UNDERSTANDING THE ENDANGERED SPECIES ACT: A CASE STUDY OF THE CACTUS FERRUGINOUS PYGMY-OWL IN ARIZONA

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I. Introduction

Congress enacted the Endangered Species Act of 1973¹ ("ESA") with the goal of conserving endangered and threatened species and the ecosystems on which they depend.² As originally enacted, the ESA contained strict legal prohibitions and protections toward this goal. Formerly, § 9 of the ESA unconditionally prohibited the "taking" of any endangered species, which included the act of killing or capturing endangered species as well as harmful habitat modification or degradation.³ Further, the ESA's § 7 absolutely prohibited all federal agency projects and programs that "jeopardized" endangered species.⁴ However, since its enactment the ESA has been the subject of much controversy. The ESA has confronted strong resistance largely because such prohibitions significantly interfere with land development.⁵ Additionally, the ESA has suffered from political instability as such protections lack overt human importance.⁵

Responding to marketplace criticism, Congress passed a series of compromising exemption amendments to the ESA, eliminating the complained-of inflexibility. Starting with the "God Committee" amendments, Congress brought statutory flexibility to qualifying agency actions covered by the ESA by

Pub. L. No. 93-205, 87 Stat. 884 (codified as amended at 16 U.S.C. §§ 1531-43 (1994)).

^{2.} See 16 U.S.C. § 1531(b).

^{3.} See 16 U.S.C. §§ 1538(a)—(b) (1973) (codified as amended through 1994); 50 CFR §17.3 (1985) (codified as amended through 1999) (discussing regulation in which the U.S. Fish and Wildlife Service interpreted § 9's "taking" provision to include habitat modification or degradation as a "harm" that could amount to an illegal "take").

^{4. 16} U.S.C. § 1536 (1973) (codified as amended through 1994).

^{5.} See ZYGMUNT J.B. PLATER ET AL., ENVIRONMENTAL LAW AND POLICY: NATURE, LAW, AND SOCIETY 671-73 (2d ed. 1998).

^{6.} See id.

authorizing the removal of § 7 protections. Congress also excused certain private property owners from the § 9 prohibitions of the ESA with the "Incidental Take" amendments. However, because such amendments compromise the preservation of endangered species and their habitat, the ESA has achieved even more controversy as of late. This has been particularly true in Arizona, where recently the foremost protections and exemptions of the ESA have taken center-stage regarding the cactus ferruginous pygmy-owl (Glaucidium brasilianum cactorum) ("pygmy-owl").

With its exacting protections and demanding exemptions, coupled with underlying rationales that lack overt human importance and a complicated process by which deserving species are afforded protection, the ESA has become a highly complex and extremely difficult Act both to understand and implement. The ESA as applied to the pygmy-owl exemplifies such complexity and misunderstanding. ¹¹ Thus, in an attempt to bring some understanding to the situation in Arizona, this Note examines the ESA implemented as to the pygmy-owl. Part II begins the analysis by looking at the rationales for endangered species conservation in general and for pygmy-owl protection in particular. Part III continues by following the ascent of the pygmy-owl under the ESA. Part IV explores §§ 7 and 9 of the ESA and how they operate as to the pygmy-owl. Part V examines the "God Committee" and "Incidental Take" exemption amendments and how they affect pygmy-owl protection. Part VI concludes by suggesting that without sufficient

^{7.} See 16 U.S.C. §§ 1536(e)—(o) (1994) (enabling a cabinet-level review board to authorize the removal of protections if an agency satisfactorily meets a stringent set of criteria).

^{8.} See 16 U.S.C. § 1539 (1994). The "Incidental Take" exemption provisions of § 10 allow the U.S. Fish and Wildlife Service to modify "unnecessary" burdens placed on property owners by § 9. See id.

^{9.} See generally Defenders of Wildlife v. Bernal, 204 F.3d 920 (9th Cir. 2000) (deciding whether construction of a high school by the Amphitheater School District would result in the "take" of the endangered cactus ferruginous pygmy-owl in violation of § 9 of the ESA); Defenders of Wildlife v. Ballard, 73 F. Supp. 2d 1094 (D. Ariz. 1999) (clarifying a district court order enjoining the U.S. Army Corps of Engineers from issuing nationwide permits under the Clean Water Act); 62 Fed. Reg. 10730 (1997) (determining endangered status for the cactus ferruginous pygmy-owl in Arizona); 64 Fed. Reg. 37419 (1999) (designating critical habitat for the cactus ferruginous pygmy-owl).

^{10.} See U.S. FISH AND WILDLIFE SERV., BIOLOGICAL OPINION SUMMARY: ISSUANCE OF AN ENDANGERED SPECIES ACT SECTION 10(a)(1)(B) PERMIT FOR THE LAZY K BAR RANCH (1998) (issuing an "Incidental Take" permit to the Lazy K Bar Ranch that allowed the "take" of two adult cactus ferruginous pygmy-owls and their young by way of habitat loss and harassment that will result from construction activities and a loss of critical habitat from residential development); 65 Fed. Reg. 54295 (2000) (notifying the public that Pima County is expected to apply for an "Incidental Take" permit for several federally listed species, including the pygmy-owl).

^{11.} See 62 Fed. Reg. at 10732-739 (summarizing comments surrounding the determination of endangered status for the cactus ferruginous pygmy-owl); 64 Fed. Reg. at 37426-433 (summarizing of comments surrounding the designation of critical habitat for the pygmy-owl).

administrative and judicial support for the ESA, the pygmy-owl may be facing extinction in the near future.

II. RATIONALES FOR PROTECTING ENDANGERED SPECIES

Arguments underlying the ESA and the conservation of endangered species in general include protecting the aesthetic beauty of certain species, as well as ecological and philosophical principles asserting the value of the survival of the greatest number of species possible. In utilitarian terms, a diversity of species is indispensable as to human welfare and survival. Individually, and more importantly, as part of interacting in their ecosystems, species of fish, wildlife, and plants directly and indirectly provide for and protect the human environment. Species naturally service the ecosystem by detoxifying and decomposing wastes, purifying air and water, generating and renewing soil and soil fertility, pollinating crops and natural vegetation, controlling harmful agricultural pests, mitigating floods, and partially stabilizing the climate. Such natural services further include protection from natural disasters, drought control, protection from ultraviolet rays, and dispersal of seeds and nutrients.

Animals and plants are also an important source of critical chemical and medical properties.¹⁵ Certain species have yielded beneficial drugs, medical

^{12.} See Plater et al., supra note 5, at 674; see also 16 U.S.C. § 1531(a)(3) (1994) ("[S]pecies of fish, wildlife, and plants are of esthetic, ecological, educational, historical, recreational, and scientific value to the Nation and its people."); DANIEL J. ROHLF, THE ENDANGERED SPECIES ACT: A GUIDE TO ITS PROTECTIONS AND IMPLEMENTATION 12-17 (1989) (offering a series of justifications for preserving endangered species including their aesthetic or cultural value, their potential medical or industrial value, the "natural services" that they and their ecosystems provide, and their eco-tourism value).

^{13.} See Paul & Anne Ehrlich, Extinction: The Causes and Consequences Of the Disappearance of Species 86-95 (1981); Charles C. Mann & Mark L. Plummer, Noah's Choice: The Future of Endangered Species 123 (1995); Gretchen C. Daily, Introduction: What Are Ecosystem Services?, in Nature's Services: Societal Dependence on Natural Ecosystems 1, 3-4 (Gretchen C. Daily ed., 1997) [hereinafter Nature's Services]; Gary Paul Nabhan & Stephen L. Buchmann, Services Provided by Pollinators, in Nature's Services 133; Rosamond L. Naylor & Paul R. Ehrlich, Natural Pest Control Services and Agriculture, in Nature's Services 151; David Tilman, Biodiversity and Ecosystem Functioning, in Nature's Services 93; Barton H. Thompson, Jr., People or Prairie Chickens: The Uncertain Search for Optimal Biodiversity, 51 Stan. L. Rev. 1127, 1136 (1999); see also William T. Hornaday, Our Vanishing Wild Life: Its Extermination and Preservation 213-33 (1913) (describing how birds have long been valued for eating troublesome insects and the seeds of unwanted weeds).

^{14.} See 143 Cong. Rec. E1596 (daily ed. Aug. 1, 1997) (statement of Rep. Miller) (explaining that the Alabama beach mouse "plays an important role in the beach dune ecosystem of the Gulf of Mexico by dispersing the seeds of the sea oat—its principal food source—which, in turn, forms the basis for the formation of dunes and protects them from erosion. The dunes protect inland housing from coastal flooding and hurricanes."); Daily, supra note 13, at 3-4.

^{15.} See NORMAN MYERS, A WEALTH OF WILD SPECIES: STOREHOUSE FOR HUMAN WELFARE 119 (1983) [hereinafter A WEALTH OF WILD SPECIES]; see also Norman Myers, Biodiversity's Genetic Library, in NATURE'S SERVICES 255 (Gretchen C. Daily ed., 1997)

treatments,¹⁶ and other utilitarian services,¹⁷ and numerous others potentially possess significant pharmaceutical, industrial, and agricultural value.¹⁸ Additionally, species regularly provide support for various cultural activities,¹⁹ as

(reviewing the "manifold contributions of biodiversity and its genetic resources to modern agriculture, medicine, and industry").

16. See United Nations Environment Programme, Global Biodiversity Assessment: Summary for Policy-Makers 14 (1995) (describing how a significant percentage of prescription drugs come from plants and animals); see also Mann & Plummer, supra note 13, stating:

Bark from the white willow gave us salicin, an ancient version of aspirin; the Grecian foxglove provided digoxin, a cardiac medication; bear bile is the origin of ursodiol, a gallstone dissolver; deadly nightshade led to atropine, an eye dilator and anti-inflammatory; the velvet bean produced L-dopa, a treatment for Parkinson's disease; and...penicillin, the bacteria slayer[, was] discovered accidentally in a mold.

Id. at 120–21; see also MYERS, A WEALTH OF WILD SPECIES, supra note 15, at 119 (indicating how the venom of a South American pit viper is the source of a popular drug that treats hypertension); Myers, supra note 13, at 265 (describing how frogs provide antitoxins and pain killers, an octopus produces a substance that relieves hypertension, and insects secrete substances similar to hormones); EDWARD O. WILSON, THE DIVERSITY OF LIFE 283 (1992) (describing how the endangered rosy periwinkle of Madagascar revealed cures for lymphocytic leukemia and Hodgkin's disease); William Barrett, Delaying Tactics, FORBES, Mar. 1998, at 68 (indicating how the Pacific yew supplies the cancer-fighting drug taxol).

- 17. See Myers, in NATURE'S SERVICES, supra note 15, at 266-70 (explaining how various species have benefited industrial production, scientific research, and biotechnology).
- 18. See Endangered Species Act: Washington, DC—Part II: Oversight Hearing Before the Task Force on Endangered Species Act of the Comm. on Resources, House of Representatives, 104th Cong. 206 (1995) [hereinafter Washington ESA Hearing Part II] (statement of the National Wildlife Federation) ("The National Cancer Institute is now studying four plant compounds that provide effective protection against the replication of the HIV-1 and HIV-2 virus, the precursors to AIDS, in laboratory tests."); MANN & PLUMMER, supra note 13, at 128 (recounting some of the possible anti-AIDS drugs).

