WHAT DOES IT TAKE TO TAKE AND WHAT DOES IT TAKE TO JEOPARDIZE? A COMPARATIVE ANALYSIS OF THE STANDARDS EMBODIED IN SECTIONS 7 AND 9 OF THE ENDANGERED SPECIES ACT

I. INTRODUCTION

Because the continued existence of a species on earth is part of an ongoing dynamic process of survival and adaptation, it is undisputed that extinctions are "historically commonplace and represent an important element of natural selection and evolution."[1] In fact, it is estimated that only two percent of organisms that have ever lived on earth are now alive.[2] Also undisputed, however, is the fact that human destruction or alteration of habitats necessary for species survival has significantly accelerated species extinctions that may or may not have occurred through basic ecological relationships.[3] The conversion of land from nonuse to use, or from one use to another, and the poisoning of habitat through the consistent release of pollutants are among the factors considered most adverse to native wildlife.[4] Most simply put, "the way people live is the ultimate cause of domestic species endangerment."[5] Modern societies' lifestyles, characterized by a "frenetic quest for 'convenience'"[6] have led to an era where the rate of extinction approaches one species per day.[7]

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1. DANIEL J. ROHLF, THE ENDANGERED SPECIES ACT: A GUIDE TO ITS PROTECTIONS AND IMPLEMENTATION 8 (1989).

2. PAUL EHRLICH & ANNE EHRLICH, EXTINCTION: THE CAUSES AND CONSEQUENCES OF THE DISAPPEARANCE OF A SPECIES 28 (1981).

3. ROHLF, *supra* note 1, at 9-11.

4. *See* George C. Coggins & Irma S. Russell, *Beyond Shooting Snail Darters in Pork Barrels: Endangered Species and Land Use in America*, 70 GEO. L.J. 1433, 1442-43 (1982).

5. *Id.* at 1443 (citing NORMAN MYERS, THE SINKING ARK xi (1979)).

6. *Id.*

7. NORMAN MYERS, THE SINKING ARK 31 (1979).

From an historical perspective, man's contribution to such an alarming rate of extinction is not that surprising. Aldo Leopold "was among the first generation of conservationists, who recognized that the 'civilization' which at one moment held . . . up [a species], saying 'Gentlemen, look at this wonder,' might next throw it down and destroy it with all the nonchalance of a glacial epoch."[8] The nonchalance of which Leopold spoke is derived both from a traditional legal mindset that consigned wildlife "to the status of object over which God gave man absolute dominion,"[9] and from a continuing conception that the natural resources of our planet are inexhaustible.[10] The pattern of unrestrained economic exploitation and direct destruction of wildlife in the United States in the eighteenth and nineteenth century easily illustrates these mindsets. At the height of the slaughter of the American bison, approximately two and a half million were killed annually, reducing nearly endless herds to about five hundred animals.[11] Trappers, taking advantage of expanding pelt markets in America and Europe, virtually eliminated the beaver.[12] Cannons were used to slaughter entire flocks of sleeping ducks.[13] The passenger pigeon, "possibly the most abundant bird species ever to exist, had been hunted to extinction by 1914."[14] Ultimately, this period of history saw a spirit of ambivalence towards the extinction of species that has endured, if not through the direct collection of species, through human priority in the development and use of land and resulting pollution of habitats.

Standing as a partial reversal to the concept of human dominion over the earth's wildlife,[15] the Endangered Species Act of 1973 (the ESA or the Act) is the primary modern counterbalance to the frightening rate of extinction.[16] Recognizing the inadequacy of

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8. Katherine S. Yagerman, *Protecting Critical Habitat Under the Federal Endangered Species Act*, 20 ENVTL. L. 811, 814 (1990) (citing ALDO LEOPOLD, GAME MANAGEMENT 19 (1933)).

9. Coggins & Russell, *supra* note 4, at 1437 (citing *Genesis* 1:26-28).

10. *See* Keith Saxe, *Regulated Taking of Threatened Species Under the Endangered Species Act*, 39 HASTINGS L.J. 399, 402 (1988).

11. EHRLICH & EHRLICH, *supra* note 2, at 116.

12. Saxe, *supra* note 10, at 401 (citing R. BAKER, THE AMERICAN HUNTING MYTH 29-30 (1985)).

13. *Id.* (citing T. LUND, AMERICAN WILDLIFE LAW 59 (1980)).

14. *Id.* (citing EHRLICH & EHRLICH, *supra* note 2, at 115).

15. Coggins & Russell, *supra* note 4, at 1437.

16. 16 U.S.C. §§ 1531-1544 (1988).

previous species preservation legislation[17] and responding to a growth in public interest and fervor in species protection highlighted by the plight of the whooping crane,[18] in 1973 Congress enacted "the most comprehensive legislation for the preservation of endangered species ever enacted by any nation."[19] Finding that "various species . . . in the United States have been rendered extinct as a consequence of economic growth and development untempered by adequate concern and conservation,"[20] Congress passed the ESA "to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, [and] to provide a program for the conservation of such . . . species . . . ."[21] In the words of Congressman John Dingell, the Act truly represented a "duty to stem" the "destruction of nature's bounty."[22] It embodied the idea that "[p]reventing the extinction of our fellow creatures is neither frivolity nor foolish environmental excess; it is the means by which we keep intact the great storehouse of natural treasures that make the progress of medicine, agriculture, science, and human life itself possible."[23]

In order to reverse species' decline toward extinction, the Act provides endangered species, and in some instances the habitat of

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17. The Endangered Species Preservation Act of 1966, 16 U.S.C. §§ 668aa-668cc (1988), *repealed by* Endangered Species Act of 1973, Pub. L. No. 93-205, § 14, 87 Stat. 884, 903, and the Endangered Species Conservation Act of 1969, 16 U.S.C. §§ 668cc-1 to 668cc-6 (1988), *repealed by* Endangered Species Act of 1973, Pub. L. No. 93-205, § 14, 87 Stat. 884, 903, "afforded wildlife some protection, but neither . . . law prohibited the taking of endangered species nor mandated that all federal agencies act to preserve endangered species." James Salzman, *Evolution and Application of Critical Habitat Under the Endangered Species Act*, 14 HARV. ENVTL. L. REV. 311, 312-13 (1990); *See also* Saxe, *supra* note 10, at 408-09. President Nixon, himself, recognized that existing legislation "simply [did] not provide the kind of management tools needed to act early enough to save a vanishing species." *The President's 1972 Environmental Program*, 8 WKLY COMPILATION PRESIDENTIAL DOCUMENTS 218, 223-24 (Feb. 14, 1972).

