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Title

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Journal

UCLA Journal of Environmental Law and Policy, 16(2)

Author

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Publication Date

1998

DOI

10.5070/L5162018935

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Habitat Conservation Plans as Recovery Vehicles: Jump-Starting the Endangered Species Act

by Jon P. Tasso*

I. Introduction

Few laws have fallen as short of their goals as the Endangered Species Act ("ESA").¹ The ESA, the "pit-bull" of environmental legislation,² seeks to "conserve" species.³ In a narrow sense, the ESA has successfully "conserved" some species by delaying their otherwise imminent extinction.⁴ However, one of the ESA's broader goals — the recovery of listed species — has gone unmet.⁵ In the ESA's nearly three decade existence, the Fish and Wildlife Service ("FWS") and the National Marine Fisheries Service ("NMFS") - the federal agencies with primary responsibility for implementing the ESA - have listed over seven hundred species as "endangered" or "threatened." But the agencies have de-listed only six species for recovery. If recovery is the ESA's ultimate objective, the Act has failed miserably.

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^{1. 16} U.S.C. §§ 1531-43 (1994).

^{2.} George C. Coggins et al., Federal Public Land and Resources Law 790 (3rd ed. 1993).

^{3.} See, e.g.,16 U.S.C. § 1531(b) (1994) (stating that the purpose of the Endangered Species Act is to "provide a means whereby the ecosystems upon which endangered and threatened species depend may be conserved, [and] to provide a program for the conservation of such endangered and threatened species").

^{4.} Jason M. Patlis, Recovery, Conservation, and Survival Under the Endangered Species Act: Recovering Species, Conserving Resources, and Saving the Law, 17 Pub. Land & Resources L Rev. 55, 57 (1996).

^{5.} Douglas P. Wheeler, An Ecosystem Approach to Species Protection, 10-WTR NAT. RESOURCES & ENV'T 7 (1996). See text accompanying notes 53 and 56.

^{6.} Id.

^{7.} Id.

Political opposition to the Act's restrictive effect on land development, meanwhile, has mushroomed.⁸ Since the early 1980's, private landowners have felt the impact of § 9 of the ESA.⁹ Section 9 prevents landowners from unlawfully "taking" endangered species.¹⁰ Organized groups representing private landowners are now lobbying Congress for an amendment to the ESA requiring the government to compensate landowners whose property is rendered less valuable because of the Act.¹¹ Many environmental groups are concerned about the impact of these efforts on the Act's on-going, and often stalled, reauthorization process.¹²

Meanwhile, in the current political climate, the prospect of strengthening the ESA by amendment is nearly unthinkable. However, the FWS can initiate reforms without further statutory authorization that could improve the recovery prospects of many listed species. This Article suggests that by consistently demanding stringent mitigation measures in high acreage, or regional, habitat conservation plans ("HCPs"), the FWS could significantly further the recovery of many listed species. Frequently drafted by interested landowners and local government entities, HCPs are legally binding plans that specify, in part, those measures a party must take to minimize the impacts of its proposed actions on a listed species. Section 10 of the ESA allows the FWS to issue an incidental take permit if an applicant's HCP

^{8.} The private property rights movement has gained the ear of many in Washington D.C. Senate and House committees have formulated ESA reform proposals that deal with some of the movement's concerns. One ESA reform bill would require landowner compensation if the ESA reduced property values by twenty percent. The same bill would require the government to buy the property if the ESA reduced the property's value by more than fifty percent. House Panel Outlined ESA Reform Focuses on Species Protection, Property Rights, Nat'l Env't Daily (BNA), at D-8 (July 20, 1995).

^{9. &}quot;Until the 1980's, almost all property owners developed and used their land in blissful ignorance of section 9 and its sweeping restrictions." Barton H. Thompson, *The Endangered Species Act: A Case Study in Takings and Incentives*, 49 STAN. L. REV. 305, 310 (1997).

^{10. 16} U.S.C. § 1538 (1994).

^{11.} See supra note 8.

^{12.} As of this Article's publication, Senator Kempthorne's bill reauthorizing, but also significantly changing, the ESA, has been favorably reported out of the Senate Environment and Public Works Committee. This bill does not include a property rights protection component. Endangered Species: 'No Surprises' Clause in Conservation Plans Criticized by Conservation Groups in Report, Nat'l Env't Daily (BNA) (Feb. 12, 1998). The House has adopted a "wait and see" attitude, letting the Senate take the lead on current ESA reauthorization efforts. Elections, Competing Issues Hurt Chances for 1998 Legislative Action on Environment, Nat'l Env't Daily (BNA) (Jan. 14, 1998).

would not reduce appreciably the likelihood of the listed species' "survival" and "recovery." An incidental take permit typically allows the permittee to develop some portion of a listed species' habitat in exchange for the permitee's setting aside of other habitat and engaging in other protective measures. 14

The legal key to expansion of the HCP is to interpret "survival" and "recovery" in 16 U.S.C. §1538 as synonymous terms. The FWS currently interprets "survival" and "recovery" chronologically. To the FWS, "survival" refers to a species' short-term persistence, and "recovery," to long-term persistence. Instead, the FWS should interpret "survival" and "recovery" as involving the same goal: the long-term persistence of a listed species. This alternative interpretation is consistent with the science of conservation biology.

FWS implementation of this Article's recommendation would result, through the formulation and implementation of regional HCPs, in the establishment of large habitat preserves and the adoption of other recovery-promoting practices. Thoughtfully delineated habitat preserves, together with other species-specific management actions, are crucial to the recovery prospects of most species.¹⁶

Part I of this Article briefly describes the statutory foundation for HCPs and explains how the FWS has implemented this statutory scheme. Part II discusses the statutory foundation for recovery planning and explains how the FWS has implemented the recovery mandate. Part III discusses how recovery plan implementation and HCP formation can be integrated, and rebuts possible legal challenges to this proposed integration. Part IV illustrates the integration of recovery planning and HCP formation through Washington County, Utah's efforts to create an HCP for *Gopherus agassizii*, the desert tortoise.