As a precautionary matter, conserving all species is prudent in that any one species may possess unrealized value. See Washington ESA Hearing Part II, supra, at 35 (statement of Dr. Kevin H. Browngoehl, Biodiversity Committee, National Physicians for the Environment) ("Only five percent of our flowering plant species have been studied chemically with any thoroughness to look for their medicinal value."); ALDO LEOFOLD, A SAND COUNTY ALMANAC WITH OTHER ESSAYS ON CONSERVATION FROM ROUND RIVER 177 (1971) ("[T]he last word in ignorance is the man who says of an animal or plant: "What good is it?"....To keep every cog and wheel is the first precaution of intelligent tinkering."); MANN & PLUMMER, supra note 13, at 121–22 ("[B]iologists frequently liken the world's biodiversity to a library in which the vast majority of books have never been read....Reading the books in the species library once will not be enough....Each generation will profit from reading them over and over again.").

19. See Daily, supra note 13, at 3-4; see also Edward O. Wilson, The Serpent, in BIOPHILIA, 97-101 (1996) (stating that animals, such as snakes, are the "agents of nature that are translated into symbols of culture").

well as provide aesthetic beauty,²⁰ tourism,²¹ and psychological benefits.²² Finally, species act as "canaries in the coal mine" in that their loss may serve as early indications that the rest of the ecosystem is in danger.²³ Therefore, ensuring the

- 20. People take pleasure from visiting, photographing, painting, and simply looking at wildlife. See John Copeland Nagle, Playing Noah, 82 Minn. L. Rev. 1171, 1206 (1998). Such pleasure extends to those who never see endangered species in the wild, or who never will, and simply value their continued existence. See Lawrence H. Goulder & Donald Kennedy, Valuing Ecosystem Services: Philosophical Bases and Empirical Methods, in NATURE'S SERVICES, at 25. Non-use values are "those that do not involve any actual direct or indirect physical involvement with the natural thing in question." Id.
- The appeal of wildlife often generates substantial economic benefits in the form of recreation and eco-tourism. See U.S. FISH AND WILDLIFE SERV., 1991 ECONOMIC IMPACTS OF NONCONSUMPTIVE WILDLIFE-RELATED RECREATION 6-7 (1993) (reporting that 76 million Americans who watched, photographed, and fed birds and other wildlife spent \$18.1 billion on those activities); The Missouri Dept. of Conservation, Soaring: Hobby of Bird-Watching Takes Off, Along With Feed Stores and Festivals, St. Louis Post Dispatch, July 10, 1996, at 6SC (reporting that birdwatching alone is a \$15 billion business annually); see also Washington ESA Hearing Part II, supra note 18, at 192-93 (statement of the National Wildlife Federation) (listing examples of the tourism benefits of wildlife); Endangered Species Act: Washington, DC—Part I: Oversight Hearing Before the Task Force on Endangered Species Act of the Comm. on Resources, House of Representatives, 104th Cong. 20-21 (1995) (statement of Rep. Morella) (describing how numerous communities benefit from visiting birdwatchers); id. at 87 (statement of Rep. Brewster) (estimating that the Conservation Reserve Program produces \$4.1 billion in wildlife viewing benefits).

Endangered species in particular provide significant economic benefits. See Endangered Species and Wetlands of the Comm. on Resources, House of Representatives, 104th Cong. 65–66, at 104 (1995) (reporting that an environmentalist rancher in the Texas Hill Country earned \$14,000 from groups that came to see the endangered golden-cheeked warbler and black-capped vireo); U.S. Fish and Wildlife Serv., Draft Environmental Impact Statement on the Reintroduction of Gray Wolves to Yellowstone National Park and Central Idaho, at 18–19 (1993) (reporting that the reintroduction of gray wolves to Yellowstone National Park has increased visitors by 5–10% and is expected to generate net revenues of \$10 million by the year 2000); MANN & PLUMMER, supra note 13, at 125–26 (indicating that whooping cranes and other wildlife generate \$5 million annually to the economy of the area surrounding the Arkansas National Wildlife Refuge in Texas).

- 22. See Digest of the Pygmy Owl Forum, THE UDALL CENTER FOR STUDIES IN PUBLIC POLICY, THE UNIV. OF ARIZONA, Feb. 1, 1998, at 29 (statement of Craig Miller) ("[A] diversity of wildlife and plants...provides important psychological benefits, ranging from stress relief, to satisfaction from fulfilling our ethical duty to safeguard creation.").
- PLATER ET AL., supra note 5, at 692; see also 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, 301 (1995) ("Endangered species are the 'miners' canaries' for the health of something larger, which we have not yet attempted to protect in a more holistic way."). This metaphor refers to the use of canaries by coal miners to detect dangerous gases in deep mine shafts (because the birds were sensitive to odorless coal gas, when they began to asphyxiate, the miners would flee the shaft). See id. at 301 n.20. See also, e.g., Sierra Club v. Babbitt, 15 F. Supp. 2d 1294, 1295 (S.D. Ala. 1998) (indicating how the Alabama beach mouse warned that the coastal barrier dunes system was falling apart); Sierra Club v. Lujan, No. MO-91-CA-069, 1993 WL 151353, at *6 (W.D. Tex. Feb. 1, 1993) (indicating how the Barton springs

survival of all species assures diversity, thereby equipping the natural world and humanity with the capability to endure and adapt to continuing stresses.

Beyond the utility arguments, species also enjoy values beyond that which humans might attach to them.²⁴ The ESA implicitly recognizes such values as it avoids distinguishing between species that have a direct human utility and those that do not.²⁵ Indeed, species' protection often draws upon a variety of quasi-religious²⁶ and moral²⁷ or ethical²⁸ principles that emphasize the sanctity of life.

salamander warned that over-pumping the Edwards aquifer threatened the agricultural communities of West Texas that also depended on adequate water levels); Endangered Species Act—Vancouver, Washington: Hearing Before the Task Force on Endangered Species Act of the Comm. on Resources, House of Representatives, 104th Cong. 32–33, at 13 (1995) (statement of Gretchen Starke, Vancouver Audubon) (stating that environmentalists viewed the decline of the northern spotted owl as a sign of the decline of the old growth forests in which it lives); Washington ESA Hearing Part II, supra note 18, at 191 (statement of the National Wildlife Federation) (stating that the dangers of the pesticide DDT were first learned from the decline of the bald eagle); PLATER ET AL., supra note 5, at 670 (stating that the snail darter warned that water projects were claiming far too many free-flowing rivers and valley farms).

- 24. See generally LEOPOLD, supra note 18 (writing that conservation is the extension of ethics from people to land); PETER SINGER, ANIMAL LIBERATION (2d ed. 1995) (arguing that the principle of human equality must be extended to animals); see also Holly Doremus, Restoring Endangered Species: The Importance of Being Wild, 23 HARV. ENVIL. L. REV. 1, 13-14 (1999) (arguing that the ESA is based on ethical obligations to wildlife).
- 25. See 16 U.S.C. §§ 1531-44 (1994 & Supp. III 1997). Sections 7 and 9, for example, protect "any endangered species," regardless of utility. 16 U.S.C. §§ 1536(a)(2), 1538(a)(1).
- Numerous religions reject any human right to extirpate species. See ROGER 26. S. GOTTLIEB, THIS SACRED EARTH: RELIGION, NATURE, ENVIRONMENT (1996) (presenting essays that discuss environmental issues from a variety of religious perspectives); PETER MARSHALL, NATURE'S WEB: RETHINKING OUR PLACE ON EARTH 9-137 (1992) (discussing Taoism, Hinduism, Buddhism, Judeo-Christianity, Islamic, and Native American beliefs); Chuck D. Barlow, Why the Christian Right Must Protect the Environment: Theocentricity in the Political Workplace, 23 B.C. ENVTL. AFF. L. REV. 781, 797-819 (1996) (describing biblical examples including Jesus, Adam, Noah, and Joseph's "common sense environmentalism through command-and-control regulation"); see also LEWIS G. REGENSTEIN, REPLENISH THE EARTH: A HISTORY OF ORGANIZED RELIGION'S TREATMENT OF ANIMALS AND NATURE-INCLUDING THE BIBLE'S MESSAGE OF CONSERVATION AND KINDNESS TOWARD ANIMALS (1991); David E. DeCosse, Beyond Law and Economics: Theological Ethics and the Regulatory Takings Debate, 23 B.C. ENVTL. AFF. L. REV. 829, 837-43 (1996); Edward O. Wilson, The Little Things That Run the World, 1 Conservation BIOLOGY 343 (1987).
- 27. See Lawrence E. Johnson, Toward the Moral Considerability of Species and Ecosystems, 14 ENVIL. ETHICS 145 (1992) (discussing mankind's moral obligation to safeguard creation).
- 28. Such ethical arguments often concentrate on the concept of sustainability or intergenerational equity—the duty that each generation owes to pass on the natural estate in no worse condition to succeeding generations. See ROBIN ATTFIELD, THE ETHICS OF ENVIRONMENTAL CONCERN 166–84 (2d ed. 1991); LEOPOLD, supra note 18, at 217–69 (1966); JOHN PASSMORE, MAN'S RESPONSIBILITY FOR NATURE: ECOLOGICAL PROBLEMS AND WESTERN TRADITIONS 110 (1974); WORLD COMMISSION ON ENVIRONMENT AND

These principles essentially assert that humans, as both stewards of their natural environment and mere constituent members of the community of life, owe a duty to preserve all species.

While rationales underlying the ESA and endangered species conservation are generally true for all species, they are especially true with respect to the pygmy-owl. In applying such justifications to pygmy-owls, philosophically they are as deserving of preservation consideration as any other species in that "sanctity of life" principles strongly disfavor protecting certain species but not others.²⁹ Ecologically, primarily through a diet consisting of frogs, earthworms, birds, lizards, insects, and other small animals, pygmy-owls help perform a variety of natural services such as generating soil fertility, controlling harmful agricultural pests, and dispersing nutrients.³⁰ Aesthetically, pygmy-owls typify pleasure-inducing wildlife with their distinct appearance³¹ and tourism-generating capability.³² Regarding chemical and medical properties, pygmy-owls have yet to contribute any significant breakthroughs, although such potential may not be realized until some time in the future.³³ Finally, pygmy-owls are nature's sentinels in that their extinction may indicate that the ecosystem is in danger.³⁴

III. ASCENT OF THE PYGMY-OWL UNDER THE ESA

Given the importance of the continued existence of all species, it is surprising how long it takes a species that is almost extinct to receive ESA

DEVELOPMENT, OUR COMMON FUTURE 43 (1987); Nicholas Agar, Valuing Species and Valuing Individuals, 17 ENVIL. ETHICS 397 (1995); Eric T. Freyfogle, The Ethical Strands of Environmental Law, 1994 U. ILL. L. REV. 819, 839–40 (1994); Zygmunt J.B. Plater, In the Wake of the Snail Darter: An Environmental Law Paradigm and Its Consequences, 19 U. MICH. J.L. REFORM 805, 823–25; Holmes Rolston III, Is There an Ecological Ethics?, 85 ETHICS 93 (1975); Andrew E. Wetzler, Note, The Ethical Underpinnings of the Endangered Species Act, 13 VA. ENVIL. L.J. 145, 170–74 (1993).

