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The Embattled Social Utilities of the Endangered Species Act - A Noah Presumption and Caution Against Putting Gasmasks on the Canaries in the Coalmine

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THE EMBATTLED SOCIAL UTILITIES OF THE ENDANGERED SPECIES ACT—A NOAH PRESUMPTION AND CAUTION AGAINST PUTTING GASMASKS ON THE CANARIES IN THE COALMINE

BY
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> The militant environmentalist movement in America today is a new homosocialism, communism. What these people are is against private property rights. They are trying to attack capitalism and corporate America in the form of going after timber companies. And they're trying to say that we must preserve these virgin trees because the spotted owl and the rat kangaroo and whatever live in them, and it's the only place they can live; the snail darter and whatever it is.[1]

I. INTRODUCTION

The Endangered Species Act (ESA)[2]—which always seems to be a lightning rod for politics, passions, and philosophizing—is once again poised at the brink of what could become an illuminating national debate. The Act's congressional reauthorization process is likely to provide the first major indicator of what the 105th Congress will or won't do to environmental law generally.[3] The competing congressional bills provide a va-

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1 Rush Limbaugh, The Rush Limbaugh Show, Dec. 7, 1993, *available in* LEXIS, News Library, Script File.

2 Endangered Species Act of 1973, 16 U.S.C. §§ 1531-1544 (1994).

3 The ESA has awkwardly awaited reauthorization since the end of 1992, while tenuously hanging onto its appropriations funding year-by-year through continuing resolutions in Congress. Like many other public interest statutes, the ESA includes a sunset provision requiring periodic reauthorization statutes, the last one expiring in 1992. *See* Endangered Species Act Amendments of 1988, Pub. L. No. 100-478, § 1009, 102 Stat. 2306, 2312 (1988). Since then, the ESA has been continued through one-year extensions; the most recent temporary extension was in 1996. Omnibus Consolidated Rescissions and Appropriations Act of 1996, Pub. L. 104-134, 110 Stat. 1321, 1321-159 (1996). This never-ending succession of sunsets is, needless to say, not a pretty picture for those seeking sustained implementation of an important public interest law. ESA reauthorization is likely to provide the initial barometer read-

riety of alternatives for strengthening or eroding endangered species protections. Responding to the property rights movement, the 1982 Habitat Conservation Plan (HCP) Amendments to the Act[4] offer a case study in the pressures upon a statutory structure to mutate. In this case, the Act's standards were shifted (depending upon your viewpoint) from crudity to fine-tuned sophistication, or from clear enforceable standards to wishy-washy subjective, politically-variable agency discretion. Ultimately, the upcoming national debates on protecting endangered species, if they are thoughtful, may also serve as an occasion to explore some fundamental underpinnings of environmental law itself.

From the turbulent past and present of the ESA, this essay offers some reminders for the impending battles over the Act. It attempts to distill some useful lessons from the classic extreme example of the Tenesee Tellico Dam/snail darter case,[5] and asserts that endangered species protections often fulfill a basic and embattled civic function: the 'canary-in-the-coalmine' social indicator role. This role adds an important utilitarian purpose to the Act's ethical and aesthetic benefits, and provides a strategic backdrop to the promises and the perils of HCPs.

Below are some interconnected propositions.

- The Endangered Species Act continues to be one of the most embattled and vulnerable federal environment statutes, besieged by the dynamic pressures of marketplace politics and economics, in part because it is primarily justified and explained in limited terms of aesthetic and ethical social norms, not utilitarian human benefits.

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ing on the likely fortunes of subsequent initiatives for and against environmental protection in the 105th Congress. An initial skirmish went for the protectionists: Rep. Richard Pombo (R-Cal.) and Rep. Walter Herger (R-Cal.) tried to take advantage of the spring's tragic flood disasters by inserting a flood relief bill rider repealing ESA regulation from all projects containing any "flood control" purposes. This potentially sweeping override ultimately failed by a vote of 227 to 196. Flood Prevention and Family Protection Act of 1997, H.R. 478, 105th Cong. (1997). The Pombo amendment passed by a voice vote on May 7, 1997, but was removed the same day by a subsequent roll call vote. 143 CONG. REC. H2281-2313 (May 7, 1997).

As this article goes to press there are two major bills proceeding in the 105th Congress. One bill, 105 H.R. 2351(proposed July 31, 1997), sponsored by Congressman George Miller (D-Cal.), is carefully drafted to strengthen the effectiveness of species protection, with a renewed emphasis on the goal of recovery of endangered species to sustainable population levels. For a brief summary of 105 H.R. 2351, see Daniel Hall, *Using Habitat Conservation Plans to Implement the Endangered Species Act in Pacific Coast Forests: Common Problems and Promising Precedents*, 27 ENVTL. L. ___, n. 171 (1997).

The other bill, 105 S. 1180, sponsored by Senators Dirk Kempthorne (R-Idaho) and John Chafee (R-R.I.), is much more industry oriented and seeks to authorize increased pragmatic compromises with habitat-threatening development projects in order to mitigate the political pressures on the ESA.

[4] Endangered Species Act Amendments of 1982, Pub. L. No. 97-304, 96 Stat. 3760 (1982) (codified as amended at 16 U.S.C. § 1539(a)(2)(A)(1994)).

[5] The author had the mixed honor of being petitioner and lead counsel in the administrative, judicial, congressional, and God Committee perturbations between the snail darter and the TVA Tellico Dam project, during the years between 1973 and 1980. *See* Tennessee Valley Authority (TVA) v. Hill, 437 U.S. 153 (1978).