^{13. 16} USC § 1538(a)(1)(B)(iv) (1994).

^{14.} Albert C. Lin, Participants' Experiences with Habitat Conservation Plans and Suggestions for Streamlining the Process, 23 Ecology L. Q. 369, 377 (1996).

^{15.} See text accompanying notes 46, 47 and 56.

^{16.} Reed F. Noss, Some Principles of Conservation Biology as They Apply to Environmental Law, 69 CHI.-KENT L. REV. 893, 900 (1994).

II. The FWS Approach to HCPs

A. The Statutory Basis for HCPs

1. The ESA's Anti-"Take" Provision

Private landowners whose property contains listed species habitat would not develop HCPs absent §9 of the ESA. Section 9(a)(1)(B) makes it unlawful for any person to "take any such [listed] species within the United States. . . ."¹⁷ This section impacts a wide range of activity on private land, ranging from killing a listed species, to the clearing of listed species habitat for development purposes.

Section 3(19) of the ESA defines "take" to include "harm." In 1985, the FWS promulgated a regulation that defined "harm" to include habitat modification: "['harm' means] an act which actually kills or injures wildlife by significantly impairing essential behavior patterns, including breeding, feeding, or sheltering." In Babbitt v. Sweet Home Chapter of Communities for a Greater Oregon, the Supreme Court upheld the FWS' broad interpretation of "harm." Sweet Home established that landowners who destroy listed species habitat are subject to the ESA's civil and criminal penalties. 20

2. The § 10 Exemption for Non-federal Landowners

Many landowners willfully develop listed species habitat in violation of the law.²¹ The ESA's criminal and civil threats are often not credible deterrents. The FWS often knows the habitat of a listed species, but can rarely identify the exact tracts of land that qualify as habitat.²² Few FWS officials are available to monitor landowner compliance with the ESA.²³ Moreover, environmental groups lack the resources necessary to monitor all the landowners that own listed species habitat.²⁴

^{17. 16} U.S.C. § 1538 (1994).

^{18. 50} C.F.R. § 17.3 (1995).

^{19. 515} U.S. 687 (1995).

^{20.} See 16 U.S.C. § 1540(a) (1994) (authorizing a civil penalty per violation of \$25,000); 16 U.S.C. § 1540(b) (1994) (authorizing criminal penalties of up to \$50,000 and one year's imprisonment).

^{21.} Thompson, supra note 9, at 315.

^{22.} Id.

^{23.} Id.

^{24.} Id.

Many landowners, however, choose to obey the law.²⁵ Some landowners recognize that environmental groups know their land is listed species habitat. Others merely want a clear conscience. The ESA provides a vehicle by which a law-abiding landowner can develop some of his or her habitat: a §10 incidental take permit. A §10 permit typically grants a limited privilege to develop.²⁶

For those committed to developing their property, an incidental take permit is often a landowner's only lawful choice.²⁷ The landowner willing to pursue the long and frequently difficult process of obtaining an incidental take permit will often be able to develop his or her land.²⁸

Section 10(a)(1)(B) authorizes the FWS to issue a permit allowing "any taking... if such taking is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity."²⁹ This permit is generally known as an "incidental take" permit. A landowner who wanted, for example, to build a shopping center or private dwelling on listed species habitat would claim that his or her activity fell within §10(a)(1)(B) permit criteria; the development's purpose would not be the destruction of the habitat. Any impact on the listed species would therefore be "incidental."

Section 10 outlines the conditions under which the FWS can issue an "incidental take" permit. The permittee, as part of the permit application, must submit a "conservation plan" (referred to generally as a "habitat conservation plan").³⁰ This plan must specify "the impact which will likely result from such taking, . . . the steps the applicant will take to minimize and mitigate such

^{25.} Id.

^{26. 16} U.S.C. § 1539(a)(1)(B) (1994) authorizes the Secretary of the Interior to permit "any taking otherwise prohibited by section 1538(a)(1)(B) of this title provided the taking is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity."

^{27.} Thompson, supra note 9, at 318-319.

^{28.} See generally Lin, supra note 14.

^{29. 16} U.S.C. § 1539(a)(1)(B) (1994).

^{30. 16} U.S.C. § 1539(a)(2)(A) (1994).

The number of HCPs submitted to and approved by the FWS has now reached significant levels. From 1982, the year HCPs were incorporated into the ESA, until 1994, the FWS approved only thirty-nine HCPs. Lin, *supra* note 14, at 372. By March of 1996, the FWS had approved 141 HCPs, and an additional 300 were in the works. Nat'l Env't Daily (BNA), at D-4 (June 26, 1996). HCPs invariably impose burdens on landowners. Landowners are usually willing to shoulder these burdens so that they can realize some value for their land. Formulating a regional HCP allows participating landowners to disperse the costs of receiving a privilege to develop. Thompson, *supra* note 9.

impacts, . . . the funding that will be available to implement such steps, . . ." as well as alternatives considered and the reasons for the alternatives' rejection, and any other measures required by the FWS.³¹ The FWS is required to issue the permit if it finds that:

[T]he taking will be incidental, . . . the applicant will, to the maximum extent practicable, minimize and mitigate the impacts of such taking, . . . the applicant will ensure that adequate funding for the plan will be provided, . . . the taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild . . . [and that] any other measures [required by the FWS are satisfied]. 32

The requirement that an incidental take permit not "appreciably reduce the likelihood of the survival and recovery of the species in the wild"³³ is of central concern to this Article. This Article recommends a reinterpretation of this language, consistent with conservation biology.

The purpose of the mitigation and funding requirements for acceptable HCPs is to minimize the negative consequences of an "incidental take."³⁴ Mitigation, at least for regional HCPs, invariably includes protecting some habitat from development.³⁵ Often, mitigation involves fencing the newly created habitat reserve and providing enforcement officers to protect the reserve.³⁶ HCPs may contain other mitigation strategies unique to the circumstances.³⁷

For the FWS to approve an HCP, HCP proponents must convince the agency that the HCP will be adequately funded for its duration.³⁸ Funding sources may vary, and include specially earmarked state and federal appropriations.³⁹ Often, however,

^{31. 16} U.S.C. § 1539(a)(2)(A)(i)-(iv) (1994).

