¹³⁵ In an article examining section 7(a)(1), Professor J.B. Ruhl reviewed early caselaw and observed that the provision held “latent power” in species recovery and could be used in various ways as a “sword, a shield, or a prod.” Ruhl, *supra* note 10, at 1109. Professor Ruhl concluded that section 7(a)(1) could be used as a “shield” in the sense that “agencies that make decisions in carrying out their primary mission programs that also advance ESA’s conservation purposes will be protected against claims of acting arbitrarily or outside the scope of their authority.” *Id.* at 1130. He also found caselaw supporting the use of section 7(a)(1) as a “sword” requiring a federal agency to “maximize use of *significant* conservation measures in its action selection and justify any departure from full attention to species conservation with relevant factors.” *Id.* at 1133 (emphasis in original). He suggested too that section 7(a)(1) could be used as a “prod” for agency conservation action, noting its potential to operate as a classic “action-forcing mechanism.” *Id.* at 1137.

¹³⁶ See *Sierra Club v. Glickman*, 156 F.3d at 616 (rejecting USDA’s argument that its duties under section 7(a)(1) are not judicially reviewable because it has substantial discretion in developing conservation programs); *Leatherback Sea Turtle*, 1999 WL 33594329, at *12 (“Defendants’ actions or lack thereof under section 7(a)(1) are reviewable by this court.”); see also note 131 and accompanying text.

¹³⁷ *Glickman*, 156 F.3d at 617.

¹³⁸ See *Strahan v. Linnon*, 967 F. Supp. 581, 596 (D. Mass. 1997) (“[C]onservation plans under Section 7(a)(1) are ‘voluntary measures that the federal agency has the discretion to undertake’ and ‘the [ESA] does not mandate particular actions be taken by Federal agencies to implement [Section] 7(a)(1).’” (quoting Interagency Cooperation—Endangered Species Act of 1973, As Amended; Final Rule, 51 Fed. Reg. 19,926, 19,931, 19,934 (June 3, 1986) (modification in original))); *Defenders of Wildlife v. Env’tl. Prot. Agency*, 688 F. Supp. 1334, 1352 (D. Minn. 1988) (“Reasonable people could disagree as to the proper level of activism required by an agency under the ESA. The court will not substitute its judgment for the agency’s in deciding as a general matter that the totality of defendant’s actions taken to protect [listed] species were insufficient.”), *aff’d in part, rev’d in part on other grounds*, 882 F.2d 1294 (8th Cir. 1989); *Or. Natural Res. Council Fund*, 2003 WL 117999, at *4 (“[W]here an agency has followed the required procedures and set forth a program for the conservation of a threatened or endangered species in compliance with 7(a)(1), the courts will not evaluate the success of the program and order the agency to undertake what may be a more successful course of action.”); *WaterWatch*, 2000 WL 1100059, at *11 (“While it might be desirable for the Corps to have a more organized approach to carrying out programs for the conservation of listed species, and for the Corps to have a conservation program applicable to pump station permits, it is clearly beyond this court’s authority to order any specific conservation measure to be taken.”); *Defenders of Wildlife v. Babbitt*, 130 F. Supp. 2d 121, 135 (D.D.C. 2001) (“The case law is well settled that federal agencies are accorded discretion in determining how to fulfill their 1536(a)(1) obligations. . . . Likewise, this court is not the proper place to adjudicate and declare that defendants have violated the ESA as a matter of law by not implementing the processes listed

The decision in *Coalition for Sustainable Resources v. United States Forest Service (Coalition for Sustainable Resources)*¹³⁹ is indicative of judicial abeyance in this area. That case arose out of an audacious attempt on the part of Platte River water users to force clearcutting of a national forest in order to release more water to the river—all under the guise of protecting Platte River species. The Forest Service had reduced the harvest levels on the forest over time, which in turn caused less water to be released to the river.¹⁴⁰ The plaintiffs alleged that the Forest Service was violating the section 7(a)(1) standard by failing to use its authorities in managing the forest to maximize water releases that would benefit listed species.¹⁴¹ The court responded in strong language reflecting the attitude of most courts confronted with section 7(a)(1) cases—including those brought truly for the benefit of restoring species:

The case law is well settled that federal agencies are accorded discretion in determining how to fulfill their § 1536(a)(1) obligations. . . . “While the affirmative nature of § 1536(a)(1) is beyond dispute, the definition of conservation in § 1532 proves some discretion in conservation measures.”

