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ARTICLES

ENDANGERED SPECIES CONSERVATION: WHAT SHOULD WE EXPECT OF FEDERAL AGENCIES?

Robert L. Fischman¹

I. INTRODUCTION

Twenty years after the landmark 1973 endangered species legislation, the public still does not have a clear sense of what it can expect from federal agencies. To be sure, certain duties are clearly prescribed. The citizen suit provision of the Endangered Species Act (ESA) has helped establish some minimum standards, especially for section 7 interagency consultation and for section 9 takings prohibition. Nonetheless, the affirmative duty to conserve species and the role federal agencies will play in monitoring, listing, or recovering species remains vague. Conventional legal touchstones, such as case law, regulations, and statutes, provide little direction for implementing these broad strategies pivotal for long-term preservation. The ESA details how it will prevent the worst harms but is sketchy on how it will promote its conservation goals.²

This article discusses the institutional behavior of federal agencies to better understand how they regard endangered species conservation. By looking at what agencies stand to gain or lose from strengthening endangered species programs, we can both hone our expectations for agency action and suggest ways to improve endangered species management.³ Existing management tools hold promise to leverage administrative

1. Associate Professor of Law, Indiana University, Bloomington, Indiana. I wish to thank Pam Eaton, Bob Keiter, and my colleagues from the faculty of the first three Environmental Law Institute-U.S. Forest Service threatened, endangered, and sensitive species management courses for sharing their ideas. An Indiana University School of Law Summer Faculty Fellowship provided support for this article.

2. The purpose of the ESA is to conserve both species and ecosystems. 16 U.S.C. § 1531(b) (1988). The ESA defines "conservation" as the use of all methods and procedures necessary to recover species from threatened or endangered status. 16 U.S.C. § 1532(3) (1988).

3. See generally RICHARD TOBIN, *THE EXPENDABLE FUTURE: U.S. POLITICS AND THE PROTECTION OF BIOLOGICAL DIVERSITY* (1990); STEVEN YAFFEE, *PROHIBITIVE POLICY: IMPLEMENTING THE FEDERAL ENDANGERED SPECIES ACT* (1982) (taking this approach to explain the U.S. Fish and Wildlife implementation of the ESA).

incentives and raise the chances for species survival.

This article does not focus on the agencies that are primarily responsible for administering the federal endangered species program: the U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS). Rather, this article focuses on the other agencies that must incorporate endangered species protection into missions that traditionally do not embrace such concern or that sometimes conflict with the goals of the ESA. Agencies must overcome a natural disinclination to take the important affirmative steps to meet the lofty goals of the Act. My purpose is to describe mechanisms through which regulatory and resource management agencies can advance endangered species protection.

The FWS receives less than \$10 million annually to recover threatened and endangered species. This compares discouragingly with the estimated price tag of \$4600 million to achieve the recovery goal.⁴ A disparity of that magnitude cries out for better approaches in addition to better funding. This article offers indirect ways to secure more of the needed resources.

Conservation of endangered species shares a vital characteristic with nature protection goals generally; interagency coordination is essential. If the FWS could recover species by acting alone, using solely its own authority, then implementing the goals of the ESA would be relatively easy. Alas, natural systems do not respect geographical boundaries, let alone more abstract divisions in administrative jurisdiction. Therefore, the tools discussed in this article that can create channels of cooperation between agencies should also suggest approaches to address larger conservation concerns such as protecting biological diversity and preventing pollution.⁵

II. THE ESA AND AGENCY BEHAVIOR: THE MOTIVATORS

Before discussing mechanisms to improve federal agency management of endangered species, we must first explore what motivates agency actions. Unfortunately, the simple statutory command of Congress to conserve endangered species and the ecosystems on which they depend⁶ is not enough to engender agency commitment. Even worse, the mere recognition that conservation requires coordination, though important, is

4. U.S. DEPARTMENT OF THE INTERIOR, OFFICE OF INSPECTOR GENERAL, REP. NO. 90-98, AUDIT REPORT: THE ENDANGERED SPECIES PROGRAM 11 (Sept. 1990).

5. See, e.g., Robert B. Keiter, *Taking Account of the Ecosystem On the Public Domain: Law & Ecology in the Greater Yellowstone Region*, 60 U. COLO. L. REV. 923 (1989) (discussing the complex, interjurisdictional problems in ecosystem management); Barry G. Rabe & Janet B. Zimmerman, *Cross-Media Environmental Integration in the Great Lakes Basin*, 22 ENVTL. L. 253 (1991) (discussing similar problems in pollution prevention and control).

6. 16 U.S.C. § 1531(b) (1988).

insufficient incentive to spur interagency cooperation. This section describes four important motivating factors that drive administrative behavior. Sometimes these incentives (or disincentives) drive agencies to protect endangered species. Often, though, they thwart the goals of the ESA. The challenge for conservationists is to find opportunities in these perverse incentives to promote preservation.

A. *Avoid Lawsuits*

Agencies avoid lawsuits because of cost, embarrassment, and risk of losing control of programs. Even if the direct costs of litigation are borne by the Department of Justice, lawsuits always require defendant staff to work with attorneys in preparing the government's case. This frustrates not only those involved but also the aims of the agency, which are diverted. Furthermore, litigation challenges the pride that administrators take in their programs. For land management agencies in particular, which subscribe to the model of wise stewardship, litigation can shake morale and public confidence. For a regulatory agency, like the Environmental Protection Agency (EPA), litigation can soil a white hat. On a more prosaic level, suits challenging an action may reflect poorly on the performance of the particular decision-maker involved. If an agency loses in court, it may forfeit discretion to conduct its programs as it deems fit. Injunctive relief can turn judges into administrators.⁷

The legal literature on the ESA focuses almost exclusively on tools that can prevent litigation. This makes perfect sense in light of the specific statutory duties imposed on agencies and enforceable through the citizen suit provision.⁸ In fact, compared with other resource management or environmental laws, the ESA imposes quite stringent substantive, enforceable requirements on agencies.⁹ However, as we shall see, an agency's aversion to lawsuits can be used to motivate the agency to go beyond the specific requirements of the ESA and its regulations.

Federal agencies have four fundamental legal duties that courts enforce through the citizen suit provision. I characterize them as the "four c's"¹⁰ The first three are the affirmative commands of section 7: conserve, consult, and confer. The fourth is the obligation to avoid in section 9: can't take.

7. See *infra* part II.B.

8. 16 U.S.C. § 1540(g) (1988).

9. Compare *TVA v. Hill*, 437 U.S. 153, 174 (1978) (explaining that an agency's duty under the ESA to ensure that its actions do not jeopardize endangered species admits of no exception) with *Robertson v. Methow Valley Citizens Council*, 109 S. Ct. 1835, 1846 (1989) (holding that NEPA does not mandate particular results).

10. For the geographically minded, the four seas (oceans) serve as a reminder of the basic principles of the ESA. Those more climatically inclined may use the mnemonic four seasons.

Section 7 of the ESA contains the three affirmative commands.¹¹ The conservation obligation is the most vague and the least fleshed-out by the courts.¹² Although this obligation to utilize agency authorities to recover (not just prevent jeopardy to)¹³ species holds great promise to force agencies to act cooperatively and proactively, it is not yet a powerful incentive. At the very least, the conservation obligation can be an independent basis for an agency decision, such as denying water flows to irrigators from a federal dam so that species requiring a certain instream flow will be protected.¹⁴ At most, it may be a basis for citizen challenge to agency inaction. (As we shall see, the consultation obligation applies only to agency actions.)