^{32. 16} U.S.C. § 1539(a)(2)(B)(i)-(iv) (1994).

^{33.} Id.

^{34.} Lin, supra note 14, at 376-77.

^{35.} Id. at 395.

^{36.} For examples, see the mitigation measures included in the Washington County HCP, discussed in Part V. The number of potentially acceptable mitigation measures is large. Property owners can pay a fee into a conservation fund maintained by a municipality for the acquisition of habitat. Another mitigation measure is the management of habitat. Thompson, *supra* note 9, at 317.

^{37.} Lin, supra note 14, at 377.

^{38.} *Id*.

^{39.} Specially earmarked state and federal funds are a primary means for funding the Washington County HCP discussed in Part V. Wash. County Comm'n, Desert Tortoise Incidental Take Permit and Documents 7 (Wash. County, Utah 1995).

private landowners and local government entities fund HCPs through development taxes.⁴⁰

B. FWS Understanding of HCPs

The FWS is currently committed to a habitat conservation planning model that prevents HCPs from serving as effective species recovery vehicles. Instead, the FWS has modeled its approach to species "survival" and "recovery" under \$10(a)(2)(B)(iv) on similar language in regulations promulgated under \$7.41 Section 7 of the ESA allows a federal agency to approve a course of action if that action "is not likely to jeopardize the continued existence of any endangered species or threatened species." An FWS regulation defines "jeopardize the continued existence of" as "engag[ing] in an action that reasonably would be expected . . . to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild. . . ."

The FWS does not currently regard "survival" and "recovery" as synonymous. In deciding whether a species is in "jeopardy," the FWS emphasizes that it must identify "detrimental impacts to both survival and recovery."⁴⁴ The "and" implicitly suggests that the FWS regards these terms as independent concepts. To the FWS, "survival" refers to a species near-term existence and "recovery" refers to a species' long-term existence. A proposed federal action that merely threatens a listed species' "recovery" is not barred by Section 7. Current FWS understanding of "survival" and "recovery," "merely encourage[s] federal agencies to ensure that their actions do not jeopardize the near-term existence of a listed species."⁴⁵

Consequently, as interpreted, Section 7 is merely an action-constraining, or damage-control, provision.⁴⁶ The FWS's inter-

^{40.} The types of development taxes vary. One common variety is a per-acre tax assessed upon the land's clearing, and collected by a local government entity. Lin, *supra* note 14, at 403.

^{41. 16} U.S.C. §1539(a)(2)(B)(iv) (1994).

^{42. 16} U.S.C. §1536(a)(2) (1994).

^{43. 50} C.F.R. §402.02 (1994).

^{44.} Patlis, supra note 4, at 90 (emphasis added).

^{45.} *Id*.

^{46.} The best illustration of this idea continues to be *Tennessee Valley Auth. v. Hill*, 437 U.S. 153, 193-95 (1978). The constraints of § 7 effectively delayed the completion of a federal dam project on the Little Tennessee River. The dam was finally completed and the snail darter fish population at issue eradicated after Congress exempted the project from the ESA.

pretation does not require other federal agencies affirmatively to provide for the recovery of listed species.⁴⁷ The official FWS handbook on HCPs states that there is no real difference between the §7 and §10 tests. "[T]he ESA requires a 'non-jeopardy' finding for all affected listed species as a precondition for an incidental take permit."⁴⁸

The FWS's textual understanding of "survival" and "recovery" finds expression in its review of actual incidental take permit applications. In 1994, for example, Region 1 of the FWS issued its proposed findings on an HCP submitted by Bakersville, California and Kern County, California (the "Bakersfield HCP"). The Bakersfield HCP proposed the incidental take of several endangered species, including the San Joaquin kit fox and the bluntnosed leopard lizard. The Bakersfield HCP, among other measures, anticipated the establishment of habitat preserves for these and other endangered species. Pegion 1 recommended that the FWS approve the Bakersfield HCP. Region 1 determined that the HCP would "offset impacts resulting from loss of habitat incurred through authorization of an otherwise lawful activity." According to Region 1, the species covered by the Bakersfield HCP would continue to exist if the FWS approved the HCP.

Applied to §10, the §7 approach can result in the approval of HCPs that do not sufficiently assist in species recovery. If an HCP only requires avoidance of a listed species' imminent extinction, the HCP may not contain sufficiently forward-looking mitigation measures.⁵²

^{47. 16} U.S.C. §1536(a)(1) (1994) requires that "Federal agencies shall... utilize their authorities in furtherance of the purposes [of the ESA] by carrying out programs for the conservation of [listed] species." This seemingly clear requirement of agency action does not compel agencies to take concrete steps to assist in species recovery. See, e.g., Patlis, supra note 4, at 88 (agencies maintain significant discretion in determining the extent to which they must engage in species conservation).

^{48.} Id. at 82.

^{49.} U.S. Fish and Wildlife Service, Findings and Recommendations Regarding the Issuance of a Section 10(a)(1)(B) Incidental Take Permit for San Joaquin Kit Foxes, Tipton Kangaroo Rats, Giant Kangaroo Rats, and Blunt-nosed Leopard Lizards within the Metropolitan Bakersfield 2010 General Plan Area in Kern County, California (1994).

^{50.} Id.

^{51.} Id. at 6.

^{52.} This point is developed further in Part V.