18. Cathryn Campbell, *Federal Protection of Endangered Species: A Policy of Overkill?* 3 UCLA J. ENVTL. L. & POL'Y 247, 252 (1983).

19. Tennessee Valley Auth. v. Hill, 437 U.S. 153, 180 (1978).

20. 16 U.S.C. § 1531(a)(1).

21. *Id.* § 1531(b).

22. ROHLF, *supra* note 1, at 1.

23. *Id.* at 2. *See* Jared des Rosiers, *The Exemption Process Under the Endangered Species Act: How the "God Squad" Works and Why*, 66 NOTRE DAME L. REV. 825, 827-34 (1991) (discussing the reasons for species preservation). *See also* Campbell, *supra* note 18, at 263-67.

such species, with special legal status.[24] Section 4 of the ESA requires federal designation in listing of both endangered and threatened species.[25] An endangered species is one that is "in danger of extinction throughout all or a significant portion of its range . . . ."[26] A threatened species is one that, due to habitat destruction, overexploitation, natural causes, regulatory failures, or other factors,[27] "is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range."[28] In addressing the need for habitat conservation to protect threatened wildlife, Section 4 further provides for the federal designation of "critical habitat"[29] for those areas whose physical or biological features are essential to the conservation of species and which may require special management considerations.[30] Once a species or habitat has attained this listed legal status, it is afforded the protection of the fundamental prohibitions of the Act embodied in Sections 7 and 9, the latter extending only to species.[31]

Following three substantial amendments over the past two decades, Section 7, entitled "Interagency Cooperation," requires all federal agencies to consult with the appropriate wildlife agency to insure that any proposed action is not likely to jeopardize the continued existence of an endangered species or destroy its critical habitat.[32] Described as the "conscience of contemporary

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24. 16 U.S.C. § 1533(b)(2); *see* Salzman, *supra* note 17, at 313.

25. 16 U.S.C. § 1533. Section 4 divides the responsibility for listing species under the ESA as follows:

> [T]he Secretary of the Interior is responsible for all terrestrial species while the Secretary of Commerce is responsible for marine species. . . . The Secretary of Interior has delegated his authority under the ESA to the United States Fish and Wildlife Service (FWS). The Secretary of Commerce has delegated his authority to the National Marine Fisheries Service (NMFS).

James C. Kilbourne, *The Endangered Species Act Under the Microscope: A Closeup Look From a Litigator's Perspective*, 21 ENVTL. L. 499, 502 (1991).

26. 16 U.S.C. § 1532(6).

27. *See id.* § 1533(a)(1).

28. *Id.* § 1532(20).

29. *Id.* § 1533(a)(3).

30. 16 U.S.C. § 1532(5)(A)(i).

31. *Id.* §§ 1536, 1538.

32. *Id.* § 1536(a)(2).

environmental law,"[33] Section 7 calls for a risk analysis procedure. "It requires us to look another form of life in the eye and make the explicit decision that this line of evolution should no longer continue."[34] Rather than call for a before the fact risk analysis procedure, Section 9 of the ESA flatly bans specific actions. Remaining virtually unchanged since the Act's passage in 1973, the section forbids broadly defined "persons" from "taking"[35] any endangered species of fish or wildlife "within the United States or the territorial sea of the United States . . . ."[36] Because the scope of Section 9 extends beyond the actions of federal agencies to include both state and private actions,[37] the provision has been described as "breathtaking in its reach and power"[38] and as "a major headache to the development community."[39]

In general, the purpose of this comment is to compare Sections 7 and 9 of the ESA by exploring the processes and standards of these provisions and assessing their effectiveness in accomplishing the purposes of the Act. Following a thorough analysis of what it takes to "take" and what it takes to "jeopardize," this comment, drawing from amendments to the ESA, legislative history, federal regulations and judicial interpretations, seeks to highlight the differences in these two standards. Ultimately looking to the purposes of the ESA and the continued alarming rate of extinction, this paper culminates in an examination of the difficulties created by the existence of two partially inconsistent standards and suggests that the utility of the Act in achieving Congress' lofty goals is in question, given the current imbalance in its prohibitive provisions.

II. WHAT DOES IT TAKE TO "TAKE"?

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33. Oliver A. Houck, *The "Institutionalization of Caution" Under § 7 of the Endangered Species Act: What Do You Do When You Don't Know?* 12 Envtl. L. Rep. (Envtl. L. Inst.) 15001, 15001 (1982).

34. *Id.*

35. *See* 16 U.S.C. §§ 1352(13), (19).

36. *Id.* § 1538(a)(1)(B).

37. *See id.* § 1532(13).

38. Federico Cheever, *An Introduction to the Prohibition Against Takings in Section 9 of the Endangered Species Act of 1973: Learning to Live With a Powerful Species Preservation Law*, 62 U. COLO. L. REV. 109 (1991).

39. Robert D. Thornton, *Searching for Consensus and Predictability: Habitat Conservation Planning Under the Endangered Species Act of 1973*, 21 ENVTL. L. 605, 609 (1991).

As noted above, Section 9 of the ESA prohibits any "person" from "taking" a species listed as endangered.[40] The potential sweeping application of this simple prohibition can be seen in the Act's definitions of "take" and "person."[41] "Take" means to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct."[42] "Person" includes "an individual, corporation, partnership, trust, association, or any other private entity; or any officer, employee, agent, department, or instrumentality of the Federal Government, . . . or political subdivision of a State, or of any foreign government . . . ."[43] These expansive statutory definitions do not mean, however, that the provision is without limitations. Plaintiffs or prosecutors who wish to invoke Section 9 bear the burden of establishing that a taking has occurred or will occur.[44] Several courts, adopting a restrictive interpretation of taking which views the provision as an all-or-nothing proposition that excludes actions that pose the risk of future takings, have included within this burden the necessity of showing that a taking is relatively certain and imminent.[45]

In *North Slope Borough v. Andrus*,[46] the district court faced the question of whether offshore oil leasing in the Beaufort Sea constituted an unlawful taking of endangered bowhead whales.[47] Although the court enjoined the leasing activities based on the requirements of Section 7 of the ESA,[48] the opinion stated, with respect to the issue of taking, that "injunctive relief should not herein issue unless danger to the protected species is sufficiently imminent or certain . . . . The lease sale itself threatens no species."[49] The court made this finding despite the federal defendant's concession

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40. 16 U.S.C. § 1538(a)(1)(B),(C).