The duty to consult is the most contentious enforceable obligation. It requires that agencies consult with the FWS¹⁵ to ensure that actions are not likely to jeopardize the continued existence of a listed species or to result in the adverse modification of critical habitat.¹⁶ In addition to the substantive standard of no jeopardy or adverse modification, there is also a procedural component.¹⁷ Interagency regulations provide the framework for consultation and some agencies overlay additional procedures and assessments.¹⁸ When an action may affect a listed species, agencies generally must formally consult with the FWS. The result of the consultation is a FWS biological opinion that states whether the proposed action will jeopardize a listed species or adversely modify critical habitat. An agency that proceeds with an action subject to a jeopardy opinion¹⁹ is likely to be in violation of the substantive prong of the consultation duty. The

11. 16 U.S.C. § 1536 (1988).

12. 16 U.S.C. § 1536(a)(1) (1988). See Thomas France & Jack Tuholski, *Stay the Hand: New Directions for the Endangered Species Act*, 7 PUB. LAND L. REV. 1 (1986).

13. 16 U.S.C. § 1532(3) (1988) (defining conservation to mean the use of all methods and procedures to recover species so that they no longer need the protection of the ESA). See *Defenders of Wildlife v. Andrus*, 428 F. Supp. 167 (D.D.C. 1977) (invalidating federal duck hunting regulations because they did not incorporate all methods to recover listed species). But see *Conner v. Andrus*, 453 F. Supp. 1037 (W.D. Tex. 1978).

14. *Carson-Truckee Water Conservation Dist. v. Watt*, 741 F.2d 257, 262 (9th Cir. 1984), cert. denied, 470 U.S. 1083 (1985).

15. Depending on the species at issue, the NMFS may be the lead agency. However, of the 615 listed species that occur in the United States, fewer than three percent fall under the purview of the NMFS. For simplicity, I will continue to refer solely to the FWS even though most statements are applicable also to the NMFS. As more populations of Pacific salmon are listed, NMFS will play a greater role in administering the ESA.

16. 16 U.S.C. § 1536(a)(2) (1988).

17. In contrast, the conservation obligation consists solely of a substantive standard.

18. 50 C.F.R. Part 402 (1991). See, e.g., U.S.D.A. Forest Service Manual Chap. 2670; U.S. Department of the Interior Bureau of Land Management Manual Chapter 6840.

19. "Jeopardy opinion" is the common shorthand for a biological opinion that finds a proposed action will likely jeopardize the continued existence of a listed species or adversely modify critical habitat.

ESA citizen suit provision can be used to force formal consultation where an action may affect a listed species or critical habitat,²⁰ or to prevent irreversible commitment of resources to a project that would limit the ability of the FWS to recommend reasonable and prudent alternatives.²¹ The potential hurdle that formal consultation, possibly leading to a jeopardy opinion, presents for agencies that wish to carry out their programs-as-usual provides the incentive to use many of the coordination tools described below to obviate consultation.

When a species is proposed to be listed, it does not enjoy the substantive protection offered by the consultation duty. However, agencies conducting activities likely to jeopardize the continued existence of a proposed species must confer with the FWS for advisory recommendations.²² This preventive procedural requirement can be used strategically by agencies to avoid disruptions to programs if and when proposed species are finally listed.

Unlike the other duties, the prohibitive obligation ("can't take") applies to all persons, not just federal agencies. Next to the consultation duty, the taking prohibition is the greatest legal threat to agency action. The taking prohibition not only stops actions that directly harm or harass individuals, it also precludes actions that significantly modify or degrade habitat.²³ The U.S. Forest Service's loss of a citizen suit alleging that timber management violated section 9 by degrading red-cockaded woodpecker habitat illustrates the power of litigation and its link to the next motivator, discretion.²⁴

The first step for a federal agency seeking to protect species is to fulfill its four basic duties under the ESA. Many agencies begin and end there. However, a forward-looking agency that seeks to avoid slipping into a situation where simple compliance and declining species numbers means a

20. 50 C.F.R. § 402.14 (1991). Major construction activities require an agency to prepare a biological assessment to determine whether formal consultation is necessary. 16 U.S.C. § 1536(c) (1988). *See* Thomas v. Peterson, 753 F.2d 754 (9th Cir. 1985) (holding that the USFS violated the ESA by failing to prepare a biological assessment on a road and connected timber sales).

21. 16 U.S.C. § 1536(d) (1988). *See* North Borough v. Andrus, 486 F. Supp. 332 (D.D.C. 1979), *aff'd* 642 F.2d 589 (D.C. Cir. 1980) (discussing the test for when an agency action constitutes an illegal commitment of resources).

22. 16 U.S.C. § 1536(a)(4) (1988).

23. 16 U.S.C. § 1538 (prohibiting takes) and § 1532(19) (defining "take" to mean "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in such conduct"); 50 C.F.R. § 17.3 (1991) (defining harm to include "significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering"). *See* Palila v. Hawaii Dep't of Land and Natural Resources, 852 F.2d 1106 (9th Cir. 1988) (clarifying regulatory definition of harm).

24. Sierra Club v. Lyng, 694 F. Supp. 1260 (E.D. Tex. 1988), *aff'd in part, vacated in part*, Sierra Club v. Yeutter, 926 F.2d 429 (5th Cir. 1991). *See* Palila v. Hawaii Dep't of Land and Natural Resources, 852 F.2d 1106 (9th Cir. 1988).

confrontation with unpalatable choices will be motivated to employ some of the tools discussed in Part III.

B. *Enhance Discretion*

On June 17, 1986, a public land manager's worst nightmare came true for the Texas National Forests. U.S. District Court Judge Robert Parker assumed the role of "forestmaster" and ordered the Forest Service to implement a detailed timber management plan, in accordance with parameters he laid out, that would protect the endangered red-cockaded woodpecker.²⁵ Judge Parker found, and the appeals court later affirmed, that the Forest Service (USFS) violated both section 7 and section 9 of the ESA by jeopardizing the continued existence of the woodpecker and harming the bird through habitat modification. The section 7 violation was particularly surprising in light of the FWS approval of woodpecker management guidelines during the course of consultation. Although the appeals court ultimately found that Judge Parker's remedy went too far in specifying exactly what the management plan should contain, his injunction stood for three years. Even on remand, Judge Parker retained the power to disapprove the plan submitted by the USFS, albeit under a more deferential arbitrary and capricious standard.²⁶

Administrators and public land managers guard their discretion to stay in control of agency programs. A public land manager relies on a stewardship tradition that requires a "wise" decision-maker to have flexibility. A rulemaking agency relies on discretion to ease its burden to justify regulations and their implementation. Both pride and practicality motivate agencies to maintain and enhance discretion.²⁷

The prohibitive character of the ESA runs counter to this motivator; agencies regard the ESA as a threat to their discretion. Although this conventional view is generally true, Professor Yaffee notes that a clear, strict standard may be preferred by agencies that fear uncertainty in what is required of them.²⁸ Also, an externally imposed decision does not require as much justification as an internally generated decision that represents

25. *Id.* I borrow the term "forestmaster" from *Natural Resources Defense Council v. Hodel*, 624 F. Supp. 1045, 1062-63 (D. Nev. 1985), where Judge James Burns "resist[ed] the invitation to become western Nevada's rangemaster" despite some facts that suggested poor management or insensitivity to environmental concerns on the part of the BLM.