III. RECOVERY PLANNING AND THE ESA

A. Recovery as a Central ESA Goal

It would be strange indeed for endangered species legislation to not be concerned primarily (at least in intent) with the recovery of those species protected by the Act. The mere short-term existence of a species is not an attractive justification for endangered species legislation. Legislative history concerning the ESA reflects this intuition. The findings preceding the Act's substantive sections bemoan the loss of unique species.⁵³

The ESA is not designed as a permanent hospital for listed species. The Act explicitly contemplates that species are to be "conserved."⁵⁴ Under the ESA, "conserve" includes "the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this chapter are no longer necessary." The ESA specifies de-listing procedures.⁵⁵ The ESA's delisting tool is recovery plans.⁵⁶

Recovery planning, however, has not always been a significant part of the ESA. The 1973 version of the Act contained no mechanism for the development and implementation of recovery plans. "Recovery" first appeared in the 1978 amendments to the ESA.⁵⁷ Under §4(f) of the ESA, the FWS must "develop and implement [recovery] plans... for the conservation and survival of endangered species and threatened species... unless such a plan will not promote the conservation of the species."⁵⁸ In 1986, the FWS promulgated a regulation which defined "recovery" in terms of de-listing: "recovery' means improvement in the status of a listed species to the point at which listing is no longer appro-

^{53.} See, for example, 16 U.S.C. § 1531(b) (1994) (The purpose of the Endangered Species Act is to "provide a means whereby the ecosystems upon which endangered and threatened species depend may be conserved, [and] to provide a program for the conservation of such endangered and threatened species. . . .").

^{54. 16} U.S.C. § 1532(3) (1994).

^{55. 16} U.S.C. § 1533(c) (1994).

^{56. 16} U.S.C. § 1533(f)(1) (1994) reads, in part: "The Secretary shall develop and implement plans (hereinafter in this subsection referred to as 'recovery plans') for the conservation and survival of endangered species and threatened species listed pursuant to this section, unless he finds that such a plan will not promote the conservation of the species."

^{57.} Pub. L. No. 95-632, 92 Stat. 3751, 3766 (1978).

^{58. 16} U.S.C. § 1533(f)(1) (1994).

priate under the criteria set out in section 4(a)(1) of the Act."⁵⁹ Congress amended the ESA again in 1988.⁶⁰ The ESA now requires that recovery plans possess certain elements: necessary site-specific management actions, objective criteria upon which to base species de-listing, and cost estimates for recovery plan implementation and success.⁶¹

B. The Failure of Recovery Planning

The ESA has not, however, effectively assisted the recovery of listed species.⁶² Implementation of recovery plans by the FWS is sporadic. For approximately thirty-two percent of listed species, less than fifty percent of those measures identified in a corresponding recovery plan have been implemented.⁶³ Although there are numerous reasons for this failure, a few major reasons are dominant.

Notwithstanding the seemingly non-discretionary "shall implement" language of §4(f), the recommendations contained in recovery plans are not necessarily binding on the FWS or other government agencies.⁶⁴ In *National Wildlife Federation v. National Park Service*, the court determined that the National Park Service could keep a campground in Yellowstone National Park open, even if to do so was contrary to a recovery plan for the grizzly bear.⁶⁵ At most, the FWS can be compelled to produce and implement recovery plans where no adequate justification exists not to do so.⁶⁶ This lack of enforceability constitutes a ma-

^{59. 50} C.F.R. § 402.02 (1995).

^{60.} Pub. L. No. 100-478, 102 Stat. 2307 (1988).

^{61. 16} U.S.C. § 1536(f)(1)(B) (1994).

^{62.} See supra notes 1-5.

^{63.} See Patlis, supra note 4, at 112.

^{64. 16} U.S.C. § 1533(f)(1) (1994).

^{65. 669} F. Supp. 384, 388-89 (D. Wyo. 1987).

^{66.} Two recent cases involve the issue of whether courts can compel the Fish and Wildlife Service ("FWS") to develop and implement recovery plans. In Sierra Club v. Lujan, 36 E.R.C. 1533, 1541 (W.D. Tex. 1993), the court noted that the development and implementation of a recovery plan is a nondiscretionary action of the FWS which a court can review. The facts of the case, however, suggest the holding's limited value. Sierra Club v. Lujan involved a situation where the FWS largely failed to give an explanation for why it had not developed or implemented a recovery plan for some listed fish species. In Funds for Animals v. Babbitt, 903 F. Supp. 96, 108-110 (D. D.C. 1995), an environmental group urged the court, among other things, to analyze the details of a recovery plan to determine whether the plan would effectively assist the species' recovery. The court, however, deferred to the FWS' judgment on particular management decisions, as long as those decisions were "reasonable."

jor weakness in the ESA. The Acts prohibition provisions, §7 and §9, cannot alone effectively recover species.

Another major reason for the ESA's failure regarding species recovery is public perception. Simply put, the ESA is widely regarded by policy makers, the FWS, and the public as a set of prohibitions.⁶⁷ Section 7 (the "jeopardy" provision) and § 9 (the "take" provision) dominate the ESA's implementation. The ESA has become synonymous with project-stopping snail darters and northern spotted owls. Indeed, the ESA's prohibitions have taken over the Act's implementation. The FWS spends much of its time, money, and energy working with government agencies, other entities, and individuals attempting to comply with the ESA's prohibitions.⁶⁸

Finally, staffing and funding shortfalls at the FWS have made it very difficult for the agency to develop and implement recovery plans.⁶⁹ While the number of species listed under the ESA has continued to climb, recovery plan budgets have remained stagnant.⁷⁰ In an era of staffing cutbacks and budget deficit reduction, this situation will not likely improve in the near future.⁷¹ Unfortunately, without the necessary financial and staffing resources to implement recovery plan recommendations, recovery plans are little more than paper aspirations.

TV

Bringing Recovery Plan Implementation and HCPs Together

A. Why the FWS Can Make HCPs Further Species Recovery

The FWS could not use HCPs to implement recovery plans if HCPs and recovery plans involved necessarily different approaches to conserving listed species. HCPs and recovery plans, however, both specify management actions necessary to protect species. Indeed, the species management recommendations of

^{67.} Federico Cheever, The Road to Recovery: A New Way of Thinking About the Endangered Species Act, 23 Ecology L.Q. 1, 5 (1996) ("Litigants, courts, and legal scholars have emphasized the enforcement of the Act's specific prohibitions at the expense of the Act's larger purpose.").