...
 ... [H]ow to implement “conservation” is ultimately left to the discretion of the agency.

...
 ... The Court has conducted an extensive review of the law in this area, and its research has not revealed one case where a court ordered the federal agency to take specific measures to land, such as ordering that vegetation and snow management programs be implemented. The absence of such a case makes sense: The courts are not in the best position to order a specific affirmative remedy such as clearing a forest.

by [plaintiff].” (quoting *Coalition for Sustainable Resources v. United States Forest Serv.*, 48 F. Supp. 2d 1303, 1315–16 (D. Wyo. 1999)); *S.F. Baykeeper*, 219 F. Supp. 2d at 1026 (“[A]n expansive interpretation of 7(a)(1) would divest an agency of virtually all discretion in deciding how to fulfill its duty to conserve. . . . [A]n agency has broad discretion to carry out its obligations under section 7(a)(1) so long as its actions satisfy the ESA’s general prohibition against jeopardizing listed species.” (internal quotation omitted)); *Leatherback Sea Turtle*, 1999 WL 33594329, at *13 (“[T]he agency is not required to take affirmative steps under section 7(a)(1).”); *Pyramid Lake Paiute Tribe of Indians v. United States Dep’t of Navy*, 898 F.2d 1410, 1418 (9th Cir. 1990) (“[The agency] is to be afforded some discretion in ascertaining how best to fulfill the mandate to conserve under section 7(a)(1)”); *Hawksbill Sea Turtle v. Fed. Emergency Mgmt. Agency*, 11 F. Supp. 2d 529, 542–43 (D.N.J. 1998) (finding that 7(a)(1) does not require affirmative acts).

¹³⁹ 48 F. Supp. 2d 1303 (D. Wyo. 1999), *aff’d in part, vacated in part on other grounds*, 259 F.3d 1244 (10th Cir. 2001) (finding case not ripe for review).

¹⁴⁰ *Id.* at 1307.

¹⁴¹ There was little doubt that the plaintiffs were not primarily interested in the welfare of the Platte River species. *Id.* at 1306–07, 1311. Their true motive was to ease ESA restrictions that limited the amount of water they could take from the Platte River for ranching and other operations. *Id.* at 1311. Under *Bennett v. Spear*, 520 U.S. 154 (1997), such economic “harm” suffices for standing under the ESA. See *Coalition for Sustainable Resources*, 48 F. Supp. 2d at 1311 (finding allegations of harm to water rights and aesthetic and recreational enjoyment sufficient to satisfy injury in fact).

Likewise, this court is not in the proper place to adjudge and declare that the defendants have violated the ESA as a matter of law by not implementing the processes listed. The weighty decisions of what an affirmative act will do, in terms of USFS' statutory obligations and potential impact on the environment, is better left to the experts in this field. To order such an action without going through the proper procedure of ordering analyses and impact statements is unthinkable and judicially irresponsible.¹⁴²

The strong language in *Coalition for Sustainable Resources* punctuates a body of caselaw indicating that judicial deference towards agency programs will continue to paralyze any effective use of section 7(a)(1) until the Services promulgate implementing regulations setting forth standards for conservation programs. Without standards, nearly any affirmative step towards conservation could suffice for section 7(a)(1). Congress created the consultation requirement in section 7(a)(1) for the purpose of providing an organized framework for developing these conservation programs.¹⁴³ By failing to offer any consultation, much less any logical structure for the programs, the Services have put the courts in the position of chasing phantoms when called upon to review federal agency compliance with section 7(a)(1). As long as courts refuse to scrutinize the substance of agency programs, the "latent power" of section 7(a)(1) will remain dormant.¹⁴⁴

The approach of the lower court in *Glickman* provides a foothold for turning the tide of judicial review. That court required the agency to develop an "organized program" to fulfill the section 7(a)(1) conservation mandate¹⁴⁵—language suggesting that a haphazard program with no internal parameters would not suffice. The requirement of an "organized program" seems to pick up a strand of doctrine left hanging for nearly two decades. In 1985, the United States District Court for the Eastern District of California made clear that, in fulfilling the section 7(a)(1) mandate, agencies must identify factors that are relevant to designing a conservation program, and articulate a rational connection between such factors and the program.¹⁴⁶ A rational, organized model for imposing recovery obligations on federal agencies, as expressed in the form of an agency rule-making, would awaken

¹⁴² *Id.* at 1315–16 (citations omitted).