- If one analyzes endangered species protections—as the God Committee did with the snail darter[6]—in many, if not all, cases the Act will be seen to also represent tangible important human social and economic utilities, relevant even for those who discount moral and aesthetic reasons for preserving endangered species. The ESA fulfills an important but little-recognized utilitarian civic function that goes far beyond aesthetics, ethics, and morals—the strategic social indicator function of the canary in the coal mine.
- Amendments for incorporating regulatory balances into the ESA, like incidental take review and permitting processes, HCPs, and other second generation proposals for modifying the statutory prohibitions of the Act, depending on how they are crafted, can incorporate and secure the important philosophical and practical utilities of the Endangered Species Act, or eviscerate them.
- Given the array of good but subtle reasons for protecting endangered species, public values that are typically not readily marketable and that provoke a bitter marketplace backlash, we should adopt a Noah Presumption, a strong presumption in favor of protecting all endangered species, rather than a dismissive Noah's Choice,[7] unless human necessities clearly outweigh the importance of doing so. Negotiating narrowly-conceived minimal protections for species is like designing gas masks for our canaries, and given the inexorable pressures of modern administrative politics such gas masks are quite likely to leak.

II. THE ESA: AN ENVIRONMENTAL STATUTE WITH SPECIAL VULNERABILITIES

All regulation imposes costs on society; we regulate nevertheless despite the cost because of countervailing net social benefits. Marketplace forces, which often are most directly impacted by such regulation,[8] naturally and forcefully fight back the hardest, using their power and vast resources to resist the implementation of civic values unprofitable to them. If net social benefits continue to be politically credible, however, the regulatory systems must survive and evolve. Over the past twenty years it is remarkable how public and private establishments have ultimately adjusted to most federal environmental statutes.

Today's arguments over habitat conservation plans (HCPs) are part of a drastic reassessment process being applied, quite uniquely it seems, to

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6 *See* ZYGMUNT J.B. PLATER ET AL., ENVIRONMENTAL LAW AND POLICY: A COURSEBOOK ON NATURE, LAW, AND SOCIETY 659-73 (1992) (retelling the saga of the snail darter) [hereinafter ENVIRONMENTAL LAW AND POLICY].

7 The term stems from CHARLES C. MANN & MARK L PLUMMER, NOAH'S CHOICE: THE FUTURE OF ENDANGERED SPECIES 1 (1995).

8 Note that "marketplace" forces include federal and state agency players as well as industry. As the history of NEPA illustrates, federal environmental laws typically have been resisted not only by private profitmaking enterprises, but also by a few or many federal and state agencies that have established orientations, loyalties, constituencies, and missions that conflict with the new mandate. The ESA is certainly no exception.

the Endangered Species Act (ESA). The ESA apparently acts as a special societal lightning rod,[9] with statutory functions and a political setting that seem to be more subtle, more controversial, and less secure than for other major environmental statutes. Is the ESA so much more embattled than other federal environmental statutes? Consider the course of modern federal environmental legislation. A noisy parade of statutes marched into federal law in the 1970s, particularly during the Nixon administration from 1969 to 1974.[10] Each of these federal laws was born in controversy and bitterly resented by the players who were forced to accommodate to the newly-enforceable civic values the statutes embodied. For most of those statutes, however, particularly the pollution and toxics laws, the market has accepted and adjusted to their permanent existence.

With only occasional exceptions, the marketplace has generally come to accept the validity and permanence of pollution and toxics laws. The ongoing evolution of federal environmental statutes reflects a number of interesting trends: away from command-and-control and design standards and towards performance standards; away from end-of-the-pipe solutions and towards prevention, planning, and pre-treatment; away from agency policing of facilities and towards stakeholder participation, self-certification, self-auditing, standards of due diligence, and safe harbors. These trends reflect an ability to adopt market-coordinated approaches because of the solid, if grudging, market acceptance of the statutes' basic goals and enforcement. The powerful players of the marketplace do not attempt to overthrow the basic system of protection. A rare exception, where a market coalition tried to overthrow basic Clean Water Act protections in the 104th Contract of America Congress's House Resolution 961,[11] came to naught when the media woke up to what was dubbed the "Dirty Water Bill" and brought it to public attention.[12]

The ESA is different. Though ESA proposals echo the trends toward stakeholder participation, incentives, and the like, they do not seem to share the same strong premises of accomplishing statutory goals that one finds in the pollution statutes.[13] Only the ESA is still regularly subjected to

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[9] *See* Oliver A. Houck, *On the Law of Biodiversity and Ecosystem Management*, 81 MINN. L. REV. 869, 959 n.563 (1997).

[10] By my count there were thirty-four significant environmental statutes passed in the Nixon years, including the National Environmental Policy Act, Clean Air Act, Solid Waste Disposal Act (as amended by the Resource Conservation and Recovery Act), Coastal Zone Management Act, Oil Pollution Act, Federal Water Pollution Control Act (as amended by the Clean Water Act), Federal Insecticide, Fungicide, Rodenticide Act, and Toxic Substances Control Act. *See* ENVIRONMENTAL LAW AND POLICY, *supra* note 6, at 659-73. Only Jimmy Carter's years come close, with 20 statutes in an equivalent span, many of which were merely perfecting amendments. *Id.*

[11] H.R. 961, 104th Cong. (1995).

[12] H.R. 961 was passed by the House, 240 to 185, on May 16, 1995, but died in the Senate when Sen. John Chafee (R-R.I.) courageously refused to allow it to proceed. 141 CONG. REC. D612-01 (May 16, 1995).

[13] Note, for example, the difference between the ESA arguments and debates within the Clean Air Act (CAA) and Clean Water Act (CWA) establishments about Best Available Technology (BAT) versus harm-based standards. The ESA should be so lucky as to be arguing about direct legal standards set according to criteria that presume the validity of the statu-

plenary denunciations on the floor of Congress; only the ESA faces serious non-reauthorization initiatives; only the ESA was hit by a sweeping one-year listing moratorium.[14] It was a high profile ESA case, the spotted owl, that got hit by the so-called Timber Salvage rider cynically attached to the Oklahoma bombing relief bill.[15] It is the ESA that has sustained amendments undermining its fundamental goal, species recovery; and if things go awry, it is the ESA that could be reamed instead of reinforced by the HCP strategy.