^{68.} *Id.*

^{69. &}quot;Even if a recovery plan establishes a goal of complete recovery and de-listing, tasks will be prioritized based on the importance of the task to survival of the species. Funding may be so limited that it is only those Priority-1 tasks that get funded. . . ." Patlis, *supra* note 4, at 111.

^{70.} Id.

^{71.} Id.

recovery plans and HCPs often overlap. HCPs, for example, typically require the permittee to preserve some habitat in exchange for an incidental take permit.⁷² Recovery plans try, among other things, to preserve enough habitat to allow the FWS to de-list the species.⁷³

The primary statutory mechanism by which the FWS could use HCPs is the Act's "mitigation" requirement for HCPs.⁷⁴ The FWS could require that HCP mitigation steps approximate, although on a smaller scale, the recommended recovery actions in the listed species' recovery plan.⁷⁵

If the FWS regarded "survival" and "recovery" as indistinguishable terms, each term referring to the listed species' long-term existence, this interpretation would provide the analytic foundation for an enhanced HCP mitigation requirement. The Such an interpretation would allow the FWS to establish more demanding mitigation criteria. In reviewing an HCP, the FWS could take extra precautions to ensure that the most valuable habitat was not sacrificed by the HCP.

Not all habitat is of equal quality. For a particular species' needs, some habitat may be degraded or too isolated from other habitat.⁷⁷ For a given part of the relevant species' range, the FWS could ensure that the HCP set aside particular acreage necessary for the species' ultimate recovery.

B. Why Integration of Recovery Plans and HCPs?

The use of HCPs can surmount the major obstacles to successful recovery plan implementation. First, HCPs are fully enforceable agreements between the government and \$10 permittees. If the permittee does not abide by the terms of the permit (which includes, by reference, the mitigation measures in the applicable

^{72.} See text accompanying notes 30 and 36.

^{73.} See text accompanying notes 53 and 56.

^{74. 16} U.S.C. § 1539(a)(2)(A)(i)-(iv) (1994).

^{75. 16} U.S.C. §1539 (a)(2)(B)(i)-(iv) (1994). The FWS is cognizant of the administrative and policy advantages of regional HCPs. From an administrative standpoint, regional HCPs allow the FWS to focus its energy on single permit applications for a species, rather than on hundreds of applications concerning the same species. Lin, *supra* note 14, at 395-96. Regional HCPs also allow the FWS to think clearly about the aggregate impacts on a species of further development of two species' habitat. *Id.* at 394.

^{76.} The scientific rationale for regarding "survival" and "recovery" as synonymous is discussed in detail in Part IV.C.)

^{77.} Wheeler, supra note 5, at 7, 9.

HCP), the FWS can rescind the permit.⁷⁸ While the FWS and other government agencies are not legally required to implement recovery plan recommendations, §10 permittees must implement the mitigation requirements in their HCPs to escape the ESA's criminal and civil sanctions.⁷⁹

Also, HCPs do not rely, primarily, on prohibitions to preserve species. The mitigation requirement for HCPs almost always involves setting aside some high quality species habitat.⁸⁰ The FWS then manages this reserve with the needs of the listed species in mind.⁸¹ Preserved habitat avoids the need for further prohibitory land use regulation. Thus, HCPs can do the real work of species recovery. HCPs can set aside enough habitat for the listed species to have a meaningful chance at long term existence.

Finally, HCPs, to be approved by the FWS, must be fully funded and adequate enforcement staff provided.⁸² The ability of an HCP to meet a listed species' recovery needs is therefore not a function of Capitol Hill's budgetary whims.

C. The Legality of the Proposed Changes

The FWS could implement the above recommendations under the current Act.⁸³ A FWS's decision to regard "survival" and "recovery" as synonymous would constitute a reasonable interpretation of ambiguous statutory language.

1. Chevron, "Survival," and "Recovery"

In Chevron v. Natural Resources Defense Council,⁸⁴ the Supreme Court established a two-part test to determine when courts should defer to an agency interpretation of a statutory

^{78.} Patlis, supra note 4, at 120.

^{79.} See 16 U.S.C. § 1538 (1994) (prohibiting the unlawful "take" of listed species).

^{80.} See supra note 36 and accompanying text.

^{81.} For a discussion of the mitigation measures in the Washington County, Utah HCP for the desert tortoise, for example, see infra Part V.

^{82. 16} U.S.C. § 1539(a)(2)(B)(i)-(iv) (1994).

^{83.} To implement this Article's recommendation, however, the FWS may need to proceed by notice and comment rulemaking. As explained in this section, equating "survival" and "recovery" would likely be a significant position change on the part of the FWS.

There are also other statutory avenues the FWS could pursue to accomplish this Article's objective. Section 10(a)(1)(B)(v) allows the FWS to specify any other requirements in an HCP that it deems necessary. 16 U.S.C. § 1538(a)(1)(B)(v) (1994). Under this provision, the FWS could decide that an HCP required additional mitigation measures. Section 10(a)(1)(B)(v) has not been litigated. The FWS appears to attach little or no significance to this provision currently.

^{84. 467} U.S. 837 (1984).

term. First, unless Congress has spoken to the matter, deference to an agency is appropriate when the meaning of the statutory term is unclear.⁸⁵ Second, the agency's interpretation of the term must be reasonable.⁸⁶ The second condition places constraints on the judicial deference accorded agencies by the first.

a. "Survival" and "Recovery" are Unclear

The interpretation of "survival" and "recovery" as synonymous terms would satisfy the first condition of *Chevron*. The meaning of "survival" and "recovery" in § 10(a)(1)(B)(iv) are as unclear as was the term "harm" in *Sweet Home*.⁸⁷ The FWS is only authorized to issue an incidental take permit if the permit's issuance would not jeopardize the "survival" and "recovery" of a listed species.⁸⁸ The ESA, however, defines neither of these terms. Moreover, the terms "survival" and "recovery" are not familiar common law terms. Nor are "survival" and "recovery" common statutory terms. As such, neither term carries with it historical interpretive precedent. "Survival" and "recovery" of a species are terms essentially unique to the ESA.