26. *Sierra Club v. Yeutter*, 926 F.2d 439-40 (5th Cir. 1991).

27. See, e.g., Joseph L. Sax & Robert B. Keiter, *Glacier National Park and Its Neighbors: A Study of Federal Interagency Relations*, 14 *ECOLOGY* L.Q. 207, 259 (1987) (describing the desires of park and forest managers to "maximize their own judgment, discretion, and inventiveness"). Legislation can be as much a threat as litigation. Agencies often adopt conservation programs to lessen pressure on Congress to mandate action. *Id.* at 259-60.

28. S. YAFFEE, *PROHIBITIVE POLICY* 149 (1982).

some balance of values. Agencies can use the ESA to justify decisions they may prefer for other reasons — perhaps for simplicity itself. For instance, the Army Corps of Engineers normally must engage in a difficult balancing of public interest and private gain to determine whether to issue a Clean Water Act Section 404 dredge or fill permit.²⁹ However, this balancing is unnecessary when the proposed project is likely to jeopardize an endangered species or adversely modify its critical habitat. In that case, the Army Corps simply denies the permit.³⁰

The red-cockaded woodpecker story should illustrate that even if agencies do regard the ESA as a hindrance to their closely-guarded flexibility, violation of the Act may present even more serious hurdles to accomplishing agency goals. A regulator or resource manager who wants to retain her discretion may employ some of the tools discussed in the next section to buffer her vulnerability to an ESA injunction. Instead of merely avoiding a take, an agency might want to participate actively in species recovery to allow for a wider margin of error.³¹

C. Increase Budget

Endangered species protection can cost agencies money, both in diverted expenditures (such as for mitigation projects), and in foregone revenues from activities (such as timber sales) that contribute to the administrative coffers. In today's austere fiscal climate, these ESA costs often require offsetting sacrifices in other agency programs. Why would a federal agency voluntarily put resources into species protection programs?

One reason is that the alternatives may be even more costly. The USFS has observed that the costs of conserving a species, once listed, are substantially greater than the costs of conserving a species with a population trending toward listing but not yet threatened or endangered.³² Simply stated, intensive care is more expensive than preventive medicine. Additionally, an agency might invest in species protection programs in order to build political support that might induce budget increases. A new program may be an investment in developing a new constituency for enhanced financial resources.³³ Budgeting for species protection might not be a zero sum game. Increased appropriations for wildlife and fisheries management in the USFS and wetlands protection in the Army Corps of Engineers did not come from line item sacrifices in other areas of these

29. 33 C.F.R. § 320.4 (1991).

30. *Riverside Irrigation Dist. v. Andrews*, 758 F.2d 508 (10th Cir. 1985).

31. See, e.g., Keiter, *supra* note 5, at 959-61 (describing cooperative actions taken by agencies participating in the Interagency Grizzly Bear Committee).

32. USDA FOREST SERVICE, TES TASK FORCE REPORT: BRIEFING SUMMARY 11 (April 1990).

33. See *infra* note 108 and accompanying text on marketing species protection programs.

agencies' budgets.

Any implementation tool for improving endangered species protection ought to be "funding friendly." It should either provide the implementing agency an opportunity to increase or avoid a cut in its budget. The degree to which this is necessary depends partly on how closely related the ESA tool is to the agency's perceived mission. The National Park Service will more likely implement a non-endangered, rare species protection program than an agency such as the U.S. Department of Energy whose mission is less congruent with ESA goals.³⁴

D Further Mission

That agencies are motivated to take action to further their missions is in some ways obvious. However, it can be difficult to predict whether an agency will regard endangered species protection as a constraint or an opportunity. For instance, land management agencies for many years viewed the presence of listed species on federal lands as a limitation on the agencies' missions. An emerging, more constructive attitude views these species as another resource to husband. Land managers can apply their professional skills and gain job satisfaction by conserving this resource to more effectively optimize values produced by the land. Like other, sometimes competing resources such as game, range, and timber, the endangered species resource can bring money to the unit or region and catalyze the formation of a new constituency to support management decisions.

Likewise, the EPA has long neglected endangered species conservation because it viewed its mission narrowly, along public health lines.³⁵ The 1990 Science Advisory Board report recommending that the EPA "attach as much importance to reducing ecological risk as it does to reducing human health risk"³⁶ is beginning to change the Agency's view of its mission.³⁷ Endangered species considerations will be incorporated into the media branches of the EPA as their mission broadens to include ecological issues.³⁸ Of course, different branches will evolve at different speeds.

34. See *infra* note 98 and accompanying text for the National Park Service's management policy on rare species.

35. The agency even neglected its basic, mandatory duties. See, e.g., *Defenders of Wildlife v. Administrator*, 882 F.2d 1294 (8th Cir. 1989) (holding that the failure to discontinue registration of strychnine resulted in a section 9 taking of the endangered black-footed ferret).

36. SCIENCE ADVISORY BOARD, *REDUCING RISK: SETTING PRIORITIES AND STRATEGIES FOR ENVIRONMENTAL PROTECTION 6* (1990) (Report of the Science Advisory Board Relative Risk Reduction Strategies Committee to William K. Reilly, Administrator).

37. See Philip Shabecoff, *Report Says E.P.A. Neglects Ecology*, N.Y. TIMES, Oct. 2, 1990. ("Mr. Reilly said his agency's budget request for the fiscal year 1992 would reflect the need for a broader variety of tools in addressing ecological problems.").

38. Recent litigation may prompt the water office to focus more attention on endangered species.

Agencies are not monolithic. The expansion of an agency's mission to include endangered species conservation may well depend on the emergence of a strong advocate for conservation. This is certainly true in the National Forest System of the USFS where the Wildlife and Fisheries staff has succeeded in raising the profile of endangered species and securing greater funding.³⁹ Entire agencies may shift the focus of their efforts when they see their current mission heading toward obsolescence. The Army Corps of Engineers and the Bureau of Reclamation have experienced some success in redirecting their missions toward conservation goals.

III. TOOLS TO IMPROVE ENDANGERED SPECIES CONSERVATION: APPEALING TO AGENCIES' INTERESTS

To improve endangered species conservation, agencies can use tools for coordination that help avoid lawsuits, enhance discretion, increase budgets, and further missions. Although not each of the tools discussed below satisfies all four of these criteria, each describes an under-utilized opportunity that builds on agency incentives. Not all tools will be applicable to all agencies. However, this section offers ideas that should be regarded as starting points for developing species protection programs that are less crisis driven and more conservation oriented. The most important trait is shared by all the tools. Each tool requires agencies to work with partners beyond their geographic and functional jurisdictions.