41. *Id.* §§ 1532(19), (13).

42. *Id.* § 1532(19).

43. *Id.* § 1532(13).

44. ROHLF, *supra* note 1, at 60.

45. *See, e.g.,* North Slope Borough v. Andrus, 486 F. Supp. 332, 362 (D.D.C. 1979), *aff'd in part*, *rev'd in part,* 642 F.2d 589, 614 (D.C. Cir. 1980); California v. Watt, 520 F. Supp. 1359, 1387 (C.D. Cal. 1981), *aff'd in part*, *rev'd in part*, *vacated in part*, *stayed in part*, 683 F.2d 1253 (9th Cir. 1982), *rev'd on other grounds*, 464 U.S. 312 (1984).

46. *North Slope Borough*, 486 F. Supp. at 362.

47. *Id.* at 339.

48. *Id.* at 358.

49. *Id.* at 362.

that future leasing activities could harm the endangered whales.[50] In *California v. Watt*,[51] a case involving very similar facts, the plaintiffs sought to enjoin all lease sales off the coast of California.[52] Although the district court granted summary judgment for the plaintiffs based on the Coastal Zone Management Act,[53] it nevertheless found, with respect to the Section 9 claim, that oil leasing was not a sufficiently imminent or certain source of harm to be considered a taking.[54] The court asserted that "[a]ssuming arguendo that the proposed leasing activities do constitute a threat to the continued survival of species protected by these statutes, such a threat would still not constitute a taking under the statutes."[55] In both *North Slope Borough* and *California v. Watt,* the appellate decisions did not reach the district courts' restrictive view of takings.[56]

Because instances may exist where a taking is relatively certain, but unlikely to take place imminently, the burdens imposed by *North Slope Borough* and *California v. Watt* are arguably unjustified.[57] *National Wildlife Federation v. Coleman*[58] stands as an example. In that case, the construction of a segment of Interstate Highway 10 in Mississippi, although only proposed, was deemed to inevitably have an adverse impact on the endangered Mississippi sandhill crane.[59] Although argued under Section 7 of the ESA, the case provides a fact pattern that demonstrates that there is "no rational reason to consider future adverse impacts to endangered species as not constituting takings merely because they do not affect species immediately."[60] Rather, it is sensible "to halt or modify activities as early as possible before takings occur, both to benefit endangered species and to avoid the potential waste of resources on an activity which may be enjoined in the future when a taking

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50. *See id.*

51. 520 F. Supp. 1359 (C.D. Cal. 1981).

52. *Id.* at 1365.

53. *Id.* at 1389.

54. *Id.* at 1387-88.

55. *Id.* at 1387.

56. California v. Watt, 683 F.2d 1253 (9th Cir. 1982), *rev'd on other grounds,* 464 U.S. 312 (1984); *see* North Slope Borough v. Andrus, 642 F.2d 610 (D.C. Cir. 1980).

57. ROHLF, *supra* note 1, at 61.

58. 529 F.2d 359 (5th Cir. 1976), *cert. denied*, Boteler v. Nat'l Wildlife Fed'n, 429 U.S. 979 (1976).

59. *Id.* at 371-72.

60. ROHLF, *supra* note 1, at 61.

becomes imminent."[61] The United States Court of Appeals for the Ninth Circuit adopted this position in *Palila v. Hawaii Department of Land and Natural Resources* ("*Palila I*")[62] and *Palila v. Hawaii Department of Land and Natural Resources* ("*Palila II*").[63] The *Palila* decisions both rejected the necessity of imminency, and embraced an expansive view of what constitutes harm for the purpose of taking, advocating a less intensive burden of proof for potential plaintiffs and prosecutors.[64]

In promulgating the ESA's implementing regulations, the Fish and Wildlife Service (FWS) interpreted the term "harm" within the statutory definition of taking as follows:

> "Harm" in the definition of "take" in the Act means an act or omission which actually injures or kills wildlife, including acts which annoy it to such an extent as to significantly disrupt essential behavioral patterns, which include, but are not limited to, breeding, feeding or sheltering; *significant environmental modification or degradation which has such effects is included within the meaning of* "*harm*" . . . .[65]

The leading judicial interpretations of the "harm" definition resulted from the endeavors of environmental groups to protect the Palila, a six-inch long finch-billed bird that is a member of the Hawaiian honeycreeper family, which attained the endangered legal status in 1967.[66] In *Palila I,* plaintiffs specifically argued that populations of feral goats and sheep maintained by the State of Hawaii for sport hunting harmed the Palila by destroying the mamane trees upon which the birds exclusively depend.[67] Finding that the goats and sheep were preventing the regeneration of the mamane forest and thus were causing "the relentless decline of the Palila's habitat,"[68] the district court held that the State of Hawaii was taking the Palila in

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61. *Id.* at 61-62.

62. 471 F. Supp. 985 (D. Hawaii 1979), *aff'd* 639 F.2d 495 (9th Cir. 1981) [hereinafter *Palila I*].

63. 649 F. Supp. 1070 (D. Hawaii 1986), *aff'd* 852 F.2d 1106 (9th Cir. 1981) [hereinafter *Palila II*].

64. *See supra* notes 62-63 and accompanying text.

65. 50 C.F.R. § 17.3 (superseded) (emphasis added).

66. Kilbourne, *supra* note 25, at 574.

67. *Palila I*, 471 F. Supp. at 989-90.