¹⁴³ *See Fla. Key Deer v. Stickney*, 864 F. Supp. 1222, 1241 (S.D. Fla. 1994) ("Congress has established procedures to further its policy of protecting endangered species. The substantive and procedural provisions of the ESA are the means determined by Congress to assure adequate protection. Only by requiring substantial compliance with the act's procedures can we effectuate the intent of the legislature." (quoting *Sierra Club v. Marsh*, 816 F.2d 1376, 1384 (9th Cir. 1987))).

¹⁴⁴ *See supra* note 135.

¹⁴⁵ *See Sierra Club v. Glickman*, 156 F.3d 606, 618 (5th Cir. 1998) (citing lower court opinion).

¹⁴⁶ *Nat'l Wildlife Fed'n v. Hodel*, 15 *Env'tl. L. Rep.* (Env'tl. L. Inst.) 20,891, 20,893 (E.D. Cal. 1985). That case was brought against FWS, which has a conservation mandate similar, but not identical, to other federal agencies. *See* 16 U.S.C. § 1536(a)(1) (2000) ("The Secretary shall review other programs administered by him and utilize such programs in furtherance of the purposes of this Act.").

the sleeping giant of section 7(a)(1).¹⁴⁷ On the thirtieth anniversary of the ESA, such a regulation is long overdue.

C: A Trust Approach to Developing Regulatory Content for Section 7(a)(1)

The trust doctrine provides a logical framework for developing the content of a regulation defining the section 7(a)(1) conservation responsibilities of federal agencies.¹⁴⁸ A trust approach would assign liability to parties for depleting the wildlife trust.¹⁴⁹ By accessing traditional principles of common law, the trust approach would demand that individual federal agencies and private actors be liable for their *proportionate share* of depleting the wildlife asset.¹⁵⁰ By extension, such agencies would be

¹⁴⁷ As Professor Ruhl notes:

Only by promulgating meaningful regulations detailing how federal agencies should consult on their conservation duties and the standards by which their actions will be measured, as well as by actively assisting the other agencies in carrying out that effort, can FWS fulfill the potential of section 7(a)(1)

J.B. Ruhl, *Who Needs Congress? An Agenda for Administrative Reform of the Endangered Species Act*, 6 N.Y.U. ENVTL. L.J. 367, 402 (1998).

¹⁴⁸ It is possible for courts to import trust duties and associated common law theories of liability into section 7(a)(1) even absent a regulation promulgated by the Services to carry out section 7(a)(1). The district court in *Sierra Club v. Glickman* ordered the agency to develop an "organized" program of conservation even absent an agency regulation defining the parameters of such a program. *Glickman*, 156 F.3d at 618 (citing district court opinion). In the context of protecting Indian wildlife species, the courts have noted that trust principles constitute "law to apply" within federal statutes. *See, e.g., Northwest Sea Farms, Inc. v. United States Army Corps of Eng'rs*, 931 F. Supp. 1515, 1519–20 (W.D. Wash. 1996) ("This [Indian trust] obligation has been interpreted to impose a fiduciary duty owed in conducting 'any Federal government action' which relates to Indian Tribes [and] constitute[s] 'law to apply' consistent with *Heckler v. Chaney*, 470 U.S. 821 (1985).") (citations omitted).

¹⁴⁹ *See, e.g., State v. City of Bowling Green*, 313 N.E.2d 409, 411 (Ohio 1974) ("An action against those whose conduct damages or destroys such property, which is a natural resource of the public, must be considered an essential part of a trust doctrine.").