The order of the tools described reflects a rough progression from opportunities to participate in procedures detailed in the statute, to those mentioned or referenced in the statute, to finally, programs that are implied in the ESA. Endangered species conservation is best accomplished by preventing extinction emergencies rather than managing them. Some of the tools deal primarily with species that are candidates for listing but not yet protected by the Act. Because protection of candidate species will reduce the need for listing and allow concentration of resources on existing threatened and endangered species, I include these tools in this article. Habitat conservation plans, conservation agreements, and sensitive species programs that target rare species which exhibit trends toward listing do not just reduce the FWS workload. They also address the broader nature protection concerns that animate environmental law

An Alabama man recently filed a citizen suit alleging ESA section 7(a)(2) violations in EPA's approval, without FWS consultation, of Alabama NPDES permits, regulations, and water quality standards that may affect listed species. Complaint, *Mudd v. Reilly*, CV-91-P-1392-S (N.D. Ala. June 19, 1991). For suggestions on how the EPA can better incorporate ecological concerns into its programs, see Robert L. Fischman, *Biological Diversity and Environmental Protection: Authorities to Reduce Risk*, 22 ENVTL. L. 435 (1992).

39. See U.S.D.A. FOREST SERVICE, THREATENED, ENDANGERED, AND SENSITIVE SPECIES RECOVERY AND CONSERVATION: ACTION PLAN (April 1990).

A. *Support Listing and Critical Habitat Decisions*

Listing is the single most important decision the federal government makes under the Endangered Species Act. The Act does not offer any protection until a species is proposed to be placed on the threatened or endangered list. Even then, protection is procedural only, through the duty to confer, until the species is listed pursuant to a final rulemaking and becomes the beneficiary of all the affirmative prohibitive duties.

The Act sets out a number of factors that the FWS must apply to determine whether to list a species. They include deterioration of the species' habitat, overuse of the species, disease, predation, and inadequate existing regulatory mechanisms.⁴⁰ Other federal agencies, especially land management agencies, may have relevant information that contributes to the FWS's understanding of these factors. For instance, land managers who are out in the field ought to have the best information about habitat, use, and predation from the evidence they encounter daily.⁴¹ A regulatory agency would best understand regulatory mechanisms and their applicability to a particular species. The EPA, for instance, in regulating pollution or toxic substances, should work with the FWS on listing issues to determine which species are and are not protected by EPA standards and thresholds. With over 1200 biologists on staff, the USFS has a tremendous reservoir of scientific expertise that it can make available to the FWS. In 1987, when the FWS was still considering the petition to list the northern spotted owl, the USFS agreed to conduct an accelerated research program on its old growth forest habitat to help the FWS make its decision.⁴² The USFS currently is providing the FWS information that will help determine whether the Mexican spotted owl merits listing.⁴³ Because a FWS decision concerning listing must be based solely on the *best* scientific and commercial data available,⁴⁴ adequate information should not be sufficient if other federal agencies have better knowledge.

The FWS has come under criticism for its lack of progress in shielding organisms under the protective umbrella of the Act through listing. Species on the queue for proposed protection under the ESA are known as candidates. As of December, 1989, there were 601 candidate species for which substantial information existed to warrant immediate listing.⁴⁵ In

40. 16 U.S.C. § 1533(a)(1) (1988).

41. Moreover, the USFS and BLM are required to inventory biological resources on a regular basis. 16 U.S.C. § 1601(a) (1988); 43 U.S.C. § 1711(a) (1988).

42. Personal communication with Jay Gore, USFS (May 19, 1992).

43. *Id.*

44. 16 U.S.C. § 1533(b) (1988).

45. U.S. DEPARTMENT OF THE INTERIOR, REP. NO. 90-98, OFFICE OF INSPECTOR GENERAL, AUDIT REPORT: THE ENDANGERED SPECIES PROGRAM 8 (Sept. 1990).

addition, of the 3033 species suspected of being threatened or endangered but for which insufficient information exists for listing, the FWS estimated that around half will eventually qualify for protection.⁴⁶ Although some progress might be made through the en masse, multi-species listing technique recommended by the Interior Department's Inspector General, the FWS budget remains inadequate for clearing the listing backlog.⁴⁷ Putting information generated by other federal agencies to work, instead of developing all of the information itself, would help the FWS move more quickly to list all species that warrant ESA protection.

Critical habitat is important solely with regard to the section 7 duties of federal agencies. Federal agencies may not destroy or adversely modify critical habitat.⁴⁸ Critical habitat directly links the affirmative federal duties with the Act's purpose of protecting ecosystems on which species depend.⁴⁹ Unlike species listing, critical habitat designation is based on both scientific and economic considerations. Therefore, federal agencies with little expertise about the biology of the listed organisms may nonetheless hold expertise for critical habitat determinations. A land management agency involved in conducting timber sales or mineral leases will have economic information relevant to critical habitat designation. Similarly, a regulatory agency may collect a host of relevant economic data on which it bases standards and thresholds.

As a result of the litigation over the northern spotted owl, the FWS will be under more pressure to designate critical habitat. Since 1978, the FWS has been required to designate critical habitat unless it is not prudent. Designation is not prudent only in the limited situation where identification of habitat will increase the threat of taking or otherwise not be beneficial to the species.⁵⁰ However, since 1982, the FWS has been able to delay designation for up to a year by finding that critical habitat is not determinable.⁵¹ In *Northern Spotted Owl v. Lujan*,⁵² the same district court that found the FWS decision not to list the owl in 1987 to be arbitrary and capricious⁵³ ordered the FWS to designate critical habitat. The FWS had followed its common practice of merely stating in its proposed and final listing notice that critical habitat was not determinable. The court held that the agency is not entitled to an automatic extension merely by invoking indeterminacy. The FWS can get an extension on designation

46. *Id.*

47. *Id.* at 7.

48. 16 U.S.C. § 1536(a)(2) (1988).

49. 16 U.S.C. § 1531(b) (1988).

50. 50 C.F.R. § 424.12(a)(1) (1991).

51. 16 U.S.C. § 1533(b)(6)(C) (1988).

52. 753 F. Supp. 621 (D. Or. 1991).

53. *Northern Spotted Owl v. Hodel*, 716 F. Supp. 479 (D. Or. 1988).

only by explaining why it cannot fulfill the Act's preference for designating critical habitat concurrently with listing. The court suggested that an adequate explanation would show why critical habitat is not determinable, what effort was made to determine the habitat, and what additional information is needed. Given its scarce resources, the FWS will have to rely more on the support that other agencies can provide.

But, what incentives will other agencies have to aid the FWS in its mission? Since the enforceable duties pertain only to listed species and critical habitat, an agency that assists in listing and designation may be setting itself up for a future citizen suit. On the other hand, agency information will not always support listing. Better information sometimes indicates that a threat is not as serious as once believed or critical habitat should be smaller. For example, the USFS has sponsored a number of projects to study old growth forest habitat in the Nicolet National Forest. A USFS/Audubon Society cooperative monitoring effort found that many bird species thought to be dependent on old growth forest habitat, such as the ovenbird and the hermit thrush,⁵⁴ are more common than initially believed.⁵⁵

Moreover, the presence of a listed species on a public land unit may be a source of more budget dollars. Congress does not track money spent on general conservation measures as closely as it does expenditures for threatened and endangered species.⁵⁶ Because ESA recovery has a relatively high priority in the non-game federal wildlife budget, a listed species can be a beacon to attract additional resources from Congress or the FWS.⁵⁷ For instance, since the FWS proposed listing the northern spotted owl in 1989, the USFS's budget for managing spotted owls more than tripled, from \$2 million in fiscal year 1989 to over \$6 million in fiscal year 1992.⁵⁸ For the past two fiscal years, Congress has earmarked over \$3 million explicitly for USFS spotted owl surveys.⁵⁹

54. *Seiurus aurocapillus* and *Catharus guttatus*.