68. *Id.* at 990.

violation of Section 9.[69] Drawing support from the FWS's definition of "harm," the court "did not require the plaintiffs to produce actual '*corpus delecti*' of deceased birds. Plaintiffs showed only that the Palila population was near a biologically survivable minimum and that the goats and sheep were destroying its only remaining habitat."[70]

Approximately four months following the Ninth Circuit's affirmation of the far-reaching *Palila I* decision, an Interior Department Solicitor's opinion was released that concluded that the decision demonstrated "fundamental confusion over the distinction between habitat modifications and takings."[71] The opinion argued that Section 9 prohibited habitat modification only in those instances where such modification led to the actual death or injury of endangered species.[72] "[I]n an attempt to essentially overrule what it believed to be the holding of *Palila I*,"[73] the FWS responded to the opinion by redefining the term "harm." The new definition read, and continues to read, that harm "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."[74] The actual effect this change in definition had on the scope of takings under Section 9 was the foremost subject of *Palila II*.

In 1985, the Palila once again "wing[ed] its way into federal court as plaintiff in its own right."[75] *Palila II* included nearly identical facts to the *Palila I* decision with the exception that another species of feral sheep, the mouflon, was accused of destroying the birds' habitat.[76] The State of Hawaii sought to take advantage of the FWS's redefinition of harm, arguing that it precluded the result

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69. *Id.* at 995.

70. Kilbourne, *supra* note 25, at 574-75.

71. 46 Fed. Reg. 29,492 (1981).

72. *Id.* at 29,491.

73. ROHLF, *supra* note 1, at 63.

74. 50 C.F.R. § 17.3 (1991).

75. Palila v. Hawaii Department of Land and Natural Resources (Palila II), 852 F.2d 1106, 1107 (9th Cir. 1988).

76. *Id.* at 1071.

reached by the court in *Palila I*.[77] The district court responded, however, finding that the amended regulations "did not embody a substantial change in the previous definition. Under both the original definition and the definition as amended in 1981, 'harm' may include significant habitat destruction that injures protected wildlife."[78] Further, the court rejected the idea that Section 9 requires evidence of death or injury to specific individual members of a protected species.[79] Ultimately, the court found that if "habitat modification prevents the population from *recovering*, then this causes injury to the species and should be actionable under section 9."[80] The United States Court of Appeals for the Ninth Circuit affirmed these conclusions.[81]

The significance of the *Palila* decisions cannot be overestimated. In fact, one commentator has suggested *Palila II* may be "the single most important opinion in section 9 law."[82] The decisions stand for the principle that activities which indirectly cause a decline in the population of a species harm that species, as well as the idea that activities which preclude recovery of an endangered species likewise fall within the meaning of harm. The usefulness and application of these expansive principles were demonstrated in both *Defenders of Wildlife v. EPA*[83] and *Sierra Club v. Lyng*.[84] In *Defenders of Wildlife*, the United States District Court for the District of Minnesota found that EPA's registration of strychnine for above ground use as a pesticide was a taking under Section 9 of the Act.[85] Rejecting the argument that there was a lack of evidence that actual deaths were caused by agency action, the court looked to *Palila I* to assert that Section 9 "is broadly defined in the statute" and

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77. Palila v. Hawaii Department of Land and Natural Resources (Palila II), 649 F. Supp. 1070, 1075 (D. Hawaii 1986).

78. *Id.*

79. *Id.*

80. *Id.* at 1077 (emphasis added).

81. *Palila II*, 852 F.2d 1106 (9th Cir. 1988).

82. Cheever, *supra* note 38, at 152.

83. 688 F. Supp. 1334 (D. Minn. 1988), *aff'd in part, rev'd in part*, 882 F.2d 1294 (8th Cir. 1989).

84. 694 F. Supp. 1260 (E.D. Tex. 1988), *aff'd in part, rev'd in part, sub. nom.* Sierra Club v. Yeutter, 926 F.2d 429 (5th Cir. 1991).

85. Defenders of Wildlife v. EPA, 688 F. Supp. 1334, 1353-54 (D. Minn. 1988).

"expansively construed."[86] In *Lyng*, the plaintiffs were successful in showing that the use of even-aged timber management in national forests in Texas had caused a decline in the overall population of the endangered Red-Cockated Woodpecker.[87] For the district court, this showing was sufficient to support a finding that a taking of the woodpeckers had occurred. Accordingly, the court issued an injunction directing the Forest Service to cease clearcutting practices within 1,200 meters of any Red-Cockated Woodpecker colony.[88]

Ultimately, it takes relatively little to take. That is especially true where an endangered species' habitat is confined to a small or unique area. The *Palila I* decision made it clear that plaintiffs bear the burden of showing that *habitat modification* kills or injures members of a protected species.[89] *Palila II* clarified this burden by illustrating that death or injury to a species may be shown simply by reference to the species *as a whole* and that precluding recovery of a species constitutes such an injury.[90] Although several courts have elected to adhere to a more restrictive interpretation of taking,[91] the legislative history of the ESA, as well as the Act's stated purpose supports the expansive view developed in *Palila I*, *Palila II*, and subsequent cases. Addressing the proper scope of the Section 9 prohibition, the Senate Report on the ESA as enacted in 1973 reads, "'Take' is defined . . . in the broadest possible manner to include every conceivable way in which a person can 'take' or attempt to 'take' any fish or wildlife."[92] The purpose of the ESA is to conserve both ecosystems and species. In other words, its "very purpose is to establish equal concern for habitat preservation and species protection. This dual purpose gives synergistic force to the idea that habitat destruction that leads to the harm of protected species is a

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86. *Id.* at 1353. Noting that "the record shows endangered species have eaten the strychnine bait, *either directly or indirectly*, and as a result, they have died," the Eighth Circuit Court of Appeals affirmed the district court ruling. Defenders of Wildlife v. EPA, 882 F.2d 1294, 1301 (8th Cir. 1989) (emphasis added).

87. Sierra Club v. Lyng, 694 F. Supp. 1260, 1271-72 (E.D. Tex. 1988).

88. *Id.* at 1278. *Accord* Sierra Club v. Yeutter, 926 F.2d 429 (5th Cir. 1991).

89. ROHLF, *supra* note 1, at 68.

90. *Id.*

91. *See, e.g.,* Pyramid Lake Tribe of Indians v. U.S. Department of the Navy, 898 F.2d 1410, 1420 (9th Cir. 1990) (finding diversion of water from the Truckee River in California and Nevada did not constitute a taking of the Lohonton Cutthroat Trout and Cui-ui due to an insufficient showing of harm).