Why is it that the ESA suffers from this particular precariousness? There, of course, are many possible distinctions. The institutional setting for the Act might have some relevance.[16] Or it might be that the implementation of the ESA has been particularly heavy-handed or illogical so as to arouse a particularly persistent market backlash or to prevent the formation of a particularly broad constituency.[17] Or the difference might be that the ESA came to be a federal regulatory regime almost by happenstance.[18]

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tory goals: imagine the protective tone of a process requiring BAT to prevent species jeopardy or nonrecovery, or species protection standards set like the CAA's primary and secondary standards set on a premise of no harm to man or beast.

[14] Senator Kay Bailey Hutchinson (R-Tex.) fronted the successful marketplace campaign for an ESA moratorium. Emergency Supplemental Appropriations and Rescissions for the Department of Defense to Preserve and Enhance Military Readiness Act of 1995, Pub. L. 104-6, Tit. z, ch. 4, 109 Stat. 73, 86 (1995). The moratorium rescinded $1.5 million of the amounts formerly available for making threatened or endangered species or critical habitat determinations and forbade other funds from being used for these purposes. *Id.*

[15] Pub. L. 104-19, § 2001, 109 Stat. 194 (1995). The same tactic was narrowly avoided earlier this year when Rep. Richard Pombo (R-Cal.) attempted to attach a rider to the Northwest flood relief bill exempting thousands of water-related public works from the ESA. H.R. 478 105th Cong. (1997); 143 CONG. REC. H2283-H2313 (May 7, 1997) (congressional debate and vote defeating the Pombo Amendment).

[16] The EPA has received more money and therefore political support for its regulatory regimes than the Department of Interior which through its Fish and Wildlife Service implements the ESA, or the Department of Commerce which traditionally finds itself quite reluctantly implementing the ESA in the maritime jurisdiction, often in direct conflict with the Department's eponymous primary mission and constituency.

[17] Many ESA opponents point to the infamous case of the snail darter. *See* TVA v. Hill, 437 U.S. 153 (1978). For a lengthier account of the snail darter case, see W.B. WHEELER & M.J. MCDONALD, TVA AND THE TELLICO DAM 1936-1979 (1986).

[18] Like NEPA, the ESA seems to have been passed as symbolic political rhetoric. As with the much litigated Environmental Impact Statement (EIS) requirement in section 102 of NEPA, seen for example in the cases *Kleppe v. Sierra Club*, 427 U.S. 390 (1976) (discussing when a regional EIS as opposed to a project-specific EIS is required) and *Vermont Yankee Nuclear Power Corp. v. NRDC*, 435 U.S. 519 (1978) (discussing NEPA's requirement of an analysis of alternatives in an EIS), the teeth of ESA section 7 and section 9 came as a rude shock to many, including the industrial and bureaucratic lobbyists whose interests would be so intimately affected by the Act. It transpired that, lurking within the ESA were two provisions that potentially were law, rather than mere good feeling exhortation. Section 7 has a cause of action lying within its terms on "interagency cooperation" that prohibits federal agencies from taking any action which jeopardizes the continued existence of a listed species or modifies or destroys their critical habitats. 16 U.S.C. § 1536(a)(2) (1994). Section 9 includes a prohibition which makes it "unlawful for any person . . . to . . . take any such species within the United States or the territorial sea." *Id.* § 1538 (a)(1)(B). Under the regulatory definition of "take" confirmed in *Sweet Home Chapter of Communities for a Greater Oregon v. Babbitt*, 115 S.Ct. 2407 (1995), section 9 further prohibits destruction or modifica-

Or perhaps the Act is considered a more emotive, abstract piece of legislation.[19] The original images in the minds of members of Congress, as well as the public, probably were indeed as Sen. Howard Baker (R-Tenn.) said, protection of "warm fuzzy" creatures against the relatively marginal interests of poachers and merchants trading in violation of the Convention on International Trade in Endangered Species (CITES).[20]

Pollution and toxics statutes have come to be accepted by agencies and industry, I suspect, primarily because their direct human utility is intrinsically obvious to public opinion. Behind most of these statutes is the perceptible reality of direct threats to human health and safety.[21] One doesn't have to understand complex science to know that humans, adults, children, and babies are directly at risk if the water they drink and bathe with is contaminated with toxic substances. That fundamental perception rallies the defense of such statutes when marketplace lobbyists attempt to nibble or chop away at those regulatory systems.[22] The classic false trade-off, a choice between environmental protection and a healthy economy, is rebutted by media and public recognition of pollution and toxics as vivid public health hazards, and the machineries of politics and government have fallen into line.[23]

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tion of habitats far beyond the activities of federal agencies. *Id.* at 2412. Because of the new found evolved potency of section 7 and section 9, the procedure for listing a species set out in section 4 has become extremely important as the gatekeeper for certification of an individual species as qualified for the protection of section 7 and section 9. 16 U.S.C. § 1533 (1994).

19 Unlike the Clean Air Act, Clean Water Act, Toxic Substances Control Act, the occupational safety and health statutes, and others like them, the ESA came into existence like NEPA, as an evocation of a particular political moment, and was thought to personify rather uncontroversial, generalized, and not specifically enforceable values. *See* William H. Rodgers, Jr., *The Seven Wonders of U.S. Environmental Law: Origins of Morphology*, 27 LOY. L.A. L. REV. 1009, 1010 (1994) (stating that the influence of the ESA is often measured in hope rather than results).

20 Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), Mar. 3, 1973, 27 U.S.T. 1087, 993 U.N.T.S. 243. CITES has been one of the most effective international environmental treaties, but it has focused primarily on trade. The United States extended its range greatly in the ESA. The author heard Senator Baker make the wry remark at a committee markup in 1977.