55. Robert W. Howe et al., MONITORING BIRDS IN A REGIONAL LANDSCAPE: LESSONS FROM THE NICOLET NATIONAL FOREST BIRD SURVEY, in *Proceedings of the Workshop on Avian Monitoring Techniques* (Nov. 6-7, 1991) (U.S. Forest Service/U.S. Fish and Wildlife Service, Patuxent, Maryland).

56. 16 U.S.C. § 1544 (1988). See, e.g., U.S. FISH AND WILDLIFE SERVICE, *FEDERAL AND STATE ENDANGERED SPECIES EXPENDITURES: FISCAL YEAR* (1991).

57. See *infra* notes 68-69 and accompanying text for a discussion of FWS contributions to recovery planning. A unit manager, such as a district ranger, can use the presence of a listed species to attract *intra*-agency dollars that are available only for recovery purposes. In the Forest Service, the threatened, endangered, and sensitive species budget is one of the few growth areas in an agency whose overall appropriation from Congress has been declining.

58. Personal communication with Jay Gore, USFS (May 19, 1992).

59. *Id.* Congress also earmarked funds for the USFS to provide information that would assist the FWS in making its listing decision for the Mexican spotted owl. *Id.*

Finally, resource management agencies should not be ashamed if many listed species occur on their lands. Frequently, this is not so much a reflection of poor management or planning on the agency's part. Instead, it results from development on and conversion of surrounding habitat that limits occurrence of the species to the land that retains its biological integrity⁶⁰

B. *Participate in Recovery Planning*

Although recent litigation has focused on listing species, preventing jeopardy, and stopping takings, the goal of the ESA is recovery. The FWS must prepare a recovery plan for each listed species unless the effort will be counterproductive.⁶¹ Recovery plans describe recovery goals, site-specific management tasks, criteria for monitoring the success of the plan, responsible parties, and estimates of the time and costs of recovery measures.⁶² The Act does not set a timetable for development of recovery plans, but the 1988 amendments require the FWS to report to Congress on its recovery efforts every two years.⁶³ As of July 1, 1991, the FWS had approved recovery plans for 59% of all listed species that occur in the United States. Of course, the challenge of developing and approving recovery plans pales in comparison to the cost of implementing those plans.⁶⁴

Federal agencies and states⁶⁵ have long cooperated with the FWS in recovery planning. Of all the opportunities for coordination described in this article, federal agencies have the greatest experience with recovery plans. Recovery plans are developed and implemented by interdisciplinary teams that often include representatives from federal agencies, states, Indian tribes, universities, conservation organizations, and other inter-

60. See, e.g., *Sierra Club v. Lyng*, 694 F. Supp. 1260, 1265 (E.D. Tex. 1988), *aff'd in part, vacated in part*, *Sierra Club v. Yeutter*, 926 F.2d 429 (5th Cir. 1991) (observing that red-cockaded woodpeckers are dependent on USFS habitat because suitable trees on private land have been destroyed).

61. 16 U.S.C. § 1533(f)(1) (1988).

62. 16 U.S.C. § 1533(f)(1) (1988). U.S. DEPARTMENT OF THE INTERIOR, FISH AND WILDLIFE SERVICE, POLICY AND GUIDELINES FOR PLANNING AND COORDINATING RECOVERY OF ENDANGERED AND THREATENED SPECIES 2-4 (May 1990).

63. 16 U.S.C. § 1533(f)(3) (1988). Since 1988, the FWS has been required to report annually to Congress all reasonably identifiable conservation expenditures on a species by species basis. 16 U.S.C. § 1544 (1988).

64. See U.S. DEPARTMENT OF THE INTERIOR, OFFICE OF THE INSPECTOR GENERAL, *supra* note 4.

65. Although this article is limited to federal agencies, states cooperate extensively with the FWS on recovery plans. See U.S. GENERAL ACCOUNTING OFFICE, ENDANGERED SPECIES: MANAGEMENT IMPROVEMENTS COULD ENHANCE RECOVERY PROGRAM 38-86 (GAO/RCED-89-5, Dec. 1988) (case studies listing the roles played by state agencies in recovery plan implementation). The ESA offers recovery money to states that enter into agreements with the FWS. 16 U.S.C. § 1535 (1988).

ested parties.⁶⁶ The recovery team structure is flexible, allowing for working groups, observers, or consultants.⁶⁷ Although the FWS Regional Director is responsible for the activities of the recovery team, non-FWS participants can contribute a majority of the resources for recovery. For example, as of 1987, the Bureau of Land Management (BLM) footed 60 % of the bill for recovery of the threatened New Mexico ridgenose rattlesnake.⁶⁸ Similarly, the recovery effort for the endangered Gila topminnow was split 34 % Forest Service, 32 % state, 26 % FWS, and 7 % BLM.⁶⁹ The FWS, though, usually contributes a substantial share, if not the majority, of recovery funding. This can be an important source of resource management money for a federal public land agency.

Whether a recovery plan, once approved by the FWS, binds the FWS or other federal agencies to engage in the management measures described is an open legal question. Although the Act uses the mandatory "shall" in requiring development and implementation of the plans, the language is directed to the FWS, not other federal agencies.⁷⁰ The only published judicial opinion interpreting this provision found that the National Park Service (NPS) could stay the implementation of a recovery plan for the grizzly bear pending the results of new environmental analyses relating to the impacts of the Fishing Bridge Campground.⁷¹ The court would "not attempt to second guess the Secretary's motives for not following the recovery plan."⁷² Currently, agencies do not prepare environmental assessments or impact statements for recovery plans. Instead, agencies fulfill NEPA requirements as management measures are implemented. If recovery plans are binding on agencies, then the plans will have to go through the NEPA process much like USFS land and resource management plans or NPS general management plans.

Regardless of whether recovery plans are binding, federal agencies ought to recognize that their interests lie in participating in plan development. If the plans are binding, then the agencies need to ensure that their

66. U.S. DEPARTMENT OF THE INTERIOR, FISH AND WILDLIFE SERVICE, POLICY AND GUIDELINES FOR PLANNING AND COORDINATING RECOVERY OF ENDANGERED AND THREATENED SPECIES II-2 (May 1990).

67. *Id.*

68. U.S. GENERAL ACCOUNTING OFFICE, ENDANGERED SPECIES: MANAGEMENT IMPROVEMENTS COULD ENHANCE RECOVERY PROGRAM 72 (GAO/RCED-89-5, Dec. 1988). The FWS contributed 30% of recovery funds. *Id.*

69. *Id.* at 80.

70. 16 U.S.C. § 1533(f) (1988).

71. Nat'l Wildlife Fed'n v. Nat'l Park Serv., 669 F. Supp. 384, 388-89 (D. Wyo. 1987).

72. *Id.* at 389. *But see* Harry R. Bader, *Wolf Conservation: The Importance of Following Endangered Species Recovery Plans*, 13 HARV ENVTL. L. REV. 517, 529-30 (arguing that an action specifically mandated in the implementation schedule of a recovery plan, in contrast to the NPS decision to leave Fishing Bridge open, is enforceable by the courts).

discretion is explicitly preserved in the plan or that it is exercised in designing the management measures for the plan. If the plans are not binding, agencies should still find participation on recovery teams worthwhile to shape conservation activities that will occur on their geographic or functional turf. The broad section 7(a)(1) conservation duty allows the federal agencies to take actions that reach beyond their normal mandate.⁷³ Agencies that manage habitat for listed species may find the FWS reaching into their bailiwicks if they do not participate in recovery planning to protect their prerogatives. Finally, joining in a recovery effort might offer some protection against citizen suits.⁷⁴ Activities that might otherwise be construed as requiring formal consultation or effecting a taking will likely be viewed as more benign by a court if the agency is following a FWS-approved recovery plan.