- 29. In addition to being deserving of equal protection philosophically, they are deserving of extra attention under the ESA as they are dangerously close to extinction. See 16 U.S.C. §§ 1531–44 (1994 & Supp. III 1997); see also 62 Fed. Reg. 10730 (1997) (determination of endangered status for the pygmy-owl).
- 30. See 59 Fed. Reg. 63975, 63977 (1994) (proposed rule to list the pygmy-owl as endangered with critical habitat); see generally JEAN-LUC E. CARTON & DEBORAH M. FINCH, ECOLOGY AND CONSERVATION OF THE CACTUS FERRUGINOUS PYGMY-OWL IN ARIZONA (2000).
- 31. See 59 Fed. Reg. at 63977 (stating that pygmy-owls' features include reddish- or grayish-brown suits and cream bellies, lightly-streaked crowns, black-and-white spotted napes, striped tails, yellow eyes, and a distinctive call).
- 32. See 62 Fed. Reg. at 10745 (indicating that pygmy-owls are highly sought after by birding enthusiasts).
- 33. The importance of the pygmy-owl may become apparent only after they have become extinct. See supra note 18 and accompanying text.
- 34. See Digest of the Pygmy Owl Forum, THE UDALL CENTER FOR STUDIES IN PUBLIC POLICY, THE UNIV. OF ARIZONA, Feb. 1, 1998, at 22 (statement of Kieran Suckling) ("[T]he pygmy-owl warns us of the need to slow down and ask what the wisest way to go forward is.").

attention. Often it seems that by the time these species are finally afforded the protections of the ESA, their population numbers have declined to the degree that such protections provide little to further their chances of survival. The listing of the pygmy-owl under the ESA was no exception.

On January 6, 1989, the U.S. Fish and Wildlife Service ("FWS")³⁵ officially addressed the pygmy-owl situation by including the pygmy-owl in its Animal Notice of Review.³⁶ Although the FWS determined that listing the pygmy-owl was appropriate, the FWS declared a lack of procedural support for such action.³⁷ For several years the pygmy-owl remained unlisted, unattended, and in critical need of protection. Finally on May 25, 1992, a coalition of conservation organizations petitioned the FWS and requested that it list the pygmy as an endangered species under the ESA.³⁸

Although all species are deserving of conservation, the protections of the ESA extend only to those "species" that are listed as "endangered" or "threatened." The ESA defines the term "species" to include "any subspecies of fish or wildlife or plants, and any distinct population segment of any species of vertebrate fish or wildlife which interbreeds when mature." Including these

^{35.} Generally, the U.S. Secretary of the Interior is responsible for the listing of endangered and threatened fish and wildlife species under the ESA. See 16 U.S.C. § 1533(a)(1); see also Environmental Defense Ctr. v. Babbitt, 73 F.3d 867 (9th Cir. 1995); Carlton v. Babbitt, 900 F. Supp. 526 (D.D.C. 1995). However, the FWS is the agency primarily responsible for implementing the ESA as to terrestrial and freshwater species and migratory birds pursuant to delegations of authority by the Secretary of the Interior. See 50 C.F.R. § 402.1(b) (1999).

^{36.} See 54 Fed. Reg. 554 (1989). The FWS included the pygmy-owl as a category two candidate species, which meant that the FWS had data indicating that listing the pygmy-owl was likely appropriate, but that the FWS lacked substantial information as to vulnerability and threats to support proposed listing rules. See id. However, after soliciting and reviewing additional information, the FWS elevated the pygmy-owl to category one status on November 21, 1991, which meant that the FWS now had sufficient information on biological vulnerability and threats to support proposed listing rules, but that listing was precluded due to other higher-priority listing activities. See 56 Fed. Reg. 58804 (1991). The FWS has since discontinued designating multiple categories of candidates and now considers only those species that meet the former definition of category one candidates for listing purposes. See 61 Fed. Reg. 7596 (1996).

^{37.} See 54 Fed. Reg. 554.

^{38.} See 58 Fed. Reg. 13045 (1993). The listing process for the pygmy-owl began when "Peter Galvin submitted a letter co-sponsored by the Greater Gila Biodiversity Project, Friends of the Owls, Robin Silver, and the Biodiversity Legal Foundation (petitioners) to the [FWS], requesting the [FWS] to list the [pygmy-owl] as an endangered species." Id.

^{39.} See 16 U.S.C. §§ 1531–44 (1994).

^{40. 16} U.S.C. § 1532(16) (1994). A "subspecies" is regarded as any population of species recognized as possessing physical characteristics apart from other populations of that species. See 62 Fed. Reg. 10730 (1997); see also, e.g., 56 Fed. Reg. 58804 (regulation where the pygmy-owl was recognized as a subspecies); 58 Fed. Reg. 13045 (1993) (same). Similarly, "distinct vertebrate population segments" are those populations that are

subcategories within the definition of "species" is significant in that local populations important to the overall survival of a species are also afforded the protections of the ESA.⁴¹ This is particularly true for the pygmy-owl, which might never have received ESA attention, much less protection, without such subcategorization.

The FWS has recognized the pygmy-owl as both a subspecies and a distinct vertebrate population segment of the ferruginous pygmy-owl populations that occur in North, Central, and South America.⁴² As a subspecies, the pygmy-owl differs physically from other ferruginous pygmy-owl populations by its shorter wings, longer tail, lighter coloration, and unique color phase.⁴³ As a distinct vertebrate population segment, the pygmy-owl is further distinguished from other populations of cactus ferruginous pygmy-owls according to its "discreteness" and "significance." Discretely, the pygmy-owl is isolated geographically, ⁴⁵ it occupies different habitats, ⁴⁶ and it potentially possesses genetic distinctness. ⁴⁷ Significantly, the loss of the pygmy-owl would constitute a significant gap in the range of the pygmy taxon. ⁴⁸ However, in addition to being

"discretely" and "significantly" different from other populations. See 61 Fed. Reg. 4722 (1996).

A population segment is 'discrete' if it is markedly separated from other populations of the same taxon as a consequence of physical, physiological, ecological, or behavioral factors.....A population also can be considered 'discrete' if it is delimited by international boundaries across which exist differences in management control of the species....A population segment is considered 'significant' if its loss would constitute a significant gap in the range of the taxon.

62 Fed. Reg. at 10730.

- 41. See Daniel J. Rohlf, There's Something Fishy Going on Here: A Critique of the National Marine Fisheries Service's Definition of Species Under the Endangered Species Act, 24 ENVIL. L. 617, 632 (1994).
 - 42. See 56 Fed. Reg. 58804; 58 Fed. Reg. 13045 (1993); 62 Fed. Reg. at 10730.
 - 43. See 62 Fed. Reg. at 10730.
- 44. Id. Such distinction has been questioned in a recently filed lawsuit challenging the listing of the pygmy-owl as an endangered species. See Howard Fischer, Home Builders Sue to Block Owl Rules: National Group Joins Fight Against Limits, ARIZ. DAILY STAR, May 16, 2000, at A1, available in 2000 WL 10241622.
- 45. See 62 Fed. Reg. at 10730 (stating that the pygmy-owl's elevational distribution, distribution of habitat, recorded locations, and ecological separation indicate that it is geographically isolated from other cactus ferruginous pygmy-owl populations).
- 46. See id. (stating that the pygmy-owl's habitats consisting of desertscrub, thornscrub, and riverbottom mesquite-cottonwood bosque are floristically dissimilar from the habitats of other cactus ferruginous pygmy-owl populations).
 - 47. See id.:

The fact that the pygmy-owl is nonmigratory throughout its range suggests that genetic mixing across wide areas may be infrequent. In addition, considerable variation in plumage between regional populations has been noted, including specific distinctions between Arizona and Texas [populations].

Id.

identified as a species capable of ESA attention, the pygmy-owl also had to be found a species warranting ESA protection.

The ESA describes an "endangered species" as any species that is dangerously close to extinction throughout all or a significant portion of its range.⁴⁹ Fittingly, a "threatened species" is any species that is likely to become endangered.⁵⁰ Aside from applying such definitions, determining whether a species is "endangered" or "threatened" demands compliance with a detailed series of procedural requirements.

The ESA requires that the FWS consider several factors in determining whether the listing of a species is warranted. Such factors include habitat loss and modification, overharvesting, disease, predation, inadequate regulatory control, and other natural and man-made factors.⁵¹ When considering these factors, the FWS must use the "best scientific and commercial data available"⁵² to determine the likelihood, and not merely the prospect, that a species will not become endangered or extinct in the foreseeable future.⁵³ If the FWS finds that a species is likely to become endangered or extinct in the foreseeable future without protection, then by definition that species is presently threatened or endangered.⁵⁴ Such a finding is important as it theoretically authorizes early intervention for the protection of the species before the situation becomes critical.

As was true with respect to the pygmy-owl, the listing process ordinarily commences when an interested citizen petitions the FWS to list a species as endangered or threatened.⁵⁵ Within ninety days of receiving the petition, the FWS determines "to the maximum extent practicable...whether the petition presents substantial scientific or commercial information indicating that [listing of the

49. See 16 U.S.C. § 1532(6):

The term 'endangered species' means any species which is in danger of extinction throughout all or a significant portion of its range other than a species of the Class Insecta determined by the Secretary to constitute a pest whose protection under the provisions of this chapter would present an overwhelming and overriding risk to man.

- Id. Because the ESA extends its authority to any species which is threatened or endangered throughout "all or a significant portion of its range," a species becoming extinct within its geographical area will come under its protection even if it is flourishing elsewhere. See Frank P. Grad, Treatise on Environmental Law § 12.04[7][a] at 12–178 (1999).
- 50. 16 U.S.C. § 1532(20) ("The term 'threatened species' means any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.").
- 51. See id. The 1982 amendments to the ESA eliminated all economic considerations from the species listing process. See Pub. L. No. 97-304, 96 Stat. 1411; 16 U.S.C. § 1533 (1994).
- 52. 16 U.S.C. § 1533(b)(1)(A). The FWS must rely on expert analysis, rather than mere conclusory assertions of expertise, to support a determination not to list a certain species. See Northern Spotted Owl v. Hodel, 716 F. Supp. 479, 482-83 (W.D. Wash. 1988).
- 53. See Oregon Natural Resources Council v. Daley, 6 F. Supp. 2d 1139, 1142 (D. Or. 1998).
 - 54. See id.
 - 55. See 16 U.S.C. § 1533(b)(3)(A).

species is] warranted."⁵⁶ If the FWS finds that the petition contains such information, the FWS then initiates a status review of the species, and within twelve months of receiving the petition determines either that listing is not warranted, is warranted, or is warranted but precluded by a listing backlog.⁵⁷ The FWS must publish notice of all such findings in the Federal Register⁵⁸ and is required to allow the public a minimum ninety-day comment period on a proposed rulemaking.⁵⁹ Within one year of providing general notice of a proposed regulation (or eighteen months if an extension is granted), the FWS must either publish a final regulation or publish a notice that the FWS is withdrawing the proposed regulation.⁶⁰

On March 9, 1993,⁶¹ the FWS determined that the petition requesting that the pygmy-owl be listed presented substantial scientific or commercial information indicating that listing may be warranted.⁶² The FWS found that the riparian habitat of the pygmy-owl had been, or currently was being, modified or destroyed by agricultural development, urban expansion, and general watershed degredation, and that this resulted in a significant reduction of the pygmy-owl's range and overall pygmy-owl numbers.⁶³ In addition, the FWS concluded that a lack of existing regulatory mechanisms as well as other factors may have contributed to such decline.⁶⁴ In accordance with the ESA, the FWS thereafter initiated a status review of the pygmy-owl to confirm that listing was warranted.⁶⁵

^{56.} Id.

^{57.} See 16 U.S.C. § 1533(b)(3)(B). If the "warranted but precluded" finding is made, the FWS treats the petition as a new petition and revisits the issue every 12 months for a new determination. See § 16 U.S.C. § 1533(b)(3)(C)(I). The 1988 amendments to the ESA, Pub. L. No. 100-478, 102 Stat. 2306, 16 U.S.C. § 1533(b)(3)(C)(iii), direct the FWS to implement a system to monitor the status of all species that are the focus of this finding. See id.