21 *See, e.g.*, Resource Conservation and Recovery Act (RCRA), 42 U.S.C. § 6901(b)(2) (1994) (stating that the disposal of solid and hazardous waste without careful planning "can present a danger to human health"); Clean Air Act, 42 U.S.C. § 7401(a)(2) (1994) (stating that the growth and complexity of air pollution "has resulted in mounting dangers to the public health and welfare").

22 The defenders of these statutes mobilize and exaggerate those direct threats in order to protect their regulatory regimes. Note that even when a part of a pollution statute is quite indirect in its impact on human welfare—as in wetland provisions of §404 of the Clean Water Act—it is the image of the direct generic threat, e.g. dirty water, that is mobilized to rally support.

23 Perhaps too much, in the sense that some observers argue the regulation and media coverage of toxics are harsher than would be justified by the actual public interest involved. "Although scientific analysis and quantification may have some input into legislative considerations of risk reduction strategies, the final statute will usually be influenced more heavily by subjective and political factors than by objective scientific ones." Harold P. Green, *Stand-*

The societal rationale for endangered species conservation, on the other hand, is generally characterized in terms of philosophy, emotions, and aesthetics,[24] often regarded as heartfelt but not so substantially significant when weighed against the practical world of production, payrolls, and profits. Occasionally a wistful utilitarian reason for species protection is trumpeted by ESA defenders—the knowledge or genetic material gained from endangered species may later turn out to cure cancer—but such makeweights scarcely dent the dominant mode.

Logic and experience would seem to indicate that a major, if not the determinative, difference between the broad and deep support for the pollution and toxics statutes and seemingly the less deep and less broad support for the ESA lies in perceptions of the particular public values and purposes the ESA serves. The paradigm images that come to mind for the Clean Air Act are billowing smoke stacks and gagging, gasping humans; for the Clean Water Act, pipes discharging gross fluids into waterways, dead fish and birds belly-up in the scum; for the toxic statutes, workers in cumbersome space suits cautiously excavating noxious leaking barrels, or a kitchen faucet with unknown contaminants lurking within. Now consider the paradigmatic images of the ESA: the large brown eyes of a baby seal or tiger or elephant, the fragile finery of an endangered crane, the brave splashing flukes and quavering underwater songs of humpback whales.[25] These images, though evoking emotional and thereby political attention, provide fairly shaky support in the host of prosaic battles which the statute and its regulations must wage each year in the marketplace and the lobbies of government.[26] With such a backdrop it is a wonder that the Act has survived so long, with most of its teeth intact.

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ing Committee Symposium on Risk Assessment: The Role of Congress in Risk Management, 16 Envtl. L. Rep. (Envtl. L. Inst.) 10,220, 10,221 (1983).

The National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. §§ 4321-4370d (1994), which lacks the direct implication of human harms, nevertheless is given some political protection by the fact that it targets federal agencies and does not have direct regulatory impact on the private players in the marketplace. *See id.* §§ 4332-4334 (setting forth provisions relating to the duties of federal agencies regarding environmental concerns).

[24] *See* 16 U.S.C. § 1531(a)(3) (1994) (finding that endangered species have esthetic, ecological, historical, recreational, and scientific value).

[25] The images which provide the broad public inclination of support toward the Act tend to be anthropomorphic, grabbing our sense of empathy and identification with the babies and parenting of endangered animals. The images deal with macrofauna, particularly with photogenic macrofauna. For instance, we see more endangered elephants with their Dumbo storybook ties than of rhinoceroses who do not tend to evoke the same warm or courageous empathy. Likewise, endangered plants seem to receive little intuitive allegiance from the contemporary human psyche, redwoods and saguaro cactus to the contrary not withstanding, and endangered bugs and beetles receive even less attention or sympathy.

[26] The support for the ESA, of course, cannot merely be capsulated as an emotional reaction to paradigm images. There is a deeply developed moral and aesthetic argument for preserving endangered species, and this has always been perceived as laying close to the essence of the Act. We protect species because to do so is right in a sense of ethics or as a cultural taste. *See, e.g.*, 42 U.S.C. § 1531(a)(3) (1994) ("[T]hese [protected] species of fish, wildlife, and plants are of esthetic, ecological, educational, historical, recreational, and scientific value to the Nation and its people."). My colleague, Steven Kellert, has devised a catalog of different categories for endangered species, most of which resonate in the moral

Tactically, the ESA may be thought to offer the best opening wedge in the 105th Congress for those forces that tried in the 104th to pull off a broad-ranging rollback of environmental law. The surmise is that undoubted broad popular support for the ESA may be relatively shallow, because it appears to be based on less-direct human utilities than the federal pollution and toxics statutes. So why *do* we protect endangered species?[27] Ethics and morality are surely part of the answer.[28] Aesthetic appreciation, in which I would include seeking knowledge for knowledge's sake alone, is certainly another.[29] But obviously, the moral and aesthetic qualities do not and should not comprise the entire justification for our society's protections of endangered species, no matter how good a juxtaposition of values they may represent. Social utility is a fundamental function that is fulfilled by all social policy made law.

For a fuller explanation of the reasons for species protection and to add an especially necessary justification in the practical world of politics, the ESA is clearly stronger if it is publicly recognized to fulfill significant *utilitarian* functions as well.[30] The political reality seems to be that morals and aesthetics are generally rated as less substantial and less socially useful than other utilities, particularly direct human health and safety, and cash. Although there are good, strong moral and aesthetic reasons for eliminating pollution of our air, water, and soil, it is the further utility of direct protection of health and the economy that tends to monopolize the practical arguments for the development and protection of statutory regimes. Hence the earnest attempts of ESA proponents to show examples of crucial pharmacological substances derived from endangered species—e.g. taxol from Pacific yew trees shows how species may help

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and aesthetic realm. *See* STEPHEN R. KELLERT, THE VALUE OF LIFE: BIOLOGICAL DIVERSITY AND HUMAN SOCIETY 6 (1996) [hereinafter VALUE OF LIFE].