C. *Instigate Habitat Conservation Plans*

The 1982 amendments to the ESA carved out an exception to the taking prohibition as applied to privately owned habitat. A person wishing to develop property may apply for an incidental take permit to excuse potential section 9 liability. To secure a permit, an applicant must prepare a habitat conservation plan (HCP) that specifies: the impacts of the taking; the measures to monitor, minimize, and mitigate such impacts; the funding available to implement those measures; and the alternatives to the action considered and the reasons why they were not selected.⁷⁵ The FWS may issue an incidental take permit if it finds that the taking will be incidental to the purpose of the project; the applicant will, to the maximum extent practicable, minimize and mitigate the impacts of such taking; adequate funding will be provided; and the taking will not appreciably reduce the likelihood of the recovery of the species.⁷⁶ The FWS may require additional measures in HCPs or as permit conditions.⁷⁷ Thus far, six HCPs have been approved by FWS permits.⁷⁸

Although HCPs are associated with private projects, not federal agency actions, they are significant because they represent an opportunity for ecosystem-wide planning to conserve species. Federal agencies should

73. 16 U.S.C. § 1536(a)(1) (1988). See discussion of the conservation duty *supra* notes 12-14 and accompanying text.

74. Keiter, *supra* note 5 at 960-61 (suggesting that agency participation in the Interagency Grizzly Bear Committee, charged with recovery planning, has shielded resource management decisions from judicial interference).

75. 16 U.S.C. § 1539(a)(2)(A) (1988); 50 C.F.R. § 17.32(b)(1)(C) (1991).

76. 16 U.S.C. § 1539(a)(2)(B) (1988).

77. 16 U.S.C. § 1539(A)(2) (1988).

78. MICHAEL BEAN ET AL., RECONCILING CONFLICTS UNDER THE ENDANGERED SPECIES ACT: THE HABITAT CONSERVATION PLANNING EXPERIENCE 41 (World Wildlife Fund ed., 1991).

take advantage of this opportunity wherever species either depend on habitat that is not entirely federally controlled or are threatened by activities (such as real estate development) that are not federally regulated. Robert Thornton has observed that section 7 consultations can "jump start" an "HCP by quickly establishing a foundation for the regional conservation program."⁷⁹ The "jump start" can occur when an activity to be covered in an HCP requires federal approval. A dredge or fill permit, a right-of-way, or an federal oil lease may spur federal negotiations over mitigation measures that will form the nucleus for HCP negotiation.⁸⁰

Also, because federal lands often contain the most intact areas of habitat, federal agency involvement can provide a core protected area around which an HCP can prescribe restricted development.⁸¹ In this way, the ESA provisions can be used to achieve the sort of ecosystem protection envisioned by the biosphere reserve program and world conservation strategy to protect overall biological diversity.⁸² A regional plan would also highlight the core public land area as having been well managed to keep habitat or species intact. This establishes political capital that might prove useful to the managing agency in the future. HCPs usually contain fee collection provisions so that the developers that cause incidental takes pay for their mitigation. The fees are a source of funding that federal agencies involved in the HCP might be able to tap into for conservation purposes.

Federal agencies may also want to get directly involved with HCPs to devise more comprehensive, proactive conservation plans than result from formal consultation. Although section 7 is limited to proposed and listed species, the HCP is designed to address land use conflicts over a region for both listed and unlisted species.⁸³ Furthermore, because cumulative

79. Robert D. Thornton, *Searching for Consensus and Predictability: Habitat Conservation Planning Under the Endangered Species Act of 1973*, 21 ENVTL. L. 605, 649-50 (1991) (describing consultations that furthered habitat conservation planning activities).

80. HCP approval through the issuance of an incidental take permit itself requires section 7 consultation. 16 U.S.C. § 1539(a)(2)(B)(iv) (1988). See also H.R. Conf. Rep. No. 835, 97th Cong., 2d Sess. 29-30, reprinted in 1982 U.S.C.A.N. 2860, 2870-71; 50 Fed. Reg. 59, 683 (1985), (cited in DANIEL ROHLF, *THE ENDANGERED SPECIES ACT: A GUIDE TO ITS PROTECTIONS AND IMPLEMENTATION* 84, n.113 (Stanford Environmental Law Society ed., 1989)).

81. See Thornton, *supra* note 79, at 649-50, 653 (giving examples of this federal contribution to HCPs in Riverside County, California; Kern County, California; and Austin, Texas).

82. UNESCO, *BACKGROUND: THE MAB PROGRAMME* 10 (undated) (describing the biosphere reserve program); Kenton Miller, *Biosphere Reserves in Concept and Practice*, in *TOWARDS THE BIOSPHERE RESERVE: EXPLORING RELATIONSHIPS BETWEEN PARKS AND ADJACENT LANDS* 7 (Robert Scafe & Clifford Martinka eds., 1982); INTERNATIONAL UNION FOR CONSERVATION OF NATURE AND NATURAL RESOURCES, *WORLD CONSERVATION STRATEGY* (1980).

83. Rohlif states:

Lawmakers cited two reasons why conservation plans should also cover unlisted species. First, if a plan considers unlisted as well as listed species, subsequent listings of species in the area would require few or no changes to the plan, enabling the activity in question to continue without interruption. In addition, plans not limited to listed species would more

impacts of future federal actions on protected species are not considered in section 7 consultation,⁸⁴ an HCP may better help agencies and interested parties to identify the extent to which development activities can occur. If parties rely solely on section 7, there is no indication from the FWS just how far future activities can go. No one can be certain when the next incremental federal action will result in jeopardy.⁸⁵ If the parties develop an HCP approved by the FWS, they will have an estimate of the extent to which they can carry their actions without jeopardy. For federal actions that involve permitting or licensing a private activity, HCPs offer a comprehensive, negotiated alternative to case-by-case approval or denial. In this way the HCP might be used as a tool to dissipate political heat from a controversial development.⁸⁶

D Manage with Conservation Agreements

The FWS often protects important habitat for listed species on private land through voluntary agreements with landowners.⁸⁷ However, voluntary agreements in the form of memoranda of understanding may also be used to protect habitat managed by federal agencies. These memoranda of

closely conform to the broad conservation policies Congress sought to further by enacting the ESA.

Rohlf, *supra* note 80 at 82-83 (citing H.R. Conf. Rep. No. 835, 97th Cong., 2d Sess. 30, *reprinted in* 1982 U.S.C.A.N. 2860, 2871).

84. 50 C.F.R. § 402.02 (1991) defines the "cumulative effects" considered in a biological opinion to include future state or private activities but excludes future federal activities. *Cf.* 40 C.F.R. § 1508.7 (1990) (defining "cumulative impact" for NEPA analysis to include future actions regardless of what agency or person undertakes it). For a comparison of the two different ways of considering cumulative issues, see U.S. Department of the Interior, Office of the Solicitor, Memorandum from Associate Solicitor, Conservation and Wildlife, to the Director of the Fish and Wildlife Service (Aug. 27, 1981).