¹⁵⁰ The *Restatement (Second) of Torts* provides that damages are to be apportioned among two or more causes where there are distinct harms, or where there is a reasonable basis for determining the contribution of each cause to a single harm. RESTATEMENT (SECOND) OF TORTS § 433A (1965). Similarly, Prosser and Keeton state that where "a factual basis can be found for some rough practical apportionment," liability will likely be apportioned. W. PAGE KEETON ET AL., PROSSER AND KEETON ON THE LAW OF TORTS §52, at 345 (5th ed. 1984). Apportionment, therefore, would be appropriate in a natural resources context where there is a means of determining the relative contributions of the liable parties. In public nuisance cases, however, courts have tended to adopt a theory of joint and several liability, rather than apportioning damages among liable parties. *See, e.g., Michie v. Great Lakes Steel Div., Nat'l Steel Corp.*, 495 F.2d 213, 217 (6th Cir. 1974) (stating the rule that where the injury is indivisible, the entire liability may be imposed in one or more tortfeasors); *Velsicol Chem. Corp. v. Rowe*, 543 S.W.2d 337, 343 (Tenn. 1976) (adopting the *Michie* rule for determining joint and several liability); *Landers v. E. Tex. Salt Water Disposal Co.*, 248 S.W.2d 731, 734 (Tex. 1952) ("Where the tortious acts of two or more wrongdoers join to produce an indivisible injury . . . all of the wrongdoers will be held jointly and severally liable for the entire damages . . ."). *But see* Gerald W. Boston, *Apportionment of Harm in Tort Law: A Proposed Restatement*, 21 U. DAYTON L. REV. 267, 345–48 (1996) (discussing application of apportionment of damages in public nuisance cases, and concluding: "[W]hile the courts in *Michie* and *Landers*, based on the record in those cases, were

responsible for their share of recovering the asset. This principle infuses the affirmative conservation responsibility with logical, bounded duties—the genesis of an “organized program” to carry out the section 7(a)(1) mandate.¹⁵¹

Section 4(f) of the Act provides an ideal mechanism for assigning this proportionate responsibility to individual federal agencies.¹⁵² That section requires the development of overall recovery plans for listed species.¹⁵³ Such plans provide a framework for assessing all factors contributing to a species' decline, and provide measured steps to recover the species.¹⁵⁴ As part of the overall recovery plan, the Services can assign proportionate recovery responsibility to individual federal agencies and can identify targeted goals, action items, and milestones for recovery. These elements, in turn, should provide the grist for individual action agencies to use in developing their conservation programs under section 7(a)(1). Developed in consultation with the Services, these conservation programs can incorporate specific measures tiered to the overall recovery plans. In essence, such section 7(a)(1) conservation programs would amount to mini-recovery plans carried out by individual agencies to meet their proportionate responsibility to recover the species as measured by trust liability principles.

Though recovery plans have been developed for the majority of species,¹⁵⁵ courts consider them primarily planning tools, not regulatory

disposed to . . . impose joint liability, both cases left open the possibility of apportionment where the facts could sustain it. . . . [M]ost nuisance cases will support apportionment.”). Interestingly, courts have relied extensively on common law principles to allocate responsibility for hazardous waste remediation under another landmark statute, the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 U.S.C. § 9601–9675 (2000). *See United States v. Chem-Dyne Corp.*, 572 F. Supp. 802, 810 (S.D. Ohio 1983) (“An examination of the common law reveals that when two or more persons acting independently caused a distinct or single harm for which there is a reasonable basis for division according to the contribution of each, each is subject to liability only for the portion of the total harm that he has himself caused.”).

The approach of assigning *proportionate* liability for depleting the wildlife trust has not been suggested by other commentators. Professor Ruhl's suggested approach to interpreting section 7(a)(1) focuses on the action agency's available options, not on proportionate harm. *See Ruhl*, *supra* note 10, at 1149–52.

¹⁵¹ *See supra* note 145 and accompanying text.

¹⁵² 16 U.S.C. § 1533(f) (2000).

¹⁵³ The Act states, “The Secretary shall develop and implement plans . . . for the conservation and survival of endangered species and threatened species . . . unless he finds that such a plan will not promote the conservation of the species.” *Id.* § 1533(f)(1). Recovery plans are developed with public comment. *Id.* § 1533(f)(4).

¹⁵⁴ Recovery plans must include: 1) a description of necessary “site-specific management actions” designed to recover the species, 2) “objective, measurable criteria” for delisting the species, and 3) time and cost estimates for carrying out the plan's goals. *Id.* § 1533(f)(1)(B). Courts have required the Services to include all of these statutory components in recovery plans. *See Defenders of Wildlife v. Babbitt*, 130 F. Supp. 2d 121, 135 (D.D.C. 2001) (granting summary judgment to the Defenders of Wildlife because FWS failed to include all three statutory components or to explain why it would be impractical to include them).