92. S. Rep. No. 307, 93rd Cong., 1st Sess (1973).

form of taking that the Act prohibits."[93] Essentially, an expansive view of the ESA's taking prohibition is consistent with, and well suited to the Act's goals. Whether the taking prohibition has been sufficiently enforced and whether the standard is applied soon enough to achieve the Act's purposes are questions addressed below.

Before moving on to the question of what it takes to "jeopardize," it is noteworthy that although the "take" standard has withstood changes over the past two decades, Congress has added the potential for incidental takings. In amending the ESA in 1982[94] Congress included Section 10 which grants nonfederal parties the authority to request an incidental take permit.[95] Because the process to obtain such a permit is quite demanding and potentially stringent,[96] only a handful of nonfederal entities have attempted to use the process, and only one Section 10 dispute has led to litigation.[97] Under the provision, an "applicant" must submit a habitat "conservation plan" which specifies:

> (i) the impact which will likely result from such taking;
> •(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 Secretary may require as being necessary or appropriate for purposes of the plan.[98]

Once the FWS or National Marine Fisheries Service (NMFS) receives a conservation plan and the public is given an opportunity for comment, Section 10 requires the agency to issue a permit if it finds:

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93. Michael E. Field, *The Evolution of the Wildlife Taking Concept From its Beginning to its Culmination in the Endangered Species Act*, 21 HOUS. L. REV. 457, 486 (1984).

94. Pub. L. No. 97-304, 87 Stat. 1411 (1982).

95. *See* 16 U.S.C. § 1539(a)(1)(B).

96. *See* Cheever, *supra* note 38, at 169; *see also* ROHLF, *supra* note 1, at 82.

97. ROHLF, *supra* note 1, at 84 (citing Friends of Endangered Species v. Jantzen, 596 F. Supp. 518 (N.D. Cal. 1984), *aff'd*, 760 F.2d 976 (9th Cir. 1985)).

98. 16 U.S.C. § 1539(a)(2)(A).

> (i) the taking will be incidental;
> •(ii) the applicant will, to a 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 species in the wild; and
> •(v) the measures, if any, required under subparagraph (A)(iv) will be met . . . .[99]

The fourth of the above requirements has been described as among the most significant.[100] Legislative history suggests that the "not appreciably reduce" standard is, in fact, the "not likely to jeopardize the continued existence" standard in Section 7 in disguise.[101] In general, Congress included this provision to emphasize that the issuance of a permit under Section 10 is, itself, a federal action subjecting the nonfederal permittee to the requirements of Section 7.[102] Because what it takes to "jeopardize" a species under that section is less demanding than what it takes to "take" a species, the incidental take permit process creates a means by which nonfederal parties with the resources necessary to complete a conservation plan can sidestep the more stringent taking standard of Section 9.

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99. *Id.* § 1539(a)(2)(B).

100. ROHLF, *supra* note 1, at 84.

101. Cheever, *supra* note 38, at 170. "The Secretary will base his determination as to whether or not to grant the permit, in part, by using the same standard as found in section 7(a)(2) of the Act . . . ." H.R. CONF. REP. No. 835, 97th Cong., 2d Sess. 29 (1982).

102. H.R. CONF. REP. No. 835, 97th Cong., 2d Sess. 29-30 (1982).

III. WHAT DOES IT TAKE TO "JEOPARDIZE"?

When the Supreme Court in 1978 enjoined the construction of the Tellico Dam to prevent the likely extirpation of the Snail Darter in *Tennessee Valley Authority v. Hill*,[103] it was faced with the task of interpreting what appeared to be a straightforward and relatively short mandate embodied in Section 7 of the ESA. As originally enacted, the entire section was only two sentences long. The section attracted little attention in the legislative debates surrounding the Act, and was for the most part uncontroversial.[104] In what has become one of the most widely recognized of environmental opinions, Chief Justice Burger asserted that the words of Section 7 "affirmatively command all federal agencies 'to *insure* that actions *authorized*, *funded* or *carried out* by them do not *jeopardize* the continued existence' of an endangered species or '*result* in the destruction or modification of habitat of such species' . . . . This language admits no exception."[105] The Court stated that "[o]ne would be hard pressed to find a statutory provision whose terms were any plainer . . . ."[106] Despite the fact that the Court's interpretation would produce the apparently absurd result of sacrificing the anticipated benefits of the project and many millions of dollars in public funds for the survival of an unknown three-inch fish, the majority opinion concluded that "the language, history, and structure of the legislation . . . indicates beyond doubt that Congress intended endangered species to be afforded the highest

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[103]. 437 U.S. 153, 194 (1978).

[104]. MICHAEL J. BEAN, THE EVOLUTION OF NATIONAL WILDLIFE LAW 355 (1991). As enacted in 1973, Section 7 read in its entirety:

> The Secretary shall review other programs administered by him and utilize such programs in furtherance of the purposes of this Act. All other Federal departments and agencies shall, in consultation with and with the assistance of the Secretary, utilize their authorities in furtherance of the purposes of this Act by carrying out programs for the conservation of endangered species and threatened species listed pursuant to [section 1533] of this Act and by taking such action necessary to insure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of such endangered species and threatened species or result in the destruction or modification of habitat of such species which is determined by the Secretary, after consultation as appropriate with the affected States, to be critical.

16 U.S.C. § 1536 (1973) (current session at 16 U.S.C. § 1536 (1988)).

[105]. Tennessee Valley Auth. v. Hill, 437 U.S. 153, 173 (1973) (citing 16 U.S.C. § 1536 (1976)).

[106]. *Id.*

of priorities."[107] The congressional response to *TVA v. Hill* indicates that maybe Congress did not, in fact, intend for endangered species to have such exclusive priority.

Reflecting Justice Powell's dissenting sentiments that courts should give the ESA a "permissible construction that accords with some modicum of common sense and the public weal,"[108] Congress acted dramatically and swiftly to inject flexibility into the Act. Section 7 of the ESA was extensively amended in 1978,[109] 1979,[110] and once again in 1982.[111] The result of these amendments has been to turn the "plain meaning" of the original, two-sentence Section 7 into nearly ten statutory pages. The amendments include complex procedures formalizing the consultation process, an exhausting process for exempting qualified activities from the Section's commands, and altered substantive provisions. The amended section further provides the potential for incidental takings which embody an exemption to the Section 9 taking provision.