Cumulative effects must be distinguished from indirect effects "caused by the proposed action and are later in time, but still reasonably certain to occur." 50 C.F.R. § 402.02 (1991). *See* Bob Marshall Alliance v. Hodel, 852 F.2d 1223 (9th Cir. 1988), *cert. denied sub nom*; Kohlman v. Alliance, 109 S.Ct. 1340 (1989) (holding that the FWS must analyze post-leasing activities when preparing a biological opinion on an oil/gas lease); Thomas v. Peterson, 753 F.2d 754 (9th Cir. 1985) (holding that the Forest Service must evaluate impacts of both the road planned and future timber sales that will be facilitated by the road).

85. A recovery plan, however, can aid in planning. For instance, the Interagency Grizzly Bear Committee developed a cumulative effects model to evaluate project impacts. Keiter, *supra* note 5 at 959; Gallatin National Forest, U.S. Forest Service, Cumulative Effects Analysis Process for the Yellowstone Ecosystem, in Ski Yellowstone Biological Assessment, App. I (June 1987).

86. Sometimes developers prefer the faster section 7 mechanism. Bean, *et al.*, *supra* note 78, at 47-48. For example, Waste Management, Inc. dealt with endangered species impacts of its Kirby Canyon landfill by persuading the Federal Highway Administration to initiate consultation for a highway interchange providing access to the landfill. *Id.* at 48. *See also* Thorton, *supra* note 79, at 619 (describing this Federal Highway Administration consultation).

87. Examples include agreements to protect nest sites for bald eagles, areas around release sites for peregrine falcons, and breeding/hibernation caves for Indiana bats.

understanding are commonly known as conservation agreements and are particularly valuable for guiding management of candidate species not otherwise subject to informal consultation.⁸⁸

For instance, a 1983 conservation agreement between the BLM and the FWS established a program to protect the candidate desert playa plant species, Davis peppergrass,⁸⁹ found only in southwestern Idaho and southeastern Oregon. Davis peppergrass is vulnerable to destruction through disturbance from off-road vehicle use, cattle trampling, and earthen dam-building.⁹⁰ In the conservation agreement, the BLM committed to outline management measures to reduce threats to the species, and to monitor the plant's occurrences. Davis peppergrass is in the candidate species category for organisms that may possibly be appropriate for listing but for which inadequate information exists (category two). Therefore, the BLM's ongoing monitoring provides up-to-date information that is particularly important to the FWS.

In a notice explaining its decision not to list the Jemez Mountains salamander,⁹¹ the FWS stated that a conservation agreement it signed with the USFS and a New Mexico state agency removed the threat to the salamander habitat.⁹² In the agreement, the USFS promised to survey timber stands for the salamander and prohibit logging where salamanders are found. In three years, the Santa Fe National Forest promised to incorporate into its master forest plan a salamander management plan designed to ensure the long-term viability of all populations of the species. Here, the USFS eliminated the need for listing and preserved some management flexibility

A land manager loses discretion when an occurring candidate species is listed under the ESA. Subsequent to listing, the manager no longer can make significant decisions without involving the FWS. Even more important, activities formerly permitted or planned may be blocked by substantive protections for the species. Therefore, it is sensible that a land manager would plan to manage species that indicate downward population trends to prevent listing. A conservation agreement guards against performing discretionary actions that would lead to listing and subsequent loss of control.

88. Regional foresters are encouraged to enter into conservation agreements with the FWS to "take the initiative in removing any threats to [candidate species] so that they no longer qualify for formal listing." U.S. Forest Service Manual § 2672.12 (Oct. 1986).

89. *Lepidium davisi*.

90. Memorandum of Understanding, *Lepidium davisi* (BLM/FWS 1983); DeBolt & Doremus, 1988 Inventory and Status Report for *Lepidium davisi* (BLM Boise District, March 1989).

91. *Plethodon neomexicanus*.

92. 57 Fed. Reg. 11,459 to 11,460 (1992).

E. *Implement Sensitive Species Programs*

Agencies, on their own, may devise programs to protect species that are not on the threatened or endangered list. Most agencies have guidelines or policies in addition to more formal regulations that channel their discretion. Any of these methods may be used to establish a list of species of special concern and a procedure for giving their conservation needs consideration.

The model for this type of initiative is the USFS sensitive species program. One reason why the USFS has the best and most formal model is that its regulations require it to manage habitat to "maintain viable populations of existing native and desired non-native" vertebrates.⁹³ This regulation partially implements Congress' mandate that the USFS "provide for diversity of plant and animal communities based on the suitability and capability" of its land.⁹⁴ The requirement to maintain viable populations goes beyond what is minimally necessary to comply with the ESA.⁹⁵

Other land management and regulatory agencies have incentives similar to the USFS's program to implement a sensitive species program. Some agencies even have similar statutory mandates. For instance, the Federal Water Pollution Control Act seeks to "restore and maintain the biological integrity of the Nation's waters."⁹⁶ It commands the EPA to develop water quality criteria that reflect "the effects of pollutants on biological community diversity."⁹⁷ The National Park Service Management Policy commits the agency to "identify all state and locally listed threatened, endangered, rare, declining, sensitive, or candidate species that are native to and present in the parks, and their critical habitats."⁹⁸ Similarly, BLM policy prescribes ecosystem management "to ensure self sustaining populations and a natural abundance and diversity of wildlife."⁹⁹ Two specific goals of BLM policy are to manage habitat to maintain populations at a level that will avoid the need to list species and to conserve rare, vulnerable, and representative habitats, plant communities, and

93. 36 C.F.R. § 219.19 (1991).

94. 16 U.S.C. § 1604(g)(3)(B) (1988). See 36 C.F.R. §§ 219.26 and 219.27(g) for other regulations implementing the National Forest Management Act's diversity mandate.

95. *Seattle Audubon Soc'y v. Evans*, 952 F.2d 297 (9th Cir. 1991) (holding that listing under the ESA does not reduce the planning obligations of the Forest Service under the National Forest Management Act and upholding an injunction on timber sales until the Forest Service implements adequate standards and guidelines to maintain the viability of the northern spotted owl).

96. 33 U.S.C. § 1251(a)(1) (1988). See Fischman, *supra* note 38, at 443-58, 491-99, for a discussion of EPA programs to implement this mandate.

97. 33 U.S.C. § 1314(a)(1) (1988).

98. U.S. DEPARTMENT OF THE INTERIOR, NATIONAL PARK SERVICE, MANAGEMENT POLICY, ch. 4, 11 (1988).

99. Bureau of Land Management Manual § 6500.06.

ecosystems.¹⁰⁰

Even though the USFS has the most elaborate program to protect non-listed species, it is set forth only in the USFS Manual. Connoisseurs of administrative law will recognize the multi-volume Manual as an odd, hybrid document containing procedures for staff that is part rule and part informal guidance. The Manual section relevant to sensitive species management has not gone through notice and comment rulemaking. Current revisions to this Manual section are nearing a close. As of November 1992, the USFS has not yet decided whether to propose the new Manual section through a rulemaking under the Administrative Procedure Act.¹⁰¹ The USFS would be well served to publish the new section as a proposed rule in the Federal Register and invite public comment. Besides building a stronger public constituency to support the program, it would give sensitive species procedures, such as biological evaluations, higher standing in the USFS decision-making process. It would also add stability to the program as subsequent alterations would need to be promulgated in a similar fashion. Courts will enforce manual provisions regardless of whether they are promulgated through informal rulemaking if there is a sufficient nexus between the provisions and a particular statutory mandate "to conclude that the grant of authority contemplates the regulations issued."¹⁰² In any event, a sensitive species program manual revision will likely generate the requisite public interest or controversy to trigger a notice and comment requirement pursuant to existing USFS regulations.¹⁰³

The goal of the USFS sensitive species program is to meet the agency's viability mandate, better fulfill the purposes of the National Environmen-

100. U.S. DEPT. OF THE INTERIOR BUREAU OF LAND MANAGEMENT, FISH AND WILDLIFE 2000: A PLAN FOR THE FUTURE 20-21 (undated).