^{58.} See 16 U.S.C. § 1533(b)(3)(A); see also 16 U.S.C. § 1533(b)(3)(B).

^{59.} See 16 U.S.C. § 1533(b)(5).

^{60.} See 16 U.S.C. § 1533(b)(6). However, the FWS may not be forced to make this determination when practicality is a concern. See, e.g., Environmental Defense Ctr. v. Babbitt, 73 F.3d 867, 871–72 (9th Cir. 1995) (finding that the unavailability of appropriated funds excuses the FWS from making such a determination; however, once the appropriated funds are made available, the FWS has to make the determination within a reasonable time).

^{61.} The FWS took advantage of the "maximum extent practicable" allowance in that it took almost 200 days more than what was otherwise required for the FWS to make such a determination. See 16 U.S.C. § 1533(b)(3)(A); see also Biodiversity Legal Fund v. Babbitt, 146 F.3d 1249 (10th Cir. 1998) (ruling that the ESA's requirement that petitions to list be acted on within 90 days "to the maximum extent practicable" does not impose a mandatory nondiscretionary duty on the FWS).

^{62.} See 58 Fed. Reg. 13045 (1993).

^{63.} See id. at 13046.

^{64.} See id.

^{65.} See id. at 13045. In conducting the status review, the FWS solicited additional comments and biological data on the status of the pygmy-owl through mailings, a notice in the Federal Register, see 58 Fed. Reg. 13045, and other means. See 62 Fed. Reg. 10730, 10732 (1997).

As a result of additional information collected and evaluated during the status review, on December 12, 1994,66 the FWS confirmed that listing the pygmyowl was warranted and concurrently proposed a rule to list the pygmy-owl as endangered.67 The FWS determined that the pygmy-owl was threatened by past, present, and potential future destruction and modification of its riparian habitat and that the pygmy-owl had declined in numbers to the degree that it was virtually extirpated.68 Specifically, the FWS attributed such decimation to the modifying and destroying of riverbottom forests and bosques,69 Sonoran desertscrub,70 and xeroriparian thickets,71 as well as to the diversion, channelization, and pumping of natural water sources,72 livestock overuse,73 and expanding human populations.74 Recognizing then that the pygmy-owl was nearly extirpated and in imminent danger of disappearing, the FWS concluded that the preferred action was to list the pygmy-owl as endangered.75

After reviewing all comments received in response to the proposed rule, on March 10, 1997, the FWS finally determined endangered status for the pygmyowl, thereby implementing the protections and recovery provisions afforded by the ESA. Although the FWS had earlier determined that the pygmy-owl was imminently close to extinction and that the situation warranted immediate ESA protections, it took more than two years for the FWS to extend the pygmy-owl such protections. At least 250 days of such delay occurred after what the ESA statutorily required. The FWS explained that budget limitations and legislation, a lack of personnel, and a backlog of proposed listings excused it from having to complete the final rule within the allotted time frames. Interestingly, this was a

^{66.} Although no "maximum extent practicable" allowance was available at this stage, the FWS took more than 900 days (almost three years) than what was required to make its determination. See 16 U.S.C. § 1533(b)(3)(A).

^{67.} See 59 Fed. Reg. 63975 (1994).

^{68.} See id. at 63978-979.

^{69.} See id. at 63979. Mesquite and cottonwood riverbottom woodlands, which supported the greatest abundance of pygmy-owls, have been extensively modified and destroyed by clearing, woodcutting, agricultural development, urbanization, water management, hydrological changes, and general watershed degradation. See id.

^{70.} See id. Sonoran desertscrub has been affected by urban and agricultural development, woodcutting, and livestock grazing. See id.

^{71.} See id.

^{72.} See id. Diversion and pumping have resulted in diminished surface flows, and consequently, in reductions in riparian vegetation. See id. Channelization has altered stream banks and fluvial dynamics necessary for the maintainance of native riparian vegetation and habitat. See id.

^{73.} See id. The effects of livestock overuse include changes in plant community structure, species composition, and relative abundance of species and plant density. See id.

^{74.} See id.

^{75. .} See id. at 63981.

^{76.} See 62 Fed. Reg. 10730 (1997).

^{77.} See id.

^{78.} See 16 U.S.C. § 1533(b)(6) (1994). The FWS is required to publish a final determination or an extension within one year of the date of the proposed rule. See id.

^{79.} See 62 Fed. Reg. 10730, 10738.

valid excuse, as the Ninth Circuit had recently held that the FWS could not be forced to make such determinations when doing so would be impractical.²⁰ More importantly, however, publishing the regulation late neither invalidated the rule nor prohibited the listing of the pygmy-owl.⁸¹

When the FWS publishes a final regulation implementing a determination that a species is endangered or threatened, the FWS is obligated to concurrently publish a designation of critical habitat.⁸² The ESA requires that the FWS, "to the maximum extent prudent and determinable," designate a "critical habitat" at the time a species is listed.⁸³ "Critical habitat" is defined as:

- (i) the specific areas within the geographical area occupied by the species...on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and
- (ii) specific areas outside the geographical area occupied by the species...upon a determination by the [FWS] that such areas are essential for the conservation of the species.⁸⁴

Petitions requesting that the FWS designate a critical habitat are treated similarly to those petitions that request the listing of a species. The ESA requires that the FWS, "to the maximum extent practicable," within ninety days of receiving the petition, publish a finding of "whether the petition presents substantial scientific information indicating that the revision may be warranted." If the FWS finds that such substantial information is present, the FWS must, within twelve months of receiving the petition, publish a notice indicating how it intends to proceed with the requested designation. 26

^{80.} See Environmental Defense Ctr. v. Babbitt, 73 F.3d 867, 873 (9th Cir. 1995).

^{81.} See Idaho Farm Bureau Fed'n v. Babbitt, 58 F.3d 1392, 1400 (9th Cir. 1995). The court held that violating the allotted time frame did not prohibit listing nor bar subsequent action, but rather that the time limits act as an impetus to compel action. See id. Specifically, the court found that because the ESA specified no consequences for violating the time limit, Congress merely intended to compel agency action rather than to discard the listing process. See id.

^{82.} See 16 U.S.C. § 1533(b)(6)(C). The FWS must take into consideration the economic impact, and any other relevant impact, prior to designating critical habitat. See 16 U.S.C. § 1533(b)(2).

^{83.} See 16 U.S.C. § 1533(a)(3). The term "prudent" has been interpreted to excuse the FWS from designating critical habitats when "the designation of critical habitat would inform those who would take a species illegally of the location of the species." See H.R. Rep. No. 97-567, 97th Cong., 2d. Sess. 20, reprinted in 1982 U.S.C.C.A.N. 2807, 2820. The term "determinable" was added as part of the 1982 amendments to the ESA to excuse the FWS from designating critical habitats when insufficient information is available to make a critical habitat determination. See Enos v. Marsh, 769 F.2d 1363, 1371 n.9 (9th Cir. 1985).

^{84. 16} U.S.C. § 1532(5)(A) (1994).

^{85. 16} U.S.C. § 1533(b)(3)(D)(i).

^{86.} See 16 U.S.C. § 1533(b)(3)(D)(ii).

In addition to requesting that the FWS list the pygmy-owl as endangered on May 26, 1992, the coalition of conservation organizations also petitioned the FWS to designate critical habitat for the pygmy-owl. The FWS eventually responded on December 12, 1994, by proposing the designation of pygmy-owl critical habitat along with the rule to list the pygmy-owl as endangered. However, on March 10, 1997, even though the FWS published a final rule listing the pygmy-owl as endangered, the FWS also determined that designating pygmy-owl critical habitat was not prudent. PWS apparently believed that the designation of critical habitat and the subsequent publication of location maps and detailed locality descriptions would potentially harm the pygmy-owl rather than aid in its conservation. The FWS alleged that birding enthusiasts equipped with such information would potentially harm and harass the pygmy-owls in that the proposed critical habitat was located on public lands and was therefore subject to unlimited access and inadequate management.

However, on October 31, 1997, the Southwest Center for Biological Diversity brought suit to compel the designation of pygmy-owl critical habitat.⁹² The United States District Court of Arizona, on October 7, 1998, found a lack of evidence indicating that designation was not prudent.⁹³ On November 25, 1998, the court ordered that the FWS issue, within thirty days, the proposed rules for designating critical habitat for the pygmy-owl, and issue, within six months of issuing the proposed rules, final decisions regarding the designation of pygmy-owl critical habitat.⁹⁴ On December 30, 1998,⁹⁵ the FWS proposed pygmy-owl critical habitat.⁹⁶ Finally, on July 12, 1999,⁹⁷ the FWS designated 731,712 acres of riverine riparian and upland habitat as critical habitat for the pygmy-owl.⁹⁸

- 87. See 58 Fed. Reg. 13045 (1993).
- 88. See 59 Fed. Reg. 63975 (1994). Again, the FWS took more than 250 days longer than what the ESA allowed. See § 16 U.S.C. § 1533(b)(3)(D)(ii).
 - 89. See 62 Fed. Reg. 10730 (1997).
 - 90. See id. at 10745.
- 91. See id. Specifically, the FWS stated that excessive, uncontrolled attention by birders could affect the occurrence, behavior, and reproductive success of the pygmy-owl, as well as make the pygmy-owl more vulnerable to acts of vandalism and increase the difficulties of enforcement. See id. The FWS also proposed that conservation of the pygmy-owl was better addressed through the ESA's recovery and § 7 consultation processes. See id.
 - 92. See 64 Fed. Reg. 37419, 37420 (1999).
 - 93. See id. at 37420.
 - 94. See id. at 37420-421.
- 95. See id. at 37421. Ironically, this date was five days past the time permitted by order of the district court. See id.
 - 96. See 63 Fed. Reg. 71820 (1998).
- 97. See 64 Fed. Reg. at 37420. Again, this was several days past the time allotted by order of the district court. See id.
- 98. See 64 Fed. Reg. 37419 (1999). In making its designation, the FWS considered the elements and areas essential to pygmy-owl conservation, the potential costs of the proposed designation, and areas to be included on the basis of economic and other relevant impacts. See id. The FWS stated that the physical and biological habitat features that support foraging, nesting, rearing of young, roosting, sheltering, and dispersal were

Considering that the FWS took almost nine years to list the pygmy-owl as "endangered" and more than ten years to designate pygmy-owl critical habitat from the time the pygmy-owl was first identified as warranting ESA protection, it is remarkable that there are any pygmy-owls left to protect. However, even with the ESA protections, the outlook for the pygmy-owl surviving in the wild appears tentative at best. Regardless of this prospect, pygmy-owls have finally received the protections of the ESA, thereby, at least potentially, ensuring their survival.

IV. THE PYGMY-OWL AND SECTIONS 7 AND 9 OF THE ESA

Once a species is listed and critical habitat is designated, the species is then afforded the primary protections of the ESA. Section 9 of the ESA provides the following protection for endangered species:

[W]ith respect to any endangered species of fish or wildlife listed pursuant to section 1533 of this title it is unlawful for any person subject to the jurisdiction of the United States to...
(B) take any such species within the United States or the territorial sea of the United States.⁹⁹

The ESA defines the statutory term "take" to include "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Regretably, the ESA does not further expand on the terms it uses to define "take." Fortunately, the Interior Department regulations that implement the statute do define the statutory terms "harass" and "harm":

Harass in the definition of "take" in the [ESA] means an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt

essential to the conservation of the pygmy-owl. See id. at 37422. Specifically, the FWS's findings revealed that Sonoran riparian deciduous woodlands, Sonoran riparian scrubland, xeroriparian forests, tree-lined drainages in semidesert and Sonoran savanna grasslands, the Arizona upland subdivision of Sonoran desertscrub, and specific plant associations within these biotic communities, such as cottonwood, willow, ash, mesquite, palo verde, ironwood, hackberry, saguaro cactus, and organ pipe cactus, were essential for the primary biological needs of the pygmy-owl. See id.