¹⁵⁵ The FWS website lists 1,018 recovery plans (out of 1,288 listed species). U.S. FISH & WILDLIFE, SUMMARY OF LISTED SPECIES: SPECIES AND RECOVERY PLANS AS OF 2/28/2004, at http://ecos.fws.gov/tess_public/TESSBoxscore.

documents, and typically refrain from enforcing their specific provisions.¹⁵⁶ The statute explicitly requires the Services to “implement” the recovery plans,¹⁵⁷ but does not set forth a process to make the recovery plan measures binding on the action agencies. Implementation of recovery plans, as required by statute, can only occur if the Services link the measures in such plans to the action-forcing provisions of section 7, which are mandatory and binding on all federal agencies.¹⁵⁸ As Professor J.B. Ruhl noted nearly ten years ago, linking section 7(a)(1) with section 4 creates a strong regulatory mechanism that gives meaning and purpose to the two sections.¹⁵⁹ Section 7(a)(1)’s unambiguous mandate provides an enforcement tool for carrying out section 4’s recovery planning objectives.¹⁶⁰ Section 4’s planning mechanism provides the framework to create regulatory content for section 7(a)(1)’s open-ended standard.¹⁶¹ In Professor Ruhl’s words,

The duty to conserve and recovery planning . . . could dovetail and ground each other in reality within the ESA family. With recovery planning as its benchmark, the duty to conserve would have substance and force. With the duty to conserve as its benchmark, recovery planning would have a real design and would likely come back down to earth.¹⁶²

Fused together in administrative practice, the two sections can provide an effective conservation framework with the potential to meet Congress’s ambition to restore species.

¹⁵⁶ See *Nat’l Wildlife Fed’n v. Nat’l Park Serv.*, 669 F. Supp. 384, 389 (D. Wyo. 1987) (“This Court will not attempt to second guess the Secretary’s motives for not following the recovery plan.”); *Nat’l Audubon Soc’y v. Hester*, 801 F.2d 405, 408 (D.C. Cir. 1986) (upholding FWS’s reversal of recovery strategy presented in recovery plan, finding “the agency reconsidered its policy after learning of recent developments”); *Defenders of Wildlife v. Lujan*, 792 F. Supp. 834, 835 (D.D.C. 1992) (“The Recovery Plan itself has never been an action document.”); *Or. Natural Res. Council v. Turner*, 863 F. Supp. 1277, 1284 (D. Or. 1994) (“The recovery plan presents a guideline for future goals but does not mandate any actions, at any particular time, to obtain those goals.”); *Sierra Club v. Lujan*, 1993 WL 151353, at *25 (W.D. Tex. 1993) (“The Court does not conclude the Federal Defendants must, without exception, immediately implement every step in every recovery plan [but they] may not arbitrarily, for no reason or for inadequate or improper reasons, choose to remain idle.”); Daniel J. Rohlf, *Section 4 of the Endangered Species Act: Top Ten Issues for the Next 30 Years*, 34 ENVTL. L. 483, 499 (2004) (noting that citizen litigation efforts to force agency compliance with recovery plan provisions have “generally proven spectacularly unsuccessful”); GOBLE & FREYFOGLE, *supra* note 15, at 1272 (summarizing case law and concluding that “recovery plans do not in themselves restrict an agency’s discretion”). For a thorough analysis of the recovery provision, see Cheever, *supra* note 5.

¹⁵⁷ 16 U.S.C. § 1533(f)(1) (2000). See also *supra* note 153.

¹⁵⁸ Ruhl, *supra* note 10, at 1152. Other commentators have also suggested this linkage. See Cheever, *supra* note 5, at 73 (“The various enforcement mechanisms . . . [of the ESA] become methods of furthering . . . recovery and conservation.”); Rohlf, *supra* note 9, at 153 (urging Services to “bring meaningful protections for recovery into the jeopardy standard by recognizing existing connections between recovery plans and section 7 consultation”).

¹⁵⁹ Ruhl, *supra* note 10, at 1152.

¹⁶⁰ *Id.*

¹⁶¹ *Id.*

¹⁶² *Id.*

The Services should require measured progress in carrying out these conservation programs by linking them to section 7(a)(2) consultation on individual agency actions.¹⁶³ Action agencies such as the Army Corps of Engineers, the Forest Service, the Bureau of Land Management, and many others, regularly consult with the Services as part of ongoing programs. This regular consultation provides a procedural opportunity for the Services to require implementation of those agencies' section 7(a)(1) programs. The section 7(a)(2) consultation on individual projects could incorporate a component setting forth measurable action items to carry out the section 7(a)(1) conservation programs. The Services currently link the section 7(a)(1) mandate to section 7(a)(2) consultation in a feeble way by incorporating discretionary conservation "recommendations" into the section 7(a)(2) consultation process.¹⁶⁴ The Services should instead incorporate in a mandatory way those conservation measures set forth in section 7(a)(1) programs.¹⁶⁵