A dictionary understanding of the two terms suggests no clear textual difference in meaning. One dictionary defines "survival" as "the continuation of life or existence." The same dictionary defines "recover" as "to get back . . . to bring back to normal position or condition." A species (as opposed perhaps to individuals of a species) cannot "continue to live" in any meaningful sense unless efforts are made to "get the species back" by taking steps to maximize the species' population.

Arguably, there is a "common sense" distinction between the two terms. The FWS ignores this distinction through its current interpretation of "survival" and "recovery." To the FWS, ensuring that an incidental take permit does not interfere with "survival" means that after the permit is granted, some number of the species will remain alive. Ensuring that an incidental take permit does not interfere with "recovery," in contrast, means that the

^{85.} Id. at 842-43.

^{86.} Id.

^{87.} Babbitt v. Sweet Home Chapter of Communities for a Greater Oregon, 515 U.S. 687 (1995).

^{88. 16} U.S.C. § 1538(a)(1)(B)(iv) (1994).

^{89.} Webster's New Collegiate Dictionary 1189 (9th ed. 1986).

^{90.} Id. at 985.

permit will not interfere with long-term efforts to increase the species' numbers.⁹¹

In practice, however, this "common sense" distinction breaks down, and does so quickly. The state of knowledge about a given listed species is typically poor. A biologist can almost never reliably say whether a given "take" will still allow the species to be around for 50 years (mere "survival?") or whether the "take" will allow the species to be around for 500 years ("recovery?").92 In the face of such biological uncertainty, the FWS's interpretation of "survival" and "recovery" as unambiguous and clearly distinct terms is unsound.

Moreover, as the populations of many listed species decline, the "common sense" distinction between "survival" and "recovery" becomes biologically naive. Many species' numbers are so low and their habitat so fragmented that any attempt to distinguish between the species' "survival" and the species' "recovery" is meaningless.⁹³ There must be some "recovery" to ensure some "survival."

Moreover, legislative history supports equating "survival" and "recovery." In enacting §10 in 1982, Congress urged the FWS, in reviewing incidental take permit applications, to consider the degree to which the conservation plan would nourish the habitat of the listed species and increase the survivability of the species and its ecosystem.⁹⁴

The structure of the ESA is also compatible with this Article's recommendation. As explained earlier, "recovery" is a central goal of the ESA.⁹⁵ Additionally, §10 explicitly asks the FWS to consider a proposed incidental take permit's impact on a species "recovery."⁹⁶

b. Equating "Survival" with "Recovery" Would be Reasonable

If the FWS regarded "survival" and "recovery" as synonymous, its interpretation would be consistent with principles of conservation biology. To a wildlife manager, there is no rational basis to distinguish between mitigation measures necessary for

^{91.} Patlis, supra note 4, at 120.

^{92.} Id. at 90 ("As a practical matter, it is impossible to know where survival ends and recovery begins.").

^{93.} Id.

^{94.} H.R. Rep. No. 97-567 (1982).

^{95. 16} U.S.C. § 1533(f)(1) (1994).

^{96. 16} U.S.C. § 1539(a)(2)(B)(iv) (1994).

"recovery" and mitigation measures necessary for "survival." Indeed, to the wildlife manager, actions required to preserve the likelihood of a species' "survival" and actions required to not reduce the likelihood of a species' "recovery" are virtually identical.⁹⁷

Conservation biology argues that "survival" is a function of "recovery." Only by ensuring a species' long-term survival can one suggest with confidence that the species' short-term survival is equally secure. Conservation biology strongly embraces the doctrine of prudence in wildlife management. When in doubt about a species' future, conservation biologists on the error side of preserving the largest possible amount of high quality habitat.99

If the FWS were to interpret "survival" and "recovery" as synonymous, it would demand appropriately stringent mitigation measures in HCPs. The hallmark of the FWS's approach would be a focus on the species' long-term welfare.

c. Other Legal Objections

Objections to this proposal may come from two sources. First, to equate "survival" and "recovery" would be a significant position change for the FWS. Such a change, without an amendment to the ESA, arguably might constitute an intolerable use of the agency's discretion. The FWS has indeed historically regarded the requirements of §10 (incidental takes) and §7 (jeopardy) as virtually identical. This is seen most vividly in the FWS's Draft Handbook for Habitat Conservation Plans. ¹⁰⁰ In this publication, the FWS equates the §10 requirements with §7's. ¹⁰¹ But the FWS's distinction between "survival" and "recovery" is nonethe-

^{97.} Noss, supra note 16, at 900.

^{98.} See Id.

Conservation biology's conservative approach to the management of endangered species is based on a few empirically verifiable and intuitively reasonable principles. These principles are easily summarized. First, species well distributed across their historic range are less susceptible to extinction than species less well distributed. Second, large blocks of habitat are superior to small blocks of habitat. Third, blocks of habitat close to each other are better than greatly separated blocks. Fourth, interconnected blocks of habitat are superior to isolated blocks. And finally, blocks of habitat inaccessible to humans are better for species than accessible habitat. *Id.* at 900-903.

^{99.} See id.

^{100.} U.S. FISH AND WILDLIFE SERVICE, U.S. DEP'T OF INTERIOR, PRELIMINARY DRAFT HANDBOOK FOR HABITAT CONSERVATION PLANNING AND INCIDENTAL TAKE PERMIT PROCESSING 81-82 (1994).

^{101.} Id.

less contrived. The current FWS understanding of §10 has precluded achievement of the important ESA goal of species recovery. Conservation biology rejects such a distinction. Moreover, merging "survival" and "recovery" would not be arbitrary. The ESA is fundamentally about the needs of listed species. The needs of listed species are the province of biology. Updating the interpretation of "survival" and "recovery" to correspond with recent scientific developments is eminently reasonable.