The thrust of the 1978 amendments to the ESA was the formalization of the Section 7 consultation process, the heart of the provision. The consultation process is initiated when a federal agency plans an activity which might jeopardize a listed endangered or threatened species or modifying its critical habitat.[112] The agency proposing a project or activity, the "action agency," requests information from the FWS or NMFS as to whether a listed species "may be present."[113] If the Secretary advises the action agency that a listed species might inhabit the proposed activity area, that agency must prepare a "biological assessment."[114] The biological assessment, which is to be completed 180 days from the "may be present" determination, is to identify listed species in the proposed activity area, the critical habitat of such species, and the potential impact the activity could have on the species.[115] Drawing from the assessment, the appropriate wildlife agency has 90 days from its

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107. *Id.* at 174.
108. *Id.* at 196 (Powell, J., dissenting).
109. Pub. L. No. 95-632, § 3, 92 Stat. 3751, 3752 (1978).
110. Pub. L. No. 96-159, § 4, 93 Stat. 1225, 1226 (1979).
111. Pub. L. No. 97-304, § 4, 96 Stat. 1411, 1417 (1982).
112. *See* 16 U.S.C. § 1536(a)(2).
113. *Id.* § 1536(c)(1); 50 C.F.R. § 402.12 (1991).
114. *Id.*
115. *Id.*

receipt to issue a biological opinion.[116] It is at this stage that the Secretary applies the substantive standard at the base of Section 7, the focus of this comment, to determine whether or not the activity is likely to jeopardize an endangered species or its critical habitat. If the biological opinion is negative, meaning the activity will not likely jeopardize an endangered species, the action may proceed, potentially cloaked with an exemption to Section 9's taking provisions.[117] If the Secretary otherwise finds a likelihood of jeopardy, the action agency, applicant, or affected state has the option of commencing the exemption or "God Committee" process.[118] "For the great majority of agency actions there will be no effect on endangered species and no opinion will be necessary. For the majority of those remaining actions which might affect a species, the impact will be negligible and the biological opinion will so conclude."[119]

What exactly it takes or should take to likely jeopardize the continued existence of a species for the purposes of a biological opinion is the center of much controversy. Because the Supreme Court in *TVA v. Hill* reached its dramatic conclusion without elaborating on the meaning of "jeopardize,"[120] and because Congress, in enacting and amending the ESA, has failed to define the term, the primary vehicle for the debate and development of the meaning of Section 7's substantive prohibition has been federal regulations. Putting aside for one moment the "not likely" language of the statute and focusing only on the word "jeopardize," a reasonable definition "is any substantial harm to any population segment of any listed species."[121] The listing of a species as being endangered suggests in

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116. *See* 16 U.S.C. § 1536(b).

117. *See* 16 U.S.C. § 1536(b)(4); *see also* 50 C.F.R. § 402.14(i)(1)(1991).

118. *See* 16 U.S.C. § 1536(q). The exemption process essentially includes three steps. First, a three member Review Board must certify that there is an irreconcilable conflict between a proposed project and a listed species. 16 U.S.C. § 1536(g)(5). Second, the Board prepares a report outlining the available alternatives to the project, its significance, and any reasonable mitigation or enhancement measures. *Id.* § 1536(g)(5). Finally, the Board's report is considered by the Endangered Species Committee, which is comprised of the heads of seven designated federal agencies. The Committee may grant an exemption if five or more members find that there are no reasonable and prudent alternatives, that the benefits of the proposed action outweigh the benefits of conserving the species, and that the action is of regional and national significance. *Id.* § 1536(h).

119. Houck, *supra* note 33, at 15002.

120. Tennessee Valley Auth. v. Hill, 437 U.S. 153, 171-72 (1978).

121. Coggins & Russell, *supra* note 4, at 1465.

itself that any adverse effect could lead to the species' extinction.[122] Therefore, "the use of the word 'jeopardize' in the statute, rather than the phrase 'result in extinction' suggests that Congress had in mind a less rigorous standard."[123] The federal regulations not only embrace the idea that "jeopardize" is not a very demanding standard, but push this idea even further.

The regulations promulgated to interpret and implement the substantive prohibition of Section 7 state: "*Jeopardize the continued existence of* means to engage in an action which reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of *both the survival and recovery* of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species."[124] Because this definition clearly indicates that an agency action must threaten the survival as well as recovery of a listed species to violate the jeopardy prohibition, an action that imperils a species' ability to *recover*, but does not present the likelihood of entirely eliminating the species, does not violate Section 7(a)(2). Since an action which appreciably reduces the likelihood of survival automatically reduces that species' ability to recover, the term "recovery" is somewhat useless; "the extent to which a project affects listed species' recovery is irrelevant for purposes of determining whether the project jeopardizes those species."[125] As outlined by Daniel Rohlf, the regulatory implementation of the jeopardy standard has two extremely important ramifications on the scope of the Section 7(a)(2) prohibition:

> First, because the section 7 regulations also afford no protection for the recovery of listed species in section 7(a)(2)'s prohibition against destroying critical habitat, the Secretary interprets section 7(a)(2) as merely requiring federal agencies to refrain from threatening the base survival of listed species. Moreover, since the ESA gives no indication of what constitutes "survival" . . . from a biological perspective, the Secretary and

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122. *Id.*

123. *Id.*

124. 50 C.F.R. § 402.02(d) (1991) (emphasis added).

125. ROHLF, *supra* note 1, at 149.

> federal agencies have complete discretion over how to interpret [this] term.[126]

It is therefore not surprising that the FWS routinely issues "no-jeopardy" biological opinions in the "face of declining populations."[127] The 1979 amendments to the ESA highlight the Secretary's wide discretion in determining what constitutes survival of a species and the extremely flexible nature of the jeopardy standard in general.