[27] This is, of course, a continuing question in environmental law generally, and endangered species protection has always offered a particularly illuminating case in point. *See* Oliver A. Houck, *Why Do We Protect Endangered Species, and What Does That Say About Whether Restrictions on Private Property to Protect Them Constitute "Takings"?* 80 IOWA L. REV. 297 (1995).

[28] As noted earlier, Professor Steven Kellert has compiled a catalog of different categories of justifications for endangered species protection, most of which resonate in the moral and aesthetic realm, "moralistic," "humanistic," "naturalistic," "aesthetic," and so on, with only one "utilitarian" category, primarily defined in terms of physical use of individual creatures as a resource. VALUE OF LIFE, *supra* note 26, at 6.

[29] The word aesthetic captures a sense of beauty that humans can feel in beholding an individual species in a dramatically beautiful natural setting, or more prosaically observing an endangered species in terms of the artfulness and intricacy of its unique evolved characteristics. Scientists may feel a special attachment for a particular creature where their studies produce knowledge of the evolution and intricacy of the individual in its multidimensional ecosystem. Knowledge for its own sake is also in these terms an aesthetic function.

[30] Aesthetics, ethics, and morals can also, of course, be labeled 'utilitarian' because they reflect concepts that serve to make some people feel happier; or, if endangered species can be protected and continue in existence without anthropogenic destruction, that serves to make us see ourselves as good people and our society as a good society. The label utilitarian is used here, however, to mean the more prosaic, practical, individual or social welfare utility.

cure cancer.[31] These justifications are valid, but seem to be somewhat leveraged, grasping at straws. The vast majority of endangered species probably will not cure cancer. Programs for commercially harvesting natural biodiversity in rain forests turn out to be rather insubstantial in their actual accomplishments.

But utility arguments can be presented far more broadly than merely noting the physical medicinal use of individual species. The overwhelmingly dominant cause of species endangerment is not hunting or trapping or market harvesting. Rather, it is the alteration and destruction of habitat.[32] Because of the logic of this causation, endangered species often play an indicator role, serving human utility by identifying and triggering protections for habitat areas and conditions that hold threatened human values as well.[33] This indicator function focuses on the fact that, by its very existence in a place, an endangered species serves as a trigger of legal recognition of that place as rare and potentially endangered for human purposes, as well as for ecological interests of other flora and fauna in the ecosystem.[34] This was a fundamental role played by species protection in the spotted owl and snail darter cases: the politically-thankless functional role played by certain endangered species in identifying and forcing review of questionable resource development programs and projects that otherwise would be unlikely to receive meaningful scrutiny.[35]

The ESA is a version of the 'canary-in-the-coal-mine' strategy in the fact that endangered species in their natural habitats can serve human interests in the same way as in the old days when miners carried canaries with them down into the coal seams. The sensitive little species would began to show the ill effects of the odorless methane coal gas before humans could detect the deadly gas, thus warning the miners that there was serious threat to their health. The canary in this way protected human health and welfare.[36]

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[31] *See* ROBERT V. PERCIVAL ET AL., ENVIRONMENTAL REGULATION: LAW, SCIENCE, AND POLICY 1187-88 (2d ed. 1996). I particularly like the example I heard given by Dr. Marc Imlay, a malachologist who reported that when he was testifying at a House hearing on the ESA, one of the stolid uninterested members of the committee suddenly sat up and started taking an avid interest in the Act when it was mentioned that a substance derived from an endangered shellfish off Key West showed promise in curing genital herpes.

[32] Paul R. Ehrlich, *The Loss of Diversity; Causes and Consequences*, *in* BIODIVERSITY 21 (E.O. Wilson, ed., 1988).

[33] Traditionally, endangered species protection is not viewed as pollution control. It is, however, in a larger sense, exactly that. Endangered species are useful, though incomplete, indicators of the health of their ecosystems and of the earth we share. While the best indicators may often be mollusks, plants, and lower life forms, the decline of the bald eagle from the effects of chlorinated hydrocarbons is a good indication of the impact of those chemicals on human life. As water quality becomes inadequate to protect the delta smelt, it will also become inadequate for human uses. Houck, *supra* note 27, at 327-28.

[34] *Id.*

[35] *See* Stephen L. Yaffee, *The Northern Spotted Owl: An Indicator of the Importance of Sociopolitical Contact*, *in* ENDANGERED SPECIES RECOVERY 47, 54 (Tim W. Clark et al. eds., 1994).

[36] Houck, *supra* note 27, at 301 & n.20.

Like the canaries, an endangered species can show by its presence that habitat qualities are in jeopardy, with possible or probable human welfare consequences that may follow. The canary-in-the-coal-mine role is not necessarily the best, the primary, nor an omnipresent function fulfilled by the ESA in various cases, but it deserves recognition as a tangible and systematically important function lying within the logic of endangered species protection generally, that is at least potentially relevant in every case. The provisions of the ESA are likely to wax and wane in the current political gauntlets depending on how the various utilities of species protection are or are not publicly perceived.

III. THE ESA IN A CLASSIC CASE: THE SNAIL DARTER AND THE TVA TELLICO DAM

The utilitarian indicator function of endangered species is even seen in some of the purportedly most extreme Endangered Species Act (ESA) cases, including the first nationally notorious ESA case, the conflict between the TVA Tellico Dam and the endangered snail darter.