Second, the objection may be raised that FWS expansion of HCP mitigation requirements would constitute an impermissible "taking" of property without compensation. This argument, however, is not supported by existing case law. Recent court decisions merely require proportionality in how HCPs are funded.¹⁰³

V.

Integrating Recovery Plan Implementation and HCP Formulation: The Washington County, Utah HCP for the Desert Tortoise

This Article has heretofore assumed that HCPs can be used to implement recovery plans. The efforts of Utah's Washington County to construct an HCP for the desert tortoise demonstrate the feasibility of this Article's proposal. The Washington County HCP is a truly regional HCP; the HCP covers nearly all desert tortoise habitat in Washington County. Moreover, the FWS has constructed a final recovery plan for the desert tortoise. As such, one may compare the recovery plan's management recommendations with the Washington County HCP's actual mitigation measures.

A. The Venerable Desert Tortoise

On April 2, 1990, the FWS published a final rule classifying the Mojave range of the desert tortoise as threatened.¹⁰⁴ The northeastern-most portion of that range includes Washington County,

^{102.} See supra note 56.

^{103.} See, e.g., Dolan v. City of Tigard, 512 U.S. 374, 400 (1994) (suggesting that proportionality in mitigation fees is required).

^{104.} Endangered and Threatened Wildlife and Plants; Determination of Threatened Status for the Mojave Population of the Desert Tortoise, 55 Fed. Reg. 12, 178 (1990) (to be codified at 50 C.F.R. pt. 70).

Utah.¹⁰⁵ In early 1994, the FWS issued a final recovery plan for, the Mojave range of the desert tortoise.¹⁰⁶ The recovery plan divides the Mojave Desert into recovery units.¹⁰⁷ To maximize the chances for the desert tortoise's long-term existence, the recovery plan anticipates reserves of at least 1,000 square miles.¹⁰⁸ This goal is based on available habitat and the tortoises' slow population growth rate.¹⁰⁹ The recovery unit of concern to Washington County and this Article is the Upper Virgin River. The Upper Virgin River recovery unit includes most of Washington County. Desert tortoises in the Upper Virgin River recovery unit are threatened primarily by the loss and fragmentation of habitat.¹¹⁰ This loss is due largely to human population growth in

Prior to 1990, environmental groups had unsuccessfully petitioned the FWS to list the desert tortoise. On September 14, 1984, the Environmental Defense Fund, Natural Resources Defense Council, and Defenders of Wildlife petitioned the FWS to list the desert tortoise throughout the Mojave range as endangered, arguing that desert tortoise populations had declined precipitously, partly as a result of habitat destruction. From 1985 through 1989, the FWS, under §4(b)(3)(C) of the ESA, annually issued "warranted but precluded" decisions. Endangered and Threatened Wildlife and Plants: Findings on Desert Tortoise Petition, 50 Fed. Reg. 49, 868 (1985) (to be codified at 50 C.F.R. pt. 17).

On May 31, 1989, the Environmental Defense Fund, Natural Resources Defense Council, and Defenders of Wildlife provided new information to the FWS that made further delay indefensible. This information included extensive documentation of a contagious respiratory disease afflicting large numbers of tortoises in the Mojave range. Because of the new information, the FWS, under emergency rule, listed the Mojave population as endangered. Emergency Determination of Endangered Status for the Mojave Population of the Desert Tortoise, 50 Fed. Reg. 32326 (1989).

105. U.S. FISH AND WILDLIFE SERVICE, U.S. DEP'T OF INTERIOR, DESERT TORTOISE (MOJAVE POPULATION) RECOVERY PLAN 20-21 (1994) [hereinafter *Recovery Plan*].

The desert tortoise is one of three species of the genus Gopherus residing in the United States. *Id.* at 15. The desert tortoise, or Gopherus agassizii, measures up to 38 centimeters in shell length and inhabits the Mojave, Colorado, and Sonoran deserts in Mexico and the southwestern United States. *Id.* at 27.

Desert tortoises have developed the capacity to survive (and even reproduce) in extremely dry conditions. Kenneth A. Nagy and Phillip A. Medica, *Physiological Ecology of Desert Tortoises in Southern Nevada*, 42 Herpetolgica 1, 73 (1986) (desert tortoises tolerate large imbalances in their water and energy budgets). Desert tortoises can live for as long as 100 years. David J. Germano, *Longevity and Agesize Relationships of Populations of Desert Tortoises*, 2 Copela 367 (1992).

Quite apart from any threat from humans, desert tortoise eggs and juveniles are extremely vulnerable, with preadult mortality averaging 98%. H.M. Wilbur and J.M. Morin, *Life History Evolution in Turtles*, in BIOLOGY OF REPTILIA: DEFENSE AND LIFE HISTORY 16(B), 387 (Carl Gans et al. eds., 1988).

106. Recovery Plan, supra note 105, at 6.

107. Id. at 20-22.

108. Id. at 33.

109. Id. at 27.

110. Id. at F7-F8.

Washington County and the resulting clearing of desert tortoise habitat.¹¹¹ Although limited by the county's topography, cattle grazing also threatens the Upper Virgin River population of the desert tortoise.¹¹²

The recovery plan recommends the creation of Desert Wildlife Management Areas (DWMAs) within all recovery units.¹¹³ The FWS believes that the DWMA for the Upper Virgin River recovery unit should encompass as much of the unit as possible.114 The FWS suggests that a number of activities be prohibited within all DWMAs, including all vehicle activity on undesignated roads, domestic sheep grazing, cattle grazing (except in experimental management zones), and dumping and littering. 115 The recovery plan also recommends that certain activities be allowed within all DWMAs. These include non-intrusive monitoring of desert tortoise populations, non-consumptive recreation, parking and camping in designated areas, and mining on a case-by-case basis.116 Other general guidelines for all DWMAs include habitat restoration activities, appropriate sign and fence construction, and the establishment of environmental education programs and facilities.117

In the recovery plan, the FWS concludes that the Upper Virgin River DWMA will have to be extensively managed if the desert tortoise population is to survive. The FWS seeks a target density of approximately 100 adult desert tortoises per square mile, resulting in an overall population of 7,000-9,000 adult desert tortoises. As a consequence, the recovery plan notes special management actions necessary for the recovery of the Upper Virgin River desert tortoise population. These include the acquisition of private inholdings or the development of conservation easements, the closing of livestock grazing allotments in the proposed DWMA, the construction and maintenance of desert tortoise barrier fencing around the DWMA, the establishment of a

^{111.} Id.