Using habitat maps, the FWS also developed criteria to identify areas to be included as critical habitat. See id. at 37423. The final rule for the designation of critical habitat identifies seven areas, encompassing 731,712 acres. The FWS designated 260,883 acres in Pima County, 4,832 acres in Cochise County, 432,606 acres in Pinal County, and 33,391 acres in Maricopa County. See id. at 37424. The final designation encompasses approximately 38,388 acres of Forest Service land, 91,492 acres of Bureau land, 434,886 acres of state land, 135,993 acres of private land, and 30,953 acres of other types of land. See id.

The final analysis concluded that no economic impacts are expected from critical habitat designation above and beyond that already imposed by listing the pygmy-owl as endangered. See id. at 37434. The only possible economic effects of critical habitat designation are on activities funded, authorized, or carried out by a federal agency. See id.

- 99. 16 U.S.C. § 1538(a)(1) (1994).
- 100. 16 U.S.C. § 1532(19) (1994).
- 101. See 16 U.S.C. §§ 1532, 1538.

normal behavioral paterns, which include, but are not limited to, breeding, feeding, or sheltering. Harm in the definition of "take" in the [ESA] means an act which actually kills or injures wildlife. Such act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering. ¹⁰²

However, the significance of the "harm" and "harass" definitions, as well as their relation to other ESA provisions involving habitat protection, has been a recurring and debated issue over the years. ¹⁰³

The Supreme Court addressed the "harm" issue in *Babbitt v. Sweet Home* Chapter of Communities for a Greater Oregon. ¹⁰⁴ In Sweet Home, the Court upheld the FWS regulation that construed the prohibition on "taking" of endangered or threatened species to include "significant habitat modification or degradation where it actually kills or injures wildlife." However, in rendering its decision, the Court failed to clearly articulate what the regulation meant. ¹⁰⁶ Since the Sweet Home decision, courts have continued to differ in deciphering such language, with some construing the regulation narrowly, and others affording it a more generous interpretation. ¹⁰⁷ Such disparity is what originally led the FWS to

^{102. 50} C.F.R. § 17.3 (1999).

Compare Palila v. Hawaii Dept. of Land and Natural Resources, 649 F. Supp. 1070 (D. Haw. 1986) (ruling that "harm" as a subcategory of "taking" includes actions that significantly modify a habitat, resulting in actual harm to a protected species) and Palila v. Hawaii Dept. of Land and Natural Resources (Palila II), 852 F.2d 1106 (9th Cir. 1988) (upholding the Interior Department's definition of "harm") with Babbitt v. Sweet Home Chapter of Communities for a Great Oregon, 17 F.3d 1463 (D.C. Cir. 1994) (concluding that the word "harm" should be read as applying only to the direct application of force against the animal taken) and United States v. Hayashi, 5 F.3d 1278, 1282 (1993) (narrowly interpreting the word "harass").

^{104. 515} U.S. 687 (1995).

^{105.} Id. at 690. Sweet Home began as an action brought by small landowners, logging companies, families dependent on forest products from the Pacific Northwest and the Southeast, and organizations representing their interests. See id. at 692-93. These groups challenged the Secretary and the FWS, claiming that the FWS interpretation of § 9 of the ESA in the regulation exceeded its authority under the ESA. See id. The Court decided that although those challenging the regulation did not intend to harm either the red-cockaded woodpecker or the spotted owl and that they merely wanted to continue their logging activities, but allowing those activities to continue would have resulted in the killing of or injury to members of both listed species. See id. Thus, the Court held that under the FWS regulation, the groups were under a duty to avoid such harm resulting from habitat modification. See id. at 708.

^{106.} See id. In her concurring opinion, Justice O'Connor clarified what she understood the Court's decision to mean, namely that the regulation is limited to significant habitat modification that causes actually death or injury to protected animals, rather than hypothetical injuries, and that the regulation's application is limited by ordinary principles of proximate causation, including notions of foreseeability. See id. at 708–14 (O'Connor, J., concurring).

^{107.} Compare, e.g., United States v. West Coast Forest Resources Ltd. Partnership, No. 96-1575-HO, 2000 WL 298707 (D. Or. Mar. 13, 2000) (narrowly

develop species-by-species regulations or guidelines that translated the general prohibition against "harming" a species by modifying its habitat into more specific descriptions of prohibited activities. Although the FWS has developed guidelines for only a handful of species, the pygmy-owl happens to be one of those species. 109

At the time of listing the pygmy-owl as endangered, the FWS provided a partial listing of activities that could potentially "harm," "harass," or otherwise "take" the pygmy-owl. Such activities included the following:

- (1) Removal of nest trees;
- (2) Removal of a nest box in use by the pygmy-owl;
- (3) Clearing or significant modification of occupied habitat, whether or not the nest tree is included;
- (4) Sustained noise disturbance during the breeding season;
- (5) Pursuit or harassment of individual birds;
- (6) Frequent or lengthy low-level flights over occupied habitat during the breeding season; [and]
- (7) Severe overgrazing that results in the removal of understory vegetation.¹¹⁰

Interestingly, when the FWS later designated critical habitat for the pygmy-owl, it did not amend the list to include the clearing or modifying of unoccupied critical habitat as a prohibited "harmful" activity, even though such habitat "is essential for the survival and recovery" of the pygmy-owl, regardless of occupancy."
Rather, the FWS opined the following:

[T]he designation of critical habitat has no effect on non-federal actions taken on private land, even if the private land is within the mapped boundary of designated critical habitat. Critical habitat has possible effects on activities by private landowners only if the activity involves Federal funding, a Federal permit, or other Federal action. 112

construing the regulation by holding that habitat modification does not amount to "harm" where other foraging habitat is available) with Marbled Murrelet v. Babbitt, 83 F.3d 1060 (9th Cir. 1996) (generously interpreting the regulation by holding that habitat modification that significantly impairs the breeding and sheltering of a protected species amounts to "harm" under the ESA and includes the threat of future harm).

- 108. See 59 Fed. Reg. 34272 (1994).
- 109. See 62 Fed. Reg. 10730, 10746 (1997).
- 110. *Id.* In addition, "harm" by way of habitat modification or degradation could occur only if the pygmy-owl existed on those specific allotments of occupied habitat to be modified so as to qualify as an "actual death or injury." *See* Arizona Cattle Growers' Assoc. v. United States Fish and Wildlife Serv., 63 F. Supp. 2d 1034, 1042 (D. Ariz. 1998).
- 111. See 64 Fed. Reg. 37419, 37423 (1999); see also 16 U.S.C. § 1532(5)(A) (1999) (defining "critical habitat" as those areas essential for the conservation of an endangered species).
 - 112. 64 Fed. Reg. at 37428.

In other words, critical habitat designation applies only to federal lands and to private lands with a federal nexus. 113

By declining to list activities involving the clearing or modifying of unoccupied pygmy-owl critical habitat as "harmful," the FWS narrowly construed "significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering" to apply only to critical habitat occupied by the pygmy-owl. However, such language also suggests that the clearing or modifying of unoccupied pygmy-owl critical habitat will significantly impair essential pygmy-owl behavioral patterns, including pygmy-owl breeding, feeding, or sheltering, thereby potentially killing or at least injuring pygmy-owls. This seems particularly true as even unoccupied pygmy-owl critical habitat provides for "those physical or biological features" "essential for the survival and recovery" of the pygmy-owl. 116

In Defenders of Wildlife v. Bernal, 117 the Ninth Circuit addressed this issue and others when it considered whether the construction of a new high school by the Amphitheater School District ("Amphi") would result in a "take" of the pygmy-owl. 118 In March 1998, Amphi began plant salvaging operations as a precursor to beginning construction of the school. 119 Defenders of Wildlife ("Defenders") immediately filed suit, seeking a temporary restraining order and a preliminary injunction against Amphi to prevent any action on the school site. 120

[Critical habitat] is a specific geographic area(s) that is essential for the conservation of a threatened or endangered species and that may require special management and protection. Critical habitat may include an area that is not currently occupied by the species but that will be needed for its recovery.

Id. (emphasis added).

^{113.} See id. at 37444. For further information regarding pygmy-owl critical habitat and recent recommendations for minimizing the risk of inadvertently "taking" a pygmy-owl, see generally U.S. FISH & WILDLIFE SERV., RECOMMENDED GUIDANCE FOR PRIVATE LANDOWNERS CONCERNING THE CACTUS FERRUGINOUS PYGMY-OWL (2000) and U.S. FISH & WILDLIFE SERV., THE CACTUS FERRUGINOUS PYGMY-OWL SURVEY PROTOCOL (2000).

^{114.} It appears that the FWS construed the regulation narrowly so as to avoid implicating "takings" of private property. See 64 Fed. Reg. at 37428, 37434 (stating that the designation of critical habitat will not result in the "taking" of private property nor alter the value of private property).

^{115.} Arguably, the clearing or modifying of unoccupied pygmy-owl critical habitat may also constitute "harassment" by significantly disrupting pygmy-owl breeding, feeding, or sheltering. See 50 C.F.R. § 17.3 (1994). But see United States v. Hayashi, 5 F.3d 1278, 1282 (9th Cir. 1993) (narrowly interpreting "harass" so as not to curtail private property rights).

^{116.} See 64 Fed. Reg. at 37421-423 (1999); see also U.S. Fish and Wildlife Serv., Critical Habitat, What Is It?, MAY 2000, at 1:

^{117.} No. 98-16099, 1999 WL 1073696 (9th Cir. Nov. 23, 1999).

^{118.} See id.

^{119.} See id. at *2.

^{120.} See id.

Defenders alleged that the proposed construction violated § 9 of the ESA because it was likely to harm or harass a pygmy-owl, which Defenders asserted inhabited or used the site. ¹²¹ The Federal District Court of Arizona dismissed as speculative Defenders' claim that the presence of the school would reduce available foraging habitat or introduce sufficient disturbance to render the site unsuitable for the pygmy-owl. ¹²² The district court appeared to require proof that the pygmy-owl inhabited the precise area where the school was to be built in order to qualify the clearing or modifying of habitat for the school as a "take." However, the district court's decision occurred prior to the designating of pygmy-owl critical habitat, which included the site where the school was to be built, thereby raising an additional question on appeal of whether the clearing or modifying of unoccupied pygmy-owl critical habitat constituted a "take" of the pygmy-owl. ¹²⁴

The Ninth Circuit affirmed the district court's ruling, finding that the construction of the school on unoccupied pygmy-owl critical habitat would not result in a "take" of a pygmy-owl. The Ninth Circuit concluded that the designation of critical habitat was of no legal significance in that the activity in question was non-federal in nature and involved private land only. In so concluding, the court appeared to rely on the opinion by the FWS that the designation of pygmy-owl critical habitat has no effect on non-federal actions taken on private land, even if the land is designated as critical habitat. It However, such a determination seemed to ignore a clear reading of the "take" regulation in that the clearing or modifying of pygmy-owl critical habitat would significantly impair essential pygmy-owl behavior patterns, as such land is necessary for the pygmy-owl's survival and recovery. The court's conclusion also seemed to be at odds with earlier findings by the court in other cases, namely that "[h]abitat modification that is reasonably certain to injure an endangered species by impairing their [sic] essential behavioral patterns satisfie[s] the actual injury

^{121.} See id.