The trust approach would allow substantive judicial review and enforcement of section 7(a)(1) programs. Imposing proportionate liability for depletion of the wildlife asset provides broad parameters of responsibility measurable by a court. Courts are accustomed, under common law experience, to assessing liability for natural resource damage. Using the trust approach, the section 7(a)(1) conservation programs would no longer be judged by some amorphous "that's the best we can do" standard, but rather by their effectiveness at addressing proportionate liability for depleting the wildlife asset—liability arrived at through the deliberate, public recovery-planning process of section 4. Such "mini-recovery" programs, developed in consultation with the Services, would be reviewed for their effectiveness at addressing the liability established in the broader section 4 species recovery plans. Courts would likely give deference to the technical aspects of programs determined to meet section 7(a)(1) standards after active consultation with the Services.¹⁶⁶ Furthermore, courts

¹⁶³ *Id.* at 1148. As Professor Ruhl notes, the consultation necessary to carry out section 7(a)(1) must actually occur on two levels. The first level is the "programmatic level" necessary to develop conservation programs. *Id.*; see 16 U.S.C. § 1536(a)(1) (2000) (stating that action agencies must develop their section 7(a)(1) programs "in consultation and with the assistance of the Secretary"). The second level is the "project-specific" level necessary to implement these programs. Ruhl, *supra* note 10, at 1148. Professor Ruhl suggests (as does this Article) tying the second level to the section 7(a)(2) consultation process for specific agency actions. See *supra* note 51–53 and accompanying text (explaining the consultation process).

¹⁶⁴ See *supra* notes 124–25 and accompanying text.

¹⁶⁵ As Professor Ruhl observes:

[E]ach agency would consult with FWS and NMFS on a project-specific level, much as they do now for jeopardy consultations, to ensure that projects fulfill the minimum required substantive duty of conservation. Just as they have for the section 7(a)(2) jeopardy consultation duty, FWS and NMFS would have the authority to implement those procedures necessary to make the conservation consultation duty a reality.

Ruhl, *supra* note 10, at 1148.

¹⁶⁶ In *Fund for Animals v. Babbitt*, 903 F. Supp. 96 (D.D.C. 1995), the court described deference in the context of reviewing specific measures in recovery plans developed under section 4: "The choice of one particular action over another is not arbitrary, capricious or an

would likely enforce the action items identified in section 7(a)(1) conservation programs if formulated by the Services as binding requirements in biological opinions rendered as part of the section 7(a)(2) consultation process.¹⁶⁷

V. CONCLUSION

Wildlife trust principles form the historical, common law backdrop to all wildlife regulation, including the Endangered Species Act. A trust framework treats biodiversity as a natural asset held in trust by the sovereign for the benefit of the public, including both present and future generations. The natural assets of the present generation are the legacy for future generations, who hold an entitlement in the property sense akin to a future interest. The sovereign, as trustee of these irreplaceable natural assets, has a continuing and inalienable duty to protect the corpus of the trust and replenish it where depleted. Courts serve as the essential guardians of the trust by virtue of their enforcement powers against agencies and therefore play a crucial role in ensuring that trust assets will endure for future generations.

By finding that imperiled fish, wildlife, and plant species are of “esthetic, ecological, educational, historical, recreational, and scientific value to the Nation and its people,”¹⁶⁸ Congress affirmed the public trust character of all listed species. In devising “a means whereby the ecosystems upon which endangered and threatened species depend may be conserved,”¹⁶⁹ Congress provided the necessary tools to preserve the trust. By designating the Fish and Wildlife Service and NOAA Fisheries as the primary agencies charged with implementing the Act, Congress delegated to these agencies the role of trustees over the Nation’s biodiversity—a natural asset crucial to the welfare of this and future generations.¹⁷⁰

The Services’ implementation of section 7 over the first three decades of the Act has lacked grounding in any normative principles of public trust law. The Services interpret the central provision of the Act, section 7, in a manner virtually certain to allow massive depletion of the wildlife trust in just a matter of decades. They implement section 7(a)(2) so as to permit further harm to the species after listing, thereby failing to protect the current trust assets against depletion. They have ignored their section 7(a)(1) duties to recover the wildlife asset by failing to develop an enforceable mechanism to carry out that section’s affirmative conservation mandate. In enacting the

abuse of discretion simply because one may happen to think it ill-considered, or to represent the less appealing alternative solution available.” *Id.* at 108.