^{112.} Id.

^{113.} Id. at 46-47.

^{114.} Id. at F8.

^{115.} Id. at 56-59.

^{116.} Id. at 57

^{117.} Id. at 58-59

^{118.} Id. at F7.

^{119.} Id.

visitor center outside the DWMA, and the development of a drop-off site for unwanted captive tortoises.¹²⁰

B. Measuring the Washington County Habitat Conservation Plan Against the Desert Tortoise Recovery Plan

Trial and Error

In 1990 private landowners and local Washington County politicians decided that a county-wide HCP was worth constructing.¹²¹ Private landowners found themselves in possession of legally undevelopable desert tortoise habitat and wanted some way to recoup their investments. Local politicians, meanwhile, wanted a way to allow Washington County's development to continue.¹²² Later in the same year, both groups and other interested parties formed a steering committee to construct an HCP for the desert tortoise. The committee's membership was diverse, including local politicians, private landowners, environmental organizations, and state and federal officials.¹²³

In 1992, after thirty-nine often rancorous meetings, the committee submitted an HCP to the FWS for the agency's approval. 124 As originally drafted, this HCP ("WCHCP1") called for the establishment of a core desert tortoise reserve consisting of approximately 27,000 acres. WCHCP1 requested 12,000 acres of "take." 125

In March of 1993, the FWS told the Steering Committee that the FWS planned to reject the HCP. The FWS argued that WCHCP1 did not adequately mitigate the proposed take. More reserve acreage was needed. Additionally, Washington County had designated too much high-density tortoise habitat as "take." 126

After the FWS's rejection of WCHCP1, the Steering Committee wondered whether it could ever satisfy the FWS.¹²⁷ The committee decided to give HCP construction one more try. This time, however, the committee determined that it would give the

^{120.} Id.

^{121.} Wash. County Comm'n, Desert Tortoise Incidental Take Permit and Documents 1 (Wash. County, Utah 1995) [hereinafter *Incidental Take Permit*].

^{122.} Id. at 9.

^{123.} Id. at 5.

^{124.} Id. at 8.

^{125.} Id.

^{126.} Id. at 8-9.

^{127.} Id. at 9.

FWS an offer the agency could not rationally refuse. The Steering Committee decided to try, insofar as possible, to implement, in WCHCP2, the FWS's management recommendations for the Upper Virgin River DWMA.¹²⁸

WCHCP2 established a core protection zone, under joint federal and state management, of 38,787 acres.¹²⁹ In this area, land managers would remove all competing uses of the land, including cattle grazing.¹³⁰ Furthermore, Washington County agreed to fence the entire reserve using desert tortoise-proof materials.¹³¹ Washington County also agreed to enact countywide ordinances, establish per-acre development fees, create an environmental education program for the public, and establish a translocation program for dislocated tortoises.¹³² The County also agreed to establish and fund a monitoring program for the entire reserve.¹³³

In February of 1995, the Steering Committee submitted the revised HCP to the FWS. The FWS accepted this HCP in December 1995.¹³⁴ WCHCP2 is now in force, and gives Washington County a 20-year §10 incidental take permit.¹³⁵

2. Why the Washington County Experience is Valuable

The Washington County, Utah HCP for the desert tortoise is a striking example of how HCPs can further recovery purposes. Washington County agreed to take dramatic steps to further the desert tortoises' recovery, even though these steps may not have been required by current FWS policy. It is interesting to note how the committee saw its actions:

Although the total amount of desert tortoise habitat in the Upper Virgin River Recovery Unit will be reduced, the enhanced quality of the remaining habitat through removal of threats from development and other sources should more than compensate for this loss. When combined with the proposed mitigation, the proposed level of take should not adversely impact the Upper Virgin River Recovery Unit population of the desert tortoise.

^{128.} See id.

^{129.} Id. at 10.

^{130.} *Id*.

^{131.} *Id*.

^{132.} Id.

^{133.} *Id*.

^{134.} Issuance of Permit for Incidental Take of Threatened Species, 61 Fed. Reg. 26,529 (1996).

^{135.} INCIDENTAL TAKE PERMIT, supra note 121, at 2.

On the contrary, it is expected that implementation of this HCP should improve the quality of habitat and long-term survivability for the Mojave desert tortoise in this Recovery Unit.¹³⁶ The committee consciously regarded WCHCP2 as a significant recovery tool.

If the FWS officially regarded "survival" and "recovery" as synonymous, additional instances would present themselves in which regional HCPs could be used as a vehicle to implement recovery plans. A change in FWS policy is necessary to accomplish this outcome. The Washington County HCP is unusual. It is likely the rare exception in which § 10 permit applicants, of their own volition, include nearly all recovery plan recommendations in their HCP.

VI. Conclusion

Efforts under the Endangered Species Act to recover listed species have failed. Yet, species recovery is one of the central goals of the Act. In the current political climate, it is unlikely that the ESA will be strengthened. As such, the FWS should look for ways to increase the Act's effectiveness within the existing statutory framework.

The FWS has not fully explored the possibility of using regional HCPs as a mechanism for implementing recovery plan recommendations. It should. Recovery plan recommendations can be implemented and fully funded via regional HCPs.

Integrating recovery plans and HCPs may require the FWS to rethink its current understanding of "survival" and "recovery." The emerging science of conservation biology suggests that the terms get at the same basic idea: the long-term persistence of a species. The FWS should, utilizing this recognition, strengthen the mitigation requirements required of applicants seeking a regional incidental take permit.