^{122.} See id. at *3-*5.

See id. The district court found that the constructing and operating of the school likely would not harass the pygmy-owl as the pygmy-owl can tolerate and even benefit from human activity. Further, the court dismissed, as speculative, evidence indicating that such activity would disrupt pygmy-owl breeding, feeding, or sheltering. See id. The district court further determined that a pygmy-owl would not suffer actual injury as the school was being constructed on land unoccupied by any pygmy-owl, and that "harm" could not occur on unoccupied habitat. See id.; see also Arizona Cattle Growers' Assoc. v. United States Fish and Wildlife Serv., 63 F. Supp. 2d 1034, 1042 (D. Ariz. 1998) (stating "harm" could not occur on unoccupied habitat).

^{124.} See Bernal, 1999 WL 1073696, at *1.

^{125.} See id. at *5. Using the clearly erroneous standard, the Ninth Circuit found that the district court's factual findings were well supported and not clearly erroneous, and therefore affirmed the ruling that the construction of the school would not "take" a pygmyowl. See id.

^{126.} See id. at *1.

^{127.} See 64 Fed. Reg. 37419, 37428-444 (1999).

^{128.} See 50 C.F.R. § 17.3 (1999); 64 Fed. Reg. 37419.

requirement[,]"¹²⁹ and that "[a] reasonably certain threat of imminent harm to a protected species is sufficient for issuance of an injunction under § 9 of the ESA."¹³⁰ Nevertheless, the Ninth Circuit disregarded such findings and instead relied on the FWS regulation in opining that unoccupied pygmy-owl critical habitat lands receive no further ESA protections except through § 7.¹³¹

Section 7 of the ESA requires that each federal agency consult with the FWS to ensure that agency actions¹³² are not likely to "jeopardize the continued existence" of any listed species or result in the "destruction or adverse modification" of the critical habitat of such species.¹³³ According to regulations implementing the ESA, an agency action is likely to "jeopardize the continued existence" of a listed species if it will result in "an appreciable reduction in the likelihood of survival and recovery of a listed species."¹³⁴ Further, "destruction or adverse modification" is defined as "a direct or indirect alteration that appreciably diminishes the value of critical habitat for the survival and recovery of the listed species for which critical habitat was designated."¹³⁵ In practice, if an agency action "may affect" a protected species or its critical habitat, then the activity will require § 7 consultation with the FWS.¹³⁶

Activities involving a federal action that may affect the pygmy-owl or pygmy-owl critical habitat include those that alter the primary constituent elements to the extent that the value of pygmy-owl critical habitat for both the survival and recovery of the pygmy-owl is appreciably diminished or that jeopardize the continued existence of the pygmy-owl.¹³⁷ Such activities may include:

(1) Removing, thinning, or destroying vegetation, whether by burning or mechanical, chemical, or other means (e.g., woodcutting, bulldozing, overgrazing, construction, road building, mining, herbicide application, etc.);

^{129.} Bernal, 1999 WL 1073696, at *3, quoting Forest Conservation Council v. Rosboro Lumber Co., 50 F.3d 781, 783 (9th Cir.1995).

^{130.} *Id.*, *quoting* Marbled Murrelet v. Babbitt, 83 F.3d 1060, 1066 (9th Cir. 1996).

^{131.} See id. at *1.

^{132.} Agency actions subject to the § 7 consultation include those that are authorized, funded, or carried out by a federal agency. See 16 U.S.C. § 1536(a)(2) (1994 & Supp. IV 1999).

^{133. 16} U.S.C. §§ 1536(a)(2), (h). In fulfilling the consultation requirement, each agency is to use the best scientific and commercial data available. See 16 U.S.C. § 1536(a)(2).

^{134. 50} C.F.R. § 402.02 (2000).

^{135.} *Id.* Unlike § 9, § 7 definitively reaches actions affecting both occupied and unoccupied critical habitat. *See id.*

^{136. 64} Fed. Reg. 37419, 37429 (1997). The FWS opines that if a federal action is to occur within the geographic area occupied by a listed species, and the action will affect habitat features important to the species, then the agency should consider such action a situation that "may affect" the species and undergo §7 consultation with the FWS. See id.

^{137.} See id. at 37425.

- (2) Water diversion or impoundment, groundwater pumping, or other activity that alters water quality or quantity to an extent that riparian vegetation is significantly affected; and
- (3) Recreational activities that appreciably degrade vegetation. 138

At a minimum, activities occurring on private or state lands requiring a permit from a federal agency, such as a permit from the U.S. Army Corps of Engineers under § 404 of the Clean Water Act, or a § 402 permit from the Environmental Protection Agency, will be subject to the § 7 consultation process. Conversely, federal actions not affecting the pygmy-owl, as well as actions on non-federal lands that are not federally funded or permitted, will not require § 7 consultation. In the consultation.

When a federal agency determines that its action may affect a protected species or its critical habitat, the consultation process begins with the agency and the FWS discussing the possible adverse effects of the proposed action upon the protected species.¹⁴¹ After consultation begins, neither the federal agency nor a private party awaiting federal approval may "make any irreversible or irretrievable commitment of resources" foreclosing project alternatives consistent with preservation of the species. 142 As part of the consultation process, each federal agency must request information from the FWS as to whether a listed species may be present in the area of the agency's proposed action. 143 If the FWS advises that such a species may be present, the agency must then conduct a biological assessment in order to identify any listed species likely to be affected by the agency action.144 If after consultation the FWS finds jeopardy or adverse modification, the FWS must then issue a biological opinion explaining and describing how the proposed action would affect the species in question, and recommend reasonable and prudent alternatives which can be taken by the agency in implementing the action thereby avoiding jeopardizing the protected species or adversely modifying its critical habitat. 145 Although the above provisions of § 7 do

^{138.} Id.

^{139.} See id.

^{140.} See id.

^{141.} See 16 U.S.C. § 1536(a)(4) (1994 & Supp. IV. 1999). An agency's failure to consult where required may result in forced consultation by way of the ESA's citizen-suit provision. See 16 U.S.C. § 1540(g) (1994).

^{142.} See 16 U.S.C. § 1536(d). This provision is intended to prevent defendants from accelerating the destruction or modifying of habitat in the face of potential statutory constraints before a citizen group can finally get to a court so that they can argue that conservation of the species and statutory compliance have become moot. See Jeffrey S. Kopf, Steamrolling Section 7(d) of the Endangered Species Act: How Sunk Costs Undermine Environmental Regulations, 23 B.C. ENVIL. AFF. L. REV. 393 (1996).

^{143.} See 16 U.S.C. § 1536(c)(1).

^{144.} See id. The agency must complete such a biological assessment within 180 days after it has been initiated. See id.

^{145.} See 16 U.S.C. § 1536(b). If the FWS concludes after consultation that the agency action will not jeopardize the endangered species nor adversely modify its critical habitat, or if the FWS offers reasonable and prudent alternatives, or if the FWS concludes that the taking of the endangered species incidental to the agency action will not jeopardize

not explicitly provide for mitigation, federal agencies and courts have interpreted these provisions to authorize the use of mitigation measures so as to minimize the adverse impact on a listed species and to avoid a determination of jeopardy, destruction, or adverse modification of critical habitat that would otherwise halt a proposed project or action. ¹⁴⁶ Conservation-type mitigation measures, which are used to mitigate the impact to critical habitat through on-site and off-site preservation of habitat suitable for the endangered species involved, ¹⁴⁷ are occurring with respect to pygmy-owl critical habitat, thereby allowing development projects to continue. ¹⁴⁸

In Defenders of Wildlife v. Bernal, 149 the Ninth Circuit confirmed that § 7 of the ESA applies only to actions carried out, funded, or authorized by a federal agency. 150 In Bernal, the U.S. Army Corps of Engineers ("Corps") designated three arroyos (dry washes or ephemeral desert waterways) within the land acquired by Amphi as "jurisdictional waters" pursuant to the Clean Water Act

the continued existence of the species, then the FWS must supply the agency and any applicant concerned with a written statement specifying the impact of such incidental taking on the species, the reasonable and prudent measures the Secretary considers necessary to minimize such impact, and the terms and conditions including reporting requirements that the federal agency or applicant must comply with in order to implement the measures specified in the FWS's written statement. See 16 U.S.C. § 1536(b)(4).

^{146.} See Thomas J. Schoenbaum & Richard B. Stewart, The Role of Mitigation and Conservation Measures in Achieving Compliance with Environmental Regulatory Statutes: Lessons from Section 316 of the Clean Water Act, 8 N.Y.U. ENVIL. L.J. 237, 258 (2000).

^{147.} See id.

See, e.g., Edward L. Cook, Marana Loses to Vistoso on State Land: Town 148. Sought Park Next to Planned Hyatt Hotel, ARIZ. DAILY STAR, Oct. 26, 2000, at B1, available in 2000 WL 28643597; Edward L. Cook, New Resort Is Planned for Marana: \$160M Hyatt Corp. Complex Would Be Built in Owl Habitat, ARIZ. DAILY STAR, Oct. 21, 2000, at A1, available in 2000 WL 28643375; Tony Davis, Dove Mountain Deal Nears Finish Line, with 99-Year Preserve Lease, ARIZ. DAILY STAR, July 25, 2000, at A1, available in 2000 WL 10245821; Tony Davis, Owl-Habitat Subdivision Is Approved for Marana: 1st Such Project to Gain OK; 20 Acres Affected, ARIZ. DAILY STAR, July 20, 2000, at B5, available in 2000 WL 10245535; Tony Davis, Thornydale Widening up \$1.5M: County to Buy 47 Desert Acres to Make up for Cleared Habitat, ARIZ. DAILY STAR, Nov. 25, 2000, at A1, available in 2000 WL 28645321. However, whether such habitat is sufficient for preserving pygmy-owl remains an issue and may itself result in litgation. See Edward L. Cook, New Resort Is Planned for Marana: \$160M Hyatt Corp. Complex Would Be Built in Owl Habitat, ARIZ. DAILY STAR, Oct. 21, 2000, at A1, available in 2000 WL 28643375; Tony Davis, Dove Mountain Deal Nears Finish Line, with 99-Year Preserve Lease, ARIZ. DAILY STAR, July 25, 2000, at A1, available in 2000 WL 10245821. For further information regarding § 7 consultation, see generally U.S. FISH & WILDLIFE SERV. AND NAT'L MARINE FISHERIES SERV., ENDANGERED SPECIES CONSULTATION HANDBOOK: PROCEDURES FOR CONDUCTING CONSULTATION AND CONFERENCE ACTIVITIES UNDER SECTION 7 OF THE ENDANGERED SPECIES ACT (1998).

^{149.} No. 98-16099, 1999 WL 1073696 (9th Cir. Nov. 23, 1999).

^{150.} See id. at *2.