When Congress amended the ESA in 1979,[128] it changed federal agencies' substantive obligation from ensuring that the agencies' actions would not jeopardize an endangered or threatened species to ensuring that their actions would *not likely* jeopardize such species.[129] The legislative history outlining the reasons for the 1979 modification is slightly contradictory. Although Congress attempted to convey that its intent was not to lessen the substantive prohibition by stating that it simply wanted to bring "the language of the statute into conformity with existing agency practice,"[130] the conference committee report accompanying the 1979 amendments suggests otherwise. The report indicates that Congress made the change in Section 7(a)(2) to allow agency actions to continue even if existing information following the consultation process was not entirely sufficient to allow the Secretary to insure against jeopardy or critical habitat destruction.[131] Further support for the idea that Congress intended more than just a modernization of the provision can be found in the fact that the 1979 amendment further authorized the Secretary to issue a "no-jeopardy" biological opinion based not on a guarantee that a proposed activity would not jeopardize a listed species, but on the "best scientific and commercial data available."[132]

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126. *Id.*

127. Dale D. Goble, *Of Wolves and Welfare Ranching*, 16 HARV. ENVTL. L. REV. 101, 125 (1992) (identifying the grizzly bear as the most obvious example).

128. Pub. L. No. 96-159, 93 Stat. 1225 (1979) (codified as amended at 16 U.S.C. § 1536).

129. H.R. CONF. REP. No. 697, 96th Cong., 1st Sess. 5, 12 (1979); *reprinted in* 1979 U.S.C.C.A.N. 2557, 2576.

130. H.R. CONF. REP. No. 697, 96th Cong., 1st Sess. 12, *reprinted in* 1979 U.S.C.C.A.N. 2572, 2576.

131. *Id.*

132. *See id.*; 16 U.S.C. § 1536(a)(2).

Overall, the 1979 change weakened the jeopardy standard such that "the section's protection of listed species is now less absolute."[133]

Because a finding of "no-jeopardy" can be made in the face of a dim likelihood of recovery of an endangered species, and because this decision need only be based on a questionable level of certainty, it necessarily draws into question the utility of the jeopardy standard in fulfilling the Act's purposes. Although commentators have referred to Section 7 as a "considerable barrier to land development,"[134] the lessening of the jeopardize standard from a direct mandate under *TVA v. Hill* to its current reading and implementation is not well suited to the conservation of both species and their ecosystems. The answer to the question of "what it takes to jeopardize" is something akin to the bare survival of a species, illustrating the pervasiveness of the traditional land use mindset introduced at the beginning of this paper. The addition of flexibility to Section 7 and the implementing regulations demonstrates humankind's difficulty in relinquishing land use priority to guarantee biological diversity. Before further discussing Section 7's utility in light of the "take" standard, a brief mention of the 1982 amendments is in order.

The 1982 amendments to the ESA marked two significant changes to Section 7. First, because it was apparent to Congress that the scope of the *Palila I* decision might render Section 7 entirely superfluous because a finding of "no-jeopardy" would, in most cases, nevertheless lead to a finding that "takings" had occurred, a means through which a proposed activity would become exempt from Section 9's taking provisions was added.[135] If the formal consultation process leads to a finding of "no-jeopardy" and if taking caused by the activity covered by such an opinion is considered "incidental," the Secretary shall issue a written statement or "individual take statement" that specifies, among other things, "the reasonable and prudent measures that the Secretary considers necessary or appropriate to minimize such impact."[136] Second, and most significantly, the amendment changed the basis for the

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133. Christopher H.M. Carter, *A Dual Track For Incidental Takings: Reexamining Sections 7 and 10 of the Endangered Species Act*, 19 B.C. ENVTL. AFF. L. REV. 135, 143 (1991).

134. Coggins & Russell, *supra* note 4, at 1465.

135. 16 U.S.C. § 1533(b)(4).

136. *See id.*

designation of critical habitat.[137] At the center of this modification was the introduction of economic analysis into the designation scheme. The addition of cost-benefit analysis detracts from the idea that the value of endangered species is incalculable and that they should be protected at any cost. "Given that habitat protection is possibly the most effective way to halt the indirect extinction of species," this change has effectively "denied many endangered species their most important measure of protection under the ESA."[138] The significance of the 1982 amendment and the importance of critical habitat designation are further discussed below.

IV. THE DIFFERENCES IN "TAKING" AND "JEOPARDIZING"—TOWARD A UNIFORM STANDARD OF JEOPARDY?

While the concepts of "take" and "jeopardy," in and of themselves, are both aimed at affording endangered species some level of protection, they are very different standards. Whereas the showing required for the taking of a species is less than the actual destruction of a single member of a species, the duty to insure against jeopardy only guarantees, at a questionable level of certainty, the base survival of an endangered species. Because the "take" standard prohibits the death of a single member of a species where the "jeopardy" standard would allow for the destruction of a significant portion of a species population, these standards can be described at best as being partially inconsistent with respect to the goals of the Act. The development of this inconsistency, a result of the traditional mindset of human dominion as manifested through the Act's amendments and implementing regulations, has ultimately led to a polarization toward the more uniform application of the jeopardy standard. More and more, as Section 9 is under-enforced,[139] both federal and nonfederal parties strive to be subject to the standard which is far less suited to achieve the purposes of the Act.

• Standing alone, a major difference in the "take" and "jeopardize" standards is that the former involves an after-the-fact determination where the latter calls for a before-the-fact risk analysis

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137. 16 U.S.C. § 1533(b)(2).

138. Christopher A. Cole, *Species Conservation in the United States: The Ultimate Failure of the Endangered Species Act and Other Land Use Laws*, 72 B.U. L. REV. 343, 357-58 (1992); *see also* Campbell, *supra* note 18, at 262-63.