The snail darter saga was a protracted, many-layered case from the 1970s that, because of its Supreme Court appearance,[37] probably leveraged the modern era of serious ESA implementation. The case affirmed the strength of the Act's prohibitions and widened the perceived spectrum of actions requiring ESA compliance. The case also galvanized an on-going political reaction against the ESA and it still holds some vivid lessons for the Act's current evolution.[38]

A. The Little Fish and the Habitat Alteration that Endangered It

The snail darter, *Percina tanasi*, is a small fish in the perch family, rarely more than two-and-a-half inches at maturity, highly adapted to feeding off small crustaceans, snails, and caddis larvae in the clean rocky substrates of shallow rapid-flowing big river habitat in the South East's piedmont region west of the Appalachians. Its type habitat for feeding and spawning was the wide shallow shoalwater at Coytee Spring on the Little Tennessee River, where it was discovered in 1973 by a fish biology class on a field trip led by an eminent young ichthyologist specializing in perches, David Etnier of the University of Tennessee.[39]

As so often happens, the snail darter was an endangered species because of habitat alteration. At one time, scientists presume, it lived widely in the Alabama, Tennessee, and Kentucky river systems between the Appalachians and the Mississippi. Little by little its populations were extir-

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[37] *See* TVA v. Hill, 437 U.S. 153 (1978).

[38] The story is told a greater length in WHEELER & MCDONALD, *supra* note 17. *See also*, Zygmunt J.B. Plater, *Reflected in a River: Agency Accountability and the TVA Tellico Dam Case*, 49 TENN. L. REV. 747, 764-76 (1982); Zygmunt J.B. Plater, *In the Wake of the Snail Darter: An Environmental Law Paradigm and its Consequences*, 19 U. MICH. J.L. REF. 805 (1986); ENVIRONMENTAL LAW AND POLICY, *supra* note 6, at 659-73.

[39] WHEELER & MCDONALD, *supra* note 17, at 184-85.

pated by thermal changes, pollution, and, most directly, by damming.[40] Dams inundate spawning shoals and cover their substrates with silt. By 1973, TVA had built more than sixty dams, turning 2500 linear river miles in the relatively flat gently-rolling region into sluggish, silted, serpentine impoundments, leaving only thirty-three undammed river miles of the Little Tennessee River as the last clean flowing stretch of big river in the region and its 30,000 snail darters as the last major and then the only known population of the species.[41] The river was a superbly rich ecosystem, highly oxygenated, with high alkalinity and richly diverse speciation. The river valley was likewise extraordinary in human terms, with 360 family farms on some of richest soils left in the region, unique archeological and historical features, and great potential for recreation and tourism at the edge of the Great Smoky Mountains National Park.[42]

The darters' Little Tennessee River habitat in that last undammed 33 miles was threatened by TVA's final dam project which was a pork-barrel classic. Since the dam, though small, could not be cost-justified for normal dam purposes like power, water supply, or flood control because of its small size and its location as surrounded by other dams,[43] the Tellico dam was built on a novel accounting justification, labeled as another "economic development demonstration" project.[44] The two major benefits officially touted were recreation enhancement and resale of shorelands. The agency would condemn the family farms at low prices and projected that it would then sell off the land, at a profit, to the Boeing Company, which would build a model industrial city to be called Timberlake, which might use the dammed river for barge traffic.[45]

This program made no common sense, of course,[46] and Boeing quickly bowed out when promised subsidies failed to materialize. But backed by the congressional pork-barrel appropriations committees, TVA

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[40] *Id.*

[41] ENVIRONMENTAL LAW AND POLICY, *supra* note 6, at 660-62.

[42] *Id.* The site contained the oldest sites of continuous human habitation in North America, and also included Cherokee and colonial settlement sites including Echota, the Cherokees' Jerusalem, and Fort Loudon, a southernmost defensive outpost from the French and Indian War, and the birthplace of Chief Sequoia. *Id.* at 660.

[43] The dam, because it was in such a flat valley, could backflood thirty-three miles of river channel with a dam only seventy feet tall, costing $5 million for the dam and $29 million for levees. The majority of the more than $150 million project costs were land condemnation and road and bridge construction. GENERAL ACCOUNTING OFFICE., THE TENNESSEE VALLEY AUTHORITY'S TELLICO DAM PROJECT - COSTS, ALTERNATIVES, AND BENEFITS 7 (Oct. 4, 1977).

[44] ENVIRONMENTAL LAW AND POLICY, *supra* note 6, at 660-61.

[45] The two classes of claimed benefits that gave the project a positive benefit-cost ratio were land development profits and increased recreation, neither of which were then, nor since have proved to be, economically credible. There were no generators in the dam, though a small amount of power could be generated by diverted flows into a neighboring dam. Flood control benefits of a small impoundment in the middle of a network of more than 60 dams were trivial. The desperate internal agency pressures to justify the project are chronicled in WHEELER & MCDONALD, *supra* note 17, at 186-88.

[46] *See* SCHULTZE AND E. GRAMLICH, A GUIDE TO BENEFIT-COST ANALYSIS 147-54 (1st ed. 1982) (noting Tellico's limited economic merits).

implacably continued to push construction on the little dam and the thirty-three-mile reservoir, and given the agency's dominant powers it would take something extraordinary to force a commonsense reconsideration of the threat to the Little Tennessee River ecosystem.

The snail darter proved to be extraordinary. The case started when Hiram Hill, a student temporarily on leave from law school, took that fish biology class with Dave Etnier. When he returned to law school and needed an environmental term paper topic, Hill told his teacher about the darter and asked whether that would be enough for a ten-page paper. It was, and then some. Winning the case did not require a great lawyer. The facts and law were not difficult: if the agency was jeopardizing a listed species and destroying its habitat, the Sixth Circuit and the Supreme Court both said section 7 of the ESA had to be enforced.[47] If any adjustments were to be made, Congress had to provide the forum for change. This was the "remand to the legislature" theory borrowed from Professor Sax: if human necessity conflicted with a statutory prohibition, the matter should not be resolved by an agency's subjective discretion or by an unelected judge.[48] Courts and agencies should enforce the law, and that in effect would pass the matter to special resolution in the legislative process. And so it was.