101. 5 U.S.C. § 553 (1988).

102. *Lumber, Production and Industrial Workers Log Scalpers Local 2058 v. United States*, 580 F. Supp. 279 (D. Or. 1984) (quoting *Chrysler Corp. v. Brown*, 441 U.S. 281, 308-09 (1979) and stating that a Manual provision dealing with independent third-party scaling organizations is not binding on the agency). *Accord Oregon Natural Resources Council v. Devlin*, 776 F. Supp. 1440, 1447-48 (D. Or. 1991). *Cf. Squaw Transit Co. v. United States*, 574 F.2d 492, 496 (10th Cir. 1978) (requiring an "agency to adhere to its own pronouncements, or explain its departure from them"), *cited in Citizens for Environmental Quality v. United States*, 731 F. Supp. 970, 986 (D. Colo. 1989) (remanding a forest plan for failing to comply with a previous USDA administrative appeal decision); *Morton v. Ruiz*, 415 U.S. 199, 235 (1974) (requiring the Bureau of Indian Affairs to follow the guidelines set out in its Manual for determining which directives to publish in the Federal Register); *Service v. Dulles*, 354 U.S. 363, 388 (1957) (requiring the Secretary of State to follow guidelines set out in the department's Manual of Regulations and Procedures).

103. 36 C.F.R. 216.6 (1991). At minimum, the Administrative Procedure Act requires that the agency publish its manual provisions in the Federal Register "for the guidance of the public." 5 U.S.C. § 552 (1988).

tal Policy Act (NEPA),¹⁰⁴ assist states in achieving their goals for conservation of endemic species, and establish objectives for federal candidate species.¹⁰⁵ A sensitive species is a plant or animal for which population viability is a concern due to significant actual or predicted downward trends in population, density, or habitat capability.¹⁰⁶ Sensitive species often are candidates for federal listing or are identified by a state as deserving local protection. Like the ESA itself, the sensitive species program protects only those taxa that are included on a particular list. Sensitive species lists are collected by all but one of the nine USFS regions. Lists contain from 857 entries to eight.¹⁰⁷

The USFS implements sensitive species conservation through the preparation of biological evaluations which examine how proposed actions may affect sensitive species. Unlike biological assessments, which are used to determine whether an action may adversely affect a species, the biological evaluation determines whether the action is likely to result in a trend toward federal listing. Rather than impose additional substantive restrictions on the USFS, the sensitive species program helps the agency make more informed decisions about whether it is complying with its viability requirement.

As with the conservation agreement, a sensitive species program allows voluntary, minor modifications of standard management procedures to forestall listing and the more severe restrictions listing imposes on discretion. Another reason that resource managers in particular might be attracted to a sensitive species program is that it allows more creative conservation activities than a threatened or endangered species program. Because the stakes for any management action are higher for a listed species on the brink of extinction, biologists must be extremely risk averse with respect to recovery programs or mitigation tools. Sensitive species, on the other hand, are more resilient. Therefore, managers can experiment with tools to mitigate impacts of projects or engage in ecological trials that involve greater risks. Moreover, evaluations of the impacts of various activities on sensitive species highlights priority areas for conservation efforts and research.

104. 42 U.S.C. §§ 4321-4370(a) (1998).

105. Forest Service Manual § 2670.32 (Oct. 1986).

106. Forest Service Manual § 2670.5(19) (Oct. 1986).

107. Topik, *Number of Sensitive Species Designated by each Region, USDA Forest Service* (presented at Threatened, Endangered, and Sensitive Species Management: Traversing the Legal and Administrative Terrain, USFS Wildlife and Fisheries Continuing Education Course) (May 6-10, 1991). The variation in the numbers of sensitive species listed may reflect not just bioregional variations; it may also reflect varying degrees of regional commitment to the concept. The Rocky Mountain Region, for instance, has no sensitive species list because the region is not convinced of the benefits of the program. Gary Cargill, Address on New Perspectives on National Forest Management, University of Wyoming, Laramie (Jan. 21, 1992).

Finally, for an agency with a reputation for environmental destruction, a sensitive species program may be good politics. It can demonstrate that the agency, despite development errors in the past, is concerned about promoting sound stewardship. Agencies need constituent support to maintain their budgets and implement their plans. A sensitive species program is an effective way to market the agency to a strong constituency¹⁰⁸ It can return the luster to an agency's tarnished mission.

IV CONCLUSION

Full-fledged implementation of the ESA, where agencies do more than just go through the motions to avoid citizen suits, is difficult precisely because species management makes demands that restrict discretion, drain budgets, and interfere with agency missions. These characteristics ensure that the citizen suit will remain by far the most important tool for nature recovery. However, the prospect of avoiding suits can be used in conjunction with other motivators to build a more comprehensive, proactive conservation program.

The subtitle to this article poses a question: What should we expect of federal agencies? The preceding pages lay out a smorgasbord of specific answers. But all of these recommendations emerge from a single, simple insight. We should expect agencies to pursue activities that they can reconcile with their interests. We should not expect heroics but we should not tolerate timidity in promoting the goals of the Endangered Species Act. Almost all the tools I discuss in this article have been tested with some success by federal officials searching for creative approaches. These experiments show that agencies can do much more than answer the challenge of species protection with shoulder-shrugging and finger-pointing.

In proposing to make better use of the administrative tools that reach beyond the basic duties of the ESA, the aim is not simply to increase the effectiveness of endangered species protection. The aim is also to integrate species preservation with other environmental concerns. Once the tools establish constructive channels of interagency coordination for endan-

108. Over the past several years the USFS has become increasingly aware of the need to market its programs and now couches much of its public materials in consumerist terms. See Robertson, *Outdoor Recreation and Resource Protection: Administrative Perspective*, in *A MILLION SQUARE MILES: A PUBLIC LANDS AGENDA FOR THE 1990's* (Apr. 12, 1989, Washington, D.C.); Hal Salwasser, et al., *A Marketing Approach to Wildlife and Fisheries Program Management*, in *TRANSACTIONS OF THE NORTH AMERICAN WILDLIFE AND NATURAL RESOURCES CONFERENCE* 261-270 (1989). See, e.g., U.S.D.A. FOREST SERVICE, *SHARING THE COMMITMENT: PARTNERSHIPS FOR WILDLIFE, FISH, AND RARE PLANTS ON THE NATIONAL FORESTS* 16 (1991) (making reference to the "customer-oriented" programs of *Get Wild*, *Rise to the Future*, and *Every Species Counts*).

gered species conservation, we can enlist them for broader environmental quality challenges.