¹⁶⁷ Of course, biological opinions are only advisory, but the Supreme Court has indicated that they hold considerable weight in determining an action agency’s compliance with section 7. *See supra* note 52.

¹⁶⁸ 16 U.S.C. § 1531(a)(3) (2000).

¹⁶⁹ *Id.* § 1531(b).

¹⁷⁰ *See* GOBLE & FREYFOGLE, *supra* note 15, at 1253 (querying whether section 7(a)(1) implicitly designates the Secretaries of Interior and Commerce as trustees for endangered and threatened wildlife).

ESA, Congress did not intend to draw species towards the bottom line of survival and to keep them hovering there. Congress created a rigorous scheme to replenish wildlife populations. Clearly, after thirty years of ESA experience, a dramatic interpretive shift is necessary to bring these statutory purposes to fruition.¹⁷¹ Trust principles provide the normative compass that should guide the Services' interpretation of the ESA.

Such trust principles would frame the jeopardy prohibition of section 7(a)(2) in a manner that preserves the remaining trust corpus of listed species. Rather than doling out further harm to species after listing, the Services should interpret section 7(a)(2)'s jeopardy prohibition to allow no further harm, unless the Exemption Committee provides an exemption after balancing trust interests against public need according to the well-defined statutory criteria. The Services should give meaning to section 7(a)(1)'s goal of recovering species by promulgating a regulation to implement that section's mandate that federal agencies develop conservation programs "in consultation with" the Services. Such a regulation should set forth a clear mechanism for tying together the various authorities Congress provided for the recovery of species. Using wildlife principles of common law, recovery plans developed under section 4 of the Act should assign proportionate liability to individual agencies for recovering species and should set forth clear and measurable goals and timeframes for discharging the liability. The section 7(a)(1) mandatory conservation programs should be developed in consultation with the Services to carry out the measures identified in the recovery plans. Such section 7(a)(1) programs would, in essence, amount to "mini-recovery" programs applicable to individual federal agencies. The Services should require implementation of these conservation programs as part of the section 7(a)(2) consultation process on individual federal agency actions.

For thirty years the Services have had effective regulatory mechanisms for recovering species "virtually at [their] fingertips."¹⁷² By failing to use their full authority under the Act, the Services have thwarted Congress's clear intent to recover species. Trust principles provide the affirmative duty on the part of the Services to carry out the authority Congress vested in them. By interpreting section 7(a)(2) in a strict "no further harm" manner that holds the line against depleting the wildlife assets, and by interpreting section 7(a)(1) in a manner that truly promotes recovery of the assets, the Services would not only fulfill their trust duties, but would also carry out the their statutory duty of administering the express dual mandate of section 7.

Trust principles can and should provide a vital paradigm shift for implementation and enforcement of the ESA. The ESA has become a hyper-technical statute adrift from the fundamental principles that gave Congress resolve in 1973. Agency officials charged with carrying out the ESA have wholly failed to recognize its trust origins—origins that vest responsibility over vital natural assets in the sovereign as the only enduring institution that

¹⁷¹ Professor Federico Cheever has similarly urged a major "paradigm change" in the ESA, organized around the concept of species recovery. See Cheever, *supra* note 5, at 77-78.

¹⁷² Rohlif, *supra* note 9, at 153.

holds authority transcending the generations. In the words of one court reviewing public trust duties, “Decades count for little, *so far as time even is concerned*, in the earthly immortality of a state.”¹⁷³ Decisions made under the ESA have nearly unfathomable consequences for humanity to come. They will determine whether there is abundant biodiversity for successor generations to inherit. As the only comprehensive wildlife statute of this nation, the ESA should be applied in accordance with the trust principles conceived by courts long ago to safeguard the remarkable wildlife resource for future generations.

¹⁷³ Moss Point Lumber Co. v. Board of Supervisors of Harrison County, 42 So. 290, 315 (Miss. 1906) (Whitfield, J., concurring) (“This [school funding trust] is intended . . . to endure always as a perpetual trust, for the recurring generations of children in this commonwealth, and not as the source of a fund intended to benefit the children of any particular decades. *Decades count for little, so far as time even is concerned, in the earthly immortality of a state.*” (emphasis added)).