B. Why Protect the Snail Darter?

During oral argument Justice Powell asked "apart from biological interest, which I do not challenge, *what purpose is served*, if any, by those little darters? Are they used for food? . . . Are they suitable for bait?"[49] Others asked more directly "Aren't you being hypocritical, *misusing* the endangered species to fight other battles?"[50]

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[47] TVA v. Hill, 437 U.S. 153 (1978), *aff'g* 549 F.2d 1064 (6th Cir. 1977); *see* Zygmunt J.B. Plater, *Statutory Violations and Equitable Discretion*, 70 CAL. L. REV. 524, 592 n.319, 593 n.322 (1978). The case was brought by the author, his student, and a colleague, joined later by an association of biologists and a state chapter of the National Wildlife Federation, supported by several hundred active citizens, including farmers, Eastern Band Cherokees, fishermen, river recreationists, garden clubbers, historians, and environmentalists.

[48] *See* JOSEPH L. SAX, DEFENDING THE ENVIRONMENT: A HANDBOOK FOR CITIZEN ACTION 175-92 (1970). "The principle of 'legislative remand' would have courts leave to Congress the obligation of declaring its true intent. 'The role of courts is not to make public policy, but to help assure that public policy is made by the appropriate entity.'" Brief for Respondents at 149, TVA v. Hill, 437 U.S. 153 (1978) (No. 76-1701).

[49] Record at 43-44, *TVA*, 437 U.S. 153 (1978) (emphasis added).

[50] *Id.*

There were clearly moral reasons for saving the darter.[51] There were also aesthetic arguments.[52] But it was clear to everyone that the ESA was primarily being given a *utilitarian* application by the citizen plaintiffs, and the question was whether that utility was legitimate. The fish was 'being used' by the plaintiffs. For at least some plaintiffs, the purpose in suing on the snail darter's behalf was not primarily for the fish. It was for ecological purposes of saving a river and its valley but not for *biological* purposes, and the question was whether the Act should properly be used beyond the pure objective of saving a creature for its own sake.

The plaintiffs' answer had to be that the ESA serves many social utilities, one of which is linked to habitat. The plaintiffs answered that the snail darter was a highly sensitive indicator of the habitat qualities which the citizens were fighting about in the case. A species cannot be decoupled from its habitat; an endangered species by its very endangered existence tends to be an important indicator of threatened human values in its habitat, like a canary in a coalmine.[53] So it was logically inevitable that ESA cases would serve broader functions beyond preservation of par-

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[51] The ethical point is earnestly made, although while miscuing on some facts and missing the utility arguments, in a published anecdote from an environmental lawyer with a famous name:

> On a day in early June, Bobby Kennedy Jr. stands over the body of a decomposing fox, killed by one of his homemade traps that had been set after the rabid creature had menaced his children at his home in Mount Kisco, N.Y. Nature is his faith, and he recounts a conversation he'd had with a Catholic priest on a mountain top. 'I kind of challenged him with the most difficult episode in the history of environmental advocacy, which was the snail darter case. I said, 'How did we allow this 2-inch fish with no economic significance to hold up a $1 billion dam project that would have provided energy and jobs to people? Why did we put fish before people?' And he said, 'That's not what happened. We know at our core, as Americans, that if we lose a single species, we lose part of our ability to sense the Divine, to understand who God is and therefore what our potential is, as human beings.' Then I understood that God reveals himself through many avenues. When we destroy those things, whether whole species or huge ecosystems, to me, it's the moral equivalent of tearing the last pages out of the last Bible on Earth.

John Marks, *Special Report: The Return of the Kennedys Struggling Against Conservatives and Cynics, A New Generation of Activists Tries to Assert Itself*, U.S. NEWS & WORLD REPORT, Sept. 2, 1996, at 42.

[52] It is not so much that the fish is beautiful, though it was to many of its supporters. The primary aesthetic benefit of the darter was probably to the biologists who marveled at what they learned of its intricate life-cycle migrations, and for whom the remarkable riverine ecosystem was a continuing thing of wonder to be saved for future generations of scientific observers.

[53] The indicator species role is a well-known concept in modern conservation biology, where a species, though not necessarily an endangered species, acts as an indicator of the intricacy and dynamic interdependent relationships of an entire ecosystem. Albert C. Lin, *Participants Experiences with Habitat Conservation Planning and Suggestions for Streamlining the Process*, 23 ECOLOGY L. Q. 369, 446 (1996). In ESA litigation, the indicator role potentially has a double function in indicating the human interests woven into its nature habitat. First it makes impacted human interests visible and known (a less significant function in the case of the Little Tennessee River Valley, because the facts were known by many in the area at the time). Second, the function of indicating those qualities to the official cognizance of the legal system. Even where the human interests of an endangered habitat may be known, we live in political ecosystems where facts are not necessarily incorporated

ticular creatures, and that the utility would be less likely to come from the physical specimens themselves than from their habitats. This is a good thing, too. Who could believe that an injunction suit to protect the darter against a powerful federal agency project could ever have had a hope for success if there *hadn't* been a strong human utility argument?

The fundamental point, almost entirely missed by the media coverage of the snail darter saga, and in most subsequent debates over the ESA, was that the fish warned us that a costly mistake was about to be made. By its relict existence in the Little Tennessee River, the fish identified a vanishing valuable geographic resource that should not be destroyed without good reason and the Tellico Dam was not a good reason. It was not just coincidence that the snail darter was in the path of the last dam, or that the last dam did not make economic sense, or that absent the fortuitously strong provisions of the ESA, a stupefyingly stupid project would not have had to face such substantive legal challenge. The farmers, fishermen, and environmentalists who loved the Little Tennessee River had tried to show the extraordinary natural values of the river and valley, the trivial benefits of the dam project, the true social costs including the loss of farms and the river, and the economically lucrative and available alternatives.[54] As so often is the case, however, there was no forum for a realistic social accounting. The powerful inside players who push such pork projects have their own internal reasons for ignoring overall rational social economics. Without some extraordinary forum for citizen outsiders to force an accounting, some stupefyingly stupid projects and programs will inexorably roll on.