("CWA"). ¹⁵¹ Amphi's original design of the school intended construction within the "jurisdictional waters," thereby requiring Amphi to obtain a permit under the CWA. ¹⁵² Because a federal permit was involved, the FWS informed the Corps that "formal consultation" pursuant to § 7 was required in order to assess the impact of the proposed project on the pygmy-owl. ¹⁵³ The Corps thereafter initiated consultation with Amphi, but prior to completion of the process Amphi withdrew its application for the permit, because it had redesigned the project so as to avoid construction affecting the jurisdictional waterways. ¹⁵⁴ The Ninth Circuit found that as a result of the redesigned project, development was no longer planned for those acres containing the arroyos, thereby rendering § 7 consultation inapplicable. ¹⁵⁵

However, subsequent inspections by the Arizona Department of Environmental Quality indicated that land-clearing and construction by Amphi was affecting those jurisdictional waters, and potentially pygmy-owl critical habitat, in that storm-water runoff and silt had been discharged into a nearby tributary and neighboring wash. Is In response, the EPA threatened Amphi with an administrative penalty of \$177,000 and at least \$100,000 a day in fines for various civil and criminal violations of both the CWA and the ESA unless Amphi suspended the clearing of land and construction until obtaining federal approval for such discharges. Is Despite the possibility of being fined, Amphi has continued building, maintaining that it is not violating any law as it already has a valid permit. Yet, Amphi obtained this permit prior to the designation of pygmy-owl critical habitat, meaning that Amphi may have been, or may be, obligated to obtain a new permit under the CWA and the ESA. Is Apparently recognizing the strong probability of incurring such fines, Amphi has since applied for "a more detailed and more highly scrutinized permit."

Because construction by Amphi may affect the pygmy-owl or pygmy-owl critical habitat, the Corps will have to enter into consultation with the FWS prior

^{151.} See id.; see also 33 U.S.C. §§ 1251-1387 (1994). The CWA provides a comprehensive program designed to "restore and maintain the chemical, physcial, and biological integrity of the Nation's waters." 33 U.S.C. § 2151(a). The CWA prohibits the discharge of any pollutant, including dredged or fill material, into navigable waters unless authorized by a CWA permit. See 33 U.S.C. § 1311(a). The Corps regulates discharges by permits issued under CWA § 404. See 33 U.S.C. § 1344.

^{152.} See Bernal, 1999 WL 1073696, at *2.

^{153.} See id.

^{154.} See id.

^{155.} See id.

^{156.} See Tony Davis, Amphi Warned of Clean-Water Violations: But EPA Won't Levy a Fine, for Now, Over Construction of New High School, ARIZ. DAILY STAR, June 22, 2000, at B4, available in 2000 WL 10243164.

^{157.} See id.

^{158.} See id.

^{159.} See id.

^{160.} See id. Amphi insists, though, that it applied for a new permit only as "a courtesy to the EPA." Id.

to granting Amphi a new permit.¹⁶¹ When consultation begins between the Corps and the FWS, Amphi will be prohibited from "mak[ing] any irreversible or irretrievable commitment of resources," meaning it must halt construction until federal approval is obtained.¹⁶² If after consultation the FWS finds jeopardy to the pygmy-owl or adverse modification to pygmy-owl critical habitat, then Amphi will have to pursue "reasonable and prudent alternatives," which may entail substantially modifying the school project so as to avoid such jeopardy or adverse modification.¹⁶³ Essentially, unless Amphi's earlier permit is determined proper, thereby validating both previous and ensuing construction, Amphi may be looking at significant financial responsibility in the form of fines and/or redesign expenses.

In Defenders of Wildlife v. Ballard, 164 the Federal Court for the District of Arizona again addressed § 7 consultation relating to the pygmy-owl, this time clarifying whether the ESA required the Corps to consult with the FWS regarding the Corps' management practice of issuing § 404 permits under the CWA in the range of the pygmy-owl. 165 Among other claims, Defenders asserted that the Corps failed to consult with the FWS regarding the "likely, adverse effects" of individual and nationwide permits on the pygmy-owl and pygmy-owl habitat. 166 However, while the case was pending, the FWS designated critical habitat for the pygmy-owl, 167 and the Corps thereafter began voluntarily consulting with the FWS regarding what types of permit authorizations may affect the pygmy-owl or pygmy-owl critical habitat. 168 As such, the court regarded Defenders' claim as moot and simply ordered the Corps to continue consulting. 169

V. THE "GOD COMMITTEE" AND "INCIDENTAL TAKE" EXEMPTIONS

If, after consultation, the FWS indicates that a federal action will jeopardize a protected species or adversely modify its critical habitat, then the federal agency, the governor, or the applicable state or permit applicant may apply to the FWS for an exemption freeing the activity from the restrictions of § 7.170 However, such exemptions are extremely controversial in that they authorize the

^{161.} See 64 Fed. Reg. 37419, 37429 (1999) (codified at 50 C.F.R. pt. 17, Oct. 1, 1999).

^{162. 16} U.S.C. § 1536(d) (1994).

^{163. 16} U.S.C. § 1536(b)(4)(A) (1994).

^{164. 73} F. Supp. 2d 1094 (D. Ariz. 1999).

^{165.} See id. at 1096-97.

^{166.} See id. at 1098.

^{167.} See id. at 1114; 64 Fed. Reg. 37419 (1999).

^{168.} See Ballard, 73 F. Supp. 2d at 1114.

^{169.} See id. at 1115.

^{170.} See 16 U.S.C. § 1536(g)(1) (1994). Amendments to § 7 established a detailed procedure to permit exemptions, on a case-by-case basis, from the requirements of the ESA when these requirements stand in the way of economic and other public interests in the execution of federal projects. See Pub. L. No. 95-632, 92 Stat. 3751 (1978); Pub. L. No. 96-159, 93 Stat. 1225 (1979); Pub. L. No. 97-304, 96 Stat. 1411 (codified as amended at 16 U.S.C. § 1536 (1994)).

removal of § 7 protections, thereby allowing the activity to proceed despite the possibility of jeopardizing the continued existence of the endangered species.¹⁷¹ Notwithstanding such risks, an entity may properly obtain an exemption for its activity if it satisfies a stringent set of criteria.

To date, a federal agency or permit applicant has yet to apply for an exemption from § 7 for its otherwise prohibited activity affecting the pygmy-owl. The lack of applications may be the result of an extremely demanding exemption process. However, a more plausible reason for the lack of exemption applications with regard to the pygmy-owl is that the pygmy-owl has only recently been afforded the protections of § 7, meaning that federal agencies or applicants have not yet occasioned the opportunity to secure these kinds of exemptions. Also, because determinations of jeopardy, destruction, or adverse modification of critical habitat are being avoided through conservation-type mitigation, federal agencies or permit applicants have not yet needed an exemption from § 7. 173

Such reasons aside, if a federal agency or permit applicant subject to § 7 decides to apply to the FWS for a § 7 exemption relating to the pygmy-owl, the FWS must decide the following:

- (1) whether an irresolvable conflict exists between completion of the proposed project and preservation of the [pygmy-owl] or its critical habitat;
- (2) whether the applicant has consulted in good faith and has made a reasonable effort to develop and consider modifications or reasonable and prudent alternatives to the proposed agency action which will avoid jeopardizing the [pygmy-owl] or [its] critical habitat, and has conducted any biological assessment required of it...; and
- (3) whether the applicant has refrained from making any irretrievable commitment of resources....¹⁷⁴

If the FWS answers these questions in the affirmative, it then submits a report to the "God Committee," which must grant the agency or applicant an exemption if at least five of its members determines the following:

(i) there are no reasonable and prudent alternatives to the agency action;

^{171.} See 16 U.S.C. § 1536(h) (1994).

^{172.} See 16 U.S.C. § 1536(g)—(h). However, such hardship is debatable, if not unrealistic, in that the process is extremely susceptible to political pressures. See Portland Audubon Soc'y v. Endangered Species Comm., 984 F.2d 1534, 1545 (9th Cir. 1992).

^{173.} See supra notes 146-147 and accompanying text.

^{174.} GRAD, supra note 49 § 12.04[7][i] at 12–197; 16 U.S.C. § 1536(g)(3)(A).

^{175.} The Endangered Species Committee (the "God Committee" or "God Squad") is comprised of the Administrators of the Environmental Protection Agency and National Oceanic and Atmospheric Administration, the Chair of the Council of Economic Advisors, a state representative, and the Secretaries of the Army, Agriculture, and Interior. See 16 U.S.C. § 1536(e)(3).

- (ii) the benefits of such action clearly outweigh the benefits of alternative courses of action consistent with conserving the [pygmyowl] or its critical habitat, and such action is in the public interest;
- (iii) the action is of regional or national significance; and
- (iv) neither the federal agency concerned nor the exemption applicant made any irreversible or irretrievable commitment of resources [with respect to agency action which has the effect of foreclosing any reasonable and prudent alternative measures]....¹⁷⁶

If the God Committee grants an exemption with respect to the agency action, it must also specify the mitigation and enhancement measures which are to be carried out and paid for by the exemption applicant in implementing the agency action.¹⁷⁷ Significantly, a § 7 exemption granted by the God Committee also provides the agency or permit applicant with an exception to the "taking" of a pygmy-owl under § 9.¹⁷⁸

Similar to the "God Committee" exemptions which enable federal agencies to pursue otherwise restricted activities, the "Incidental Take" exemptions of § 10¹⁷⁹ shield certain private property owners from the burdens of the "take" prohibitions of § 9. Like their § 7 counterparts, "Incidental Take" permits are intensely contested in that they allow the "take" of a threatened or endangered species, thereby increasing the risk of extinction of that species. Moreover, because virtually all harm to endangered species occurs through incidental habitat destruction or modification, as almost no market projects set out purposefully to harm a species, this creates the risk that all such projects will likely be granted an "Incidental Take" permit. ¹⁸⁰ Despite such risks, the FWS may permit any act of "taking" otherwise prohibited by § 9 of the ESA so long as such a "taking" is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. ¹⁸¹

To date, the FWS has issued only one "Incidental Take" permit allowing for the otherwise prohibited "take" of a pygmy-owl. 182 However, a lack of

^{176. 16} U.S.C. § 1536(h)(1)(A).

^{177.} See 16 U.S.C. § 1536(h)(1)(B).

^{178.} See 16 U.S.C. § 1536(o).

^{179.} The 1982 amendments created a new § 10. See Endangered Species Act of 1978, Pub. L. No. 95-632, 92 Stat. 3751 (1978). The amendments also created a simpler "Incidental Take" exemption process for federal agencies, who can apply for and receive immunity letters without submitting a habitat conservation plan. See 16 U.S.C. § 1536(b)(4)(B)-(C).

^{180.} See PLATER ET AL., supra note 5, at 704.

^{181.} See 16 U.S.C. § 1539(a)(1)(B) (1994).