139. *See* Cheever, *supra* note 38, at 111-12.

determination. The inclusion of the Section 10 exemption to takings in the 1982 amendments, however, demonstrates that nonfederal parties are more than likely going to assess the risk that their activities will affect an endangered species. Because the 1982 amendment to the Section 7(b)(4) exemption for incidental takings when combined with the relative lessening of the jeopardy standard, increases the likelihood of a "no-jeopardy" opinion, nonfederal parties and agencies have increasingly worked together to establish a federal nexus to bring essentially private actions within the scope of Section 7.[140]

The Section 7 consultation process is triggered if a proposed activity includes a sufficient federal nexus to constitute "agency action." Under the ESA, such actions are those "authorized, funded, or carried out by such agency . . . ."[141] The regulations promulgated by the FWS broaden the concept by referring to actions "in whole or in part" and by specifically including "the granting of licenses, contracts, leases, easements, rights-of-way, permits, or grants-in-aid . . . ."[142] Several examples illustrate how the FWS and nonfederal parties recently "have employed inventive techniques"[143] to qualify activities as federal actions. In one instance, a nonfederal party proposed a solid waste landfill project that threatened the habitat of an endangered species.[144] The project triggered Section 7 through a consultation between the FWS and Federal Highway Administration on a new highway interchange which provided access to the landfill but did not directly impact the species' habitat.[145] In a second example, a private party was subjected to the lesser standard of Section 7 through a federal right-of-way grant that provided access to the landowner's development project on land purchased from the Bureau of Land Management.[146] The land included the habitat of the

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140. *See infra* notes 144-49 and accompanying text.

141. 16 U.S.C. § 1536(a)(2).

142. 50 C.F.R. § 402.02 (1991).

143. Thornton, *supra* note 39, at 619-20; *see also* Donald L. Soderberg & Paul E. Larsen, *Triggering Section 7: Federal Land Sales and "Incidental Take" Permits*, 6 J. LAND USE & ENVTL. L. 169, 172 (1991).

144. Thornton, *supra* note 39, at 620.

145. *Id.*

146. *Id.* (citing Memorandum from Acting Field Supervisor; Laguna Niguel Field Office, to Area Manager, Indio Resource Area Bureau of Land Management (May 31, 1989)).

endangered Stephens' Kangaroo Rat.[147] In both of these cases, the formal consultation process resulted in the grant of an incidental take permit covering the entire proposed activity.[148]

Nonfederal parties may be unable to establish a federal nexus. Still, a "habitat" conservation plan submitted pursuant to the Section 10 incidental take permit process is ultimately examined under the equivalent of the 7(a)(2) jeopardy standard.[149] As noted above, "the legislative history establishes beyond doubt that the 'not appreciably reduce' standard [of Section 10(a)(7)(B)(iv)] is the Section 7(a)(2) 'not likely to jeopardize the continued existence' standard in disguise."[150] Though initially scarce, it is significant to note that "a great many more conservation plans are on the drawing board."[151] Ultimately, the upshot is that we are not guaranteeing what the Act sets out to accomplish: the conservation of ecosystems and species. Rather, the increased use of a standard, that as amended places priority in the development and use of land, simply guarantees the continued alarming rate of extinction.

One might argue that the processes included in formal consultations, incidental take permits, and incidental take statements are themselves a barrier to the threatening of endangered species. Such an argument would continue that these processes raise the level of protection afforded by the "not likely to jeopardize" standard standing alone such that the gap between "what it takes to take" and "what it takes to jeopardize" is not that significant. This assertion is tenuous, however, given the fact that far more than a majority of consultations result in negative biological opinions,[152] that such "no-jeopardy" opinions are consistently issued where endangered species populations are obviously declining,[153] and that such negative biological opinions must only show that an activity is *not likely* to jeopardize based only on the "best scientific and commercial data available."[154] Overall, the great likelihood that consultation will result in a "no-jeopardy" finding despite the fact that threatened or

147. *Id.*
148. Soderberg & Larsen, *supra* note 144, at 172.
149. *See* Cheever, *supra* note 38, at 170.
150. *Id.*
151. *Id.* at 172-73.
152. Houck, *supra* note 33, at 15002; Salzman, *supra* note 17, at 330-31.
153. Goble, *supra* note 128, at 125.
154. 16 U.S.C. § 1536(a)(2).

endangered species will be affected suggests that the process itself does not significantly deter the proposal of activities or projects. Where the gap in the "take" and "jeopardy" standards is significantly decreased, almost overlapping such that they afford virtually the same high level of protection of the "take" standard, is when a listed species' habitat has been designated a critical habitat.

Once again, it is important to note the language of Section 7(a)(2). The provision reads:

> Each Federal agency shall, in consultation with and with the assistance of the Secretary, insure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered species or threatened species or *result in the destruction or adverse modification of habitat* of such species which is determined by the Secretary, after consultation as appropriate with affected States, to be *critical* . . . .[155]

The implementing regulations of the FWS state that "*Destruction or adverse modification* means a direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species."[156] James Salzman has observed that, because the judiciary has interpreted this adverse modification standard as being strikingly similar to the stringent "taking" standard as delineated in *Palila I* and *Palila II*, "[c]ourts have increasingly found jeopardy violations under section 7 or taking violations under section 9 when challenged governmental activities are located in critical habitats."[157] Salzman further asserts that "synthesis of critical habitat and jeopardy is found throughout section 7 case law, for there appear to be no successful section 7 cases finding adverse modification of critical habitat without also finding jeopardy."[158] The result is that a viable means of reducing the inconsistency between the take and jeopardy standards, a solution which would correctly focus on ecosystems rather than species

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155. *Id.* (emphasis added).

156. 50 C.F.R. § 402.02 (1992).

157. Salzman, *supra* note 17, at 323.

158. *Id.* at 326 (citing Interview with Michael J. Bean).

themselves, would be the strengthening and facilitation of the process through which a critical habitat is designated. As might be expected, this would not be a very easy task.

The designation of critical habitat has thus far only partially prevented the inconsistency between the substantive prohibitions in Sections 7 and 9 because the listing of endangered species and the designation of critical habitat are not one in the same. The 1982 amendments to the ESA permit a final listing decision without critical habitat designation.[159] Under the amendments, the FWS designates critical habitat within two years of the listing of a species. The agency may ultimately deny designation, however, if it finds it imprudent or undeterminable.[160] As briefly noted above, because Congress infused this determination of prudency with cost-benefit analysis, the likelihood of designation has decreased. Although unlikely due to Congress' commitment to flexibility as seen in the 1978, 1979 and 1982 amendments, a reversal of the ravaging of the critical habitat designation process would have the effect of balancing the differences between the "take" and "jeopardy" standards and lead to the application of uniform standard better suited to achieve the Act's purposes.

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159. *See id.* at 323; *see* 16 U.S.C. § 1533.

160. 16 U.S.C. § 1533.