^{182.} See U.S. FISH AND WILDLIFE SERV., BIOLOGICAL OPINION SUMMARY: ISSUANCE OF AN ENDANGERED SPECIES ACT SECTION 10(a)(1)(B) PERMIT FOR THE LAZY K BAR RANCH (1998). This permit will allow the Lazy K Bar Ranch to "take" two adult pygmy-owls and their young by way of habitat loss and harassment that will result from construction activities and a loss of critical habitat to residential development. See id; see also 63 Fed. Reg. 52741 (1998) (notifying the public that the Lazy K Bar Ranch applied for an "Incidental Take" permit from FWS). Pima County is also expected to apply for an

"Incidental Take" permits is likely the result of non-federal activities occurring on unoccupied pygmy-owl critical habitat not amounting to "takes," and because the pygmy-owl has only recently been afforded the protections of ESA. Moreover, as the volume of approved incidental takes have dramatically accelerated in years past across the nation, it appears that such permits may become more common in the near future with regard to the pygmy-owl. [83]

In order to obtain an "Incidental Take" permit from the FWS allowing for the legal "taking" of a pygmy-owl, an applicant must submit a Habitat Conservation Plan ("HCP") that specifies the following:

- (i) the impact which will likely result from such taking [of a pygmy-owl];
- (ii) what steps the applicant will take to minimize and mitigate such impacts, and the funding that will be available to implement such steps;
- (iii) what alternative actions to such taking the applicant considered and the reasons why such alternatives are not being utilized; and
- (iv) such other measures that the [FWS] may require as being necessary or appropriate for purposes of the plan. 184

Even then, the FWS will issue the "Incidental Take" permit only if it finds the following:

- (i) the taking [of a pygmy-owl] will be incidental;
- (ii) the applicant will, to the maximum extent practicable, minimize and mitigate the impacts of such taking;
- (iii) the applicant will ensure that adequate funding for the plan will be provided;
- (iv) the taking will not appreciably reduce the likelihood of the survival and recovery of the [pygmy-owl] in the wild; and
- (v) such other measures that the Secretary may require as being necessary or appropriate will be met[.]¹⁸⁵

[&]quot;Incidental Take" permit for several federally listed species, including the pygmy-owl, as part of the Sonoran Desert Conservation Plan. See 65 Fed. Reg. 54295 (2000).

^{183.} Beginning in 1993, more than 450 "Incidental Take" permits have been approved, and more than 200 are pending. See Plater et al., supra note 5, at 705. In Southern Arizona, the Sonoran Desert Conservation Plan may consolidate any future "Incidental Take" permits as to the pygmy-owl. See generally PIMA COUNTY ARIZONA, SONORAN DESERT CONSERVATION PLAN (2000).

^{184. 16} U.S.C. § 1539(a)(2)(A). See generally, e.g., PIMA COUNTY ARIZONA, SONORAN DESERT CONSERVATION PLAN (2000); ARIZ. ECOLOGICAL SERV. FIELD OFFICE, U.S. FISH & WILDLIFE SERV., LAZY K BAR RANCH ENVIRONMENTAL ASSESSMENT AND HABITAT CONSERVATION PLAN FOR CACTUS FERRUGINOUS PYGMY-OWL (GLAUCIDIUM BRASILIANUM CACTORUM) (1998).

^{185. 16} U.S.C. § 1539(a)(2)(B) (1994).

The FWS may additionally require of the applicant other assurances that the HCP will be implemented, ¹⁸⁶ and the permit may also contain such terms and conditions as the FWS deems necessary or appropriate for the purposes of carrying out the HCP. ¹⁸⁷ If all of the former are satisfied, ¹⁸⁸ then the FWS will issue the applicant the "Incidental Take" permit allowing the permittee to proceed with the proposed activity despite the "taking" of a pygmy-owl. ¹⁸⁹ Importantly, once issued the FWS will revoke the permit only if the permittee fails to comply with the terms and conditions of the HCP. ¹⁹⁰

A challenge to prevent the FWS from issuing an "Incidental Take" permit is extremely difficult to advance, as such decisions are effectively immune from citizen suits. ¹⁹¹ Conversely, because such permits, through their HCP programs, ¹⁹²

- 186. See id.
- 187. See id.

188. Although such elements appear demanding, in practice they often prove quite permissive, as the following indicates:

Virtually all harm to species from habitat destruction is "incidental," because virtually no market projects set out purposefully to harm species. The standard that impacts on species must be minimized "to the maximum extent practicable" could be interpreted to allow the developer's own practicalities to dominate the balance. The element requiring that "the taking...not appreciably reduce the likelihood of survival and recovery" retreats from the statutory goal of improving the chances for recovery and uses "not appreciably," an indeterminate measure. Ultimately, the rationality of such balances depends completely upon the [FWS]. If [it] wishes to hold applicants to high standards for HCPs, strict terms for maximum mitigations, and is stringent in setting "such other measures that the [FWS] may require as being necessary and appropriate," then the balance is likely to be sufficiently protective of species. If an Administration doesn't like the [ESA], however, the process in practice can eviscerate [§] 9.

PLATER ET AL., supra note 5, at 704.

- 189. See 16 U.S.C. § 1539(a)(2)(B).
- 190. See 16 U.S.C. § 1539(a)(2)(C).
- 191. See PLATER ET AL., supra note 5, at 704:

The elements of the exemption are determined by relatively unreviewable agency discretion[.] HCPs are designed to exclude citizen enforceability (the FWS itself expressly proposes that the public not be granted the status of 3d party beneficiaries[,] and the most citizens can do is try to prove that particular exemption shortcomings "jeopardize the existence" of endangered species, a tough burden. The legal opponents are likewise tough: The propertyowners who take advantage of [§] 10 are unlikely to be the little guys who can least bear the burdens of ESA restrictions and whose limited property holdings have limited impacts. It takes a lot of time, money, biologists, and lawyers to negotiate a [§] 10 exemption, and those who do so will fight to defend their permits.

Id. at n.44.

192. The "Incidental Take" authorization in § 10 of the ESA has been embodied in the HCP permit program. See GRAD, supra note 49, at 12-210.4. The permit program has special applicability to land development projects that are not carried out, funded, or authorized by the federal government. See id. They are of importance, therefore, in

are capable of achieving biological sophistication, careful balancing, and multispecies and ecosystem-wide protections, which will better occasion the survival of protected species, some environmentalists actually have encouraged their use. ¹⁹³ The proposed Sonoran Desert Habitat Conservation Plan, which seeks to provide ecosystem-wide protection for the pygmy-owl as well as other endangered and threatened species, is one such praised example. ¹⁹⁴ Still, other environmentalists continue to oppose "Incidental Take" permits and HCPs, especially arguing against the recent § 10 amendments involving "no surprises" and "safe harbors" agreements. ¹⁹⁵ Agreements of "no surprises" provide landowners who receive an "Incidental Take" permit assurances that upon completion of the HCP, the FWS will not require the commitment of additional land, water, or financial compensation or additional restrictions on the use of land, water, or other natural

instances in which private lands provide a critical habitat for endangered species. See id. The purpose of the program is to afford an opportunity for proper conservation measures in light of property development. See id. The FWS has issued a manual to guide landowners in the management of property which provides habitat for endangered species. See generally U.S. FISH & WILDLIFE SERV. AND NAT'L MARINE FISHERIES SERV., HABITAT CONSERVATION AND INCIDENTAL TAKE PERMIT PROCESSING HANDBOOK (1996).

193. See PLATER ET AL., supra note 5, at 705.

194. See PIMA COUNTY ARIZONA, SONORAN DESERT CONSERVATION PLAN (2000); see also Habitat Conservation Plans: Senate Env't. and Pub. Works Subcomm. on Fisheries, Wildlife, and Drinking Water Regarding the Implementation of the Endangered Species Act, Nov. 3, 1999, available in 1999 WL 27596622 (congressional testimony of Jamie R. Clark, Director, U.S. Fish and Wildlife Service, Department of the Interior):

The Sonoran Desert HCP is a good example of the innovative, successful merging of conservation and development. When completed, this plan will address the needs of threatened and endangered species throughout Pima County, Arizona. This visionary planning effort will actually help to shape urban development within Pima County while providing for the protection of natural and cultural resources. Listed species that will be protected include the jaguar, Sonoran pronghorn, desert pupfish, cactus ferruginous pygmy-owl, pineapple cactus, and Mexican spotted owl.

Id.

195. See PLATER ET AL., supra note 5, at 707. Environmental opponents of the amendments argue as follows:

Codifying "no surprises" will mean "no recovery" for many species. Whatever certainty "no surprises" may give to some developers, i.e., those lucky enough to cut their deals early, it will almost certainly take away from others when the plans fail, individually and in the aggregate, to achieve recovery and the covered species continue to decline, to be joined perhaps by other species dependent on the same shrinking habitat base....

Id. (quoting Patrick A. Parenteau, letter to New England Senators, Mar. 3, 1998). Clark continued, "The [ESA] is moving away from a system of regulation by citizen enforcement toward a system of largely closed-door negotiations between agencies and regulated interests, with little meaningful public involvement.... HCP initiatives have seriously weakened safeguards for listed species...." Id. at 707 (quoting John Kostyack, Surprise, ENVTL. FORUM, Mar. 1998, at 19).

resources beyond the level otherwise agreed to in the HCP.¹⁹⁶ Such a provision is extremely controversial in that if a permitted action results in unanticipated harm to a protected species, the permittee will face no further restrictions, and any necessary adjustments will be paid for by the FWS.¹⁹⁷ A "safe harbors" agreement is similarly controversial in that it provides landowners who promise to improve the quality of habitat occurring on their land with a guarantee of no further obligations if other species are attracted to the landowner's property, and no liability if the property is later returned back to an agreed upon minimum baseline as to endangered species population levels and habitat conditions.¹⁹⁸

Although the question of whether "Incidental Take" permits and HCP's are beneficial or detrimental to the survival of endangered species such as the pygmy-owl remains subject to debate, the Ninth Circuit has made clear in *Defenders of Wildlife v. Bernal*¹⁹⁹ that a party may proceed without a permit, but that it risks civil and criminal penalties if a "take" of an endangered species occurs.²⁰⁰ In *Bernal*, Amphi declined to apply for an "Incidental Take" permit as it contended that its proposed construction would not result in the "take" of a pygmy-owl.²⁰¹ Defenders argued that the ESA required Amphi to seek such a permit.²⁰² The Ninth Circuit opined that the ESA did not require Amphi to obtain an "Incidental Take" permit; rather, Amphi could choose whether or not to proceed with the permitting process.²⁰³ However, the court stressed that if Amphi decides not to secure such a permit, and Amphi's activity results in the "taking" of a pygmy-owl, then the ESA authorizes severe civil and criminal penalties against Amphi.²⁰⁴

Safe harbor programs are intended to overcome the fear by landowners that if they carry out practices beneficial to endangered species, their reward will be added restrictions on the use of their property. In essence, a safe harbor agreement confers on a landowner the right to "freeze" his or her ESA responsibilities at their current levels for a particular species if the landowner agrees to restore, enhance, or create habitat for that species. It does not, however, confer on the landowner any right to harm any endangered species already present on his or her property at the time the agreement was entered into (the landowner's "baseline" responsibilities). Those responsibilities are unaffected by a safe harbor agreement.

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Id.
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^{196.} See 63 Fed. Reg. 8859 (1998) (codified at 50 C.F.R. pts. 17 & 222).

^{197.} See id.

^{198.} See 64 Fed. Reg. 32706 (1999) (codified at 50 C.F.R. pts. 13 & 17); PLATER ET AL., supra note 5, at 707 n.55; Michael J. Bean, The Endangered Species Act and Private Land: Four Lessons Learned from the Past Quarter Century, 28 ENVIL. L. REP. 10701, 10706-707 (1998):

^{199. 204} F.3d 920 (9th Cir. 2000).

^{200.} See id. at 927.

^{201.} See id.

^{202.} See id.

^{203.} See id.

^{204.} See id.; see also 16 U.S.C. § 1540 (1994).

VI. CONCLUSION

While the goal of the ESA is to conserve the endangered pygmy-owl and the ecosystem on which it depends, a decelerated listing process, flexible exemption amendments, and insufficient administrative and judicial support have all contributed towards compromising this goal. At a minimum, strict application and enforcement of the ESA are necessary so as to preserve the pygmy-owl and its habitat. Without such stringency, the pygmy-owl in the wild may soon cease to exist.²⁰⁵

^{205.} See 65 Fed. Reg. 14999, 15000 (2000) (FWS indicating that only 39 adult pygmy-owls were known to exist as of 1999).