After the injunction, the public works lobby led by Sen. Howard Baker (R-Tenn.) persuaded Congress to create the so called "God Committee" or "God Squad"[55] which had the power to override the ESA species protection provisions if an accurate overall economic accounting demonstrated a social necessity to do so.[56] The God Committee reviewed the Tellico Dam under the 1978 ESA amendments and unanimously decided that in terms of public economics the dam had been a economic nonstarter.[57] As Chairman Charles Schultze of the Council of Economic Advisors (CEA) asserted "[t]he interesting phenomenon is that here is a project that is 95 percent complete and if one takes just the cost of finishing it

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into the governance process and the force of thoughtful logic is not necessarily implemented unless there is a legal stick.

[54] Building on the citizens' analyses, the God Committee ultimately noted the agricultural potential for the valley. Extensive further benefits to river-based alternative development were tourism and intensive river use and other recreation coordinated with the National Park, which draws 10 million visits a year. *See* UNITED STATES ENDANGERED SPECIES COMMITTEE, STAFF REPORT: TELLICO DAM AND RESERVOIR (Jan. 19, 1979); GENERAL ACCOUNTING OFFICE, THE TENNESSEE VALLEY AUTHORITY'S TELLICO DAM PROJECT - COSTS, ALTERNATIVES, AND BENEFITS (Oct. 14, 1977) (both on file with author).

[55] ENVIRONMENTAL LAW AND POLICY, *supra* note 6, at 659-73.

[56] *See* 42 U.S.C. § 1536(e)-(h) (1994).

[57] ENVIRONMENTAL LAW AND POLICY, *supra* note 6, at 659-73.

against the [total] benefits and does it properly, it doesn't pay, which says something about the original design!"[58]

The God Committee issued a dramatic unanimous verdict: in *economic* terms endangered species protection still outweighed the merits of a touted development project.[59] A river-based development without the dam could accomplish far greater economic benefits. The point deserves a further clarification: when the snail darter's God Committee met, it was told to judge the comparative economics *at the time of decision*, not as the economics would have been earlier in the project's inception or when the endangered species conflict was first discovered. The agency had been pouring money into the project and leveling the forests and farms of the river valley for 15 years, and the case for species preservation had to accept those sunk costs and lost resources in its economic case to counterbalance the dam. Amazingly, as Chairman Schultze noted, the project *still* could not show net human benefits, a dramatic reversal of the classic ecology versus economics story.[60]

But the media failed to deliver this dramatic and potentially strategic affirmation of the economic utility of the ESA into the public forum. The 'fish bites dam' story typically had run on page one; the God Committee's vindication of the darter ran deep in the back pages or not at all. The media's unfulfilled role in this story is significant, as it is in subsequent ESA stories as well as environmental law generally. The media could have provided a decisive forum, but the national media never got beyond caricature. The press in the snail darter case, as subsequently in the spotted owl and other noted modern cases, continually cast the story in terms of endangered species as moral, esthetic and emotional avatars, locked in a classic trade-off with 'practical' human enterprises. For the press, the charming infotainment story juxtaposing a frail David versus an institutional Goliath is apparently universally irresistible. Story after story featured pictures of the little fish beside a 2-inch measure, inset on a photo of the dam enlarged in wide-angle, and described as a massive hydroelectric facility. Although this juxtaposition perhaps initially served some interest of the species by casting it in the biblical hero role, ultimately it replicated the caricature of a trivial species poised against a powerful and important market project. The result was a cavalcade of news coverage that missed the dramatic reality of the case and, whatever the reason, it thereby failed to bring the real merits of the species-project conflict into the political forum.[61]

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58 Charles Schultze, Chairman, Council of Economic Advisers, Endangered Species Committee, Tellico Dam and Reservoir Project (Jan. 23, 1979) 25-26 (unpublished transcript of public hearing) (on file with author).

59 *Id.*

60 *Id.*

61 Why the 'liberal' media, our government's primary operational information system, never delivered the merits of this and other dramatic endangered species cases into the political arena is a mystery that deserves serious thought. The market realities of "infotainment" are probably a part of the reason, including the difficulties of presenting the case's complexity and the relative ease and rewards of presenting clichés. Iconoclastic stories

And playing off the cliché of worthless species vs. economic progress, the marketplace opportunistically sought to rally and capitalize upon a common sense reaction of public opinion to the alleged "irrational extremism" of protecting the endangered species. The Wall Street Journal, Paul Harvey, industrial organizations and lobbyists, and a raft of "public interest law foundations" created to support industry[62] successfully built a national perception of the darter case as extreme, and by extension called into question the social utility of other environmental regulation and perpetuated the classic false tradeoff that we must choose between ecology and economics. .

The darter's name was (and still is) treated as a twisted icon in popular lore, representing impractical and mindless environmental extremism. Even voices raised in defense of the darter typically do so only in spiritual, aesthetic, or moral terms.[63] The media, which had so loved the extremist juxtaposition of little-fish-stops-huge-dam, scarcely covered the story of the fish's economic vindication in the God Committee, and that ultimately allowed the pork-barrel to have the last word.

C. Dénouement, Darter, and Dam

In the summer of 1979, in forty-two seconds, in a stealth rider inserted on the House floor by the public works appropriations committee, the ESA was repealed as to Tellico.[64] The reservoir was soon completed, eliminating the darter in its type habitat. Since then the reservoir has produced little economic benefit; the major activity has been subsidized construction of a second-home community. There have been net recreation losses, a sharp decline in water quality, no model city, no barge traffic, and in sum a wasteful loss of a national resource compared to what might have been. Subsequently, the existence of several other smaller populations of the darter have been established, some from transplants and several in locations potentially liable to toxic pollution, prompting sardonic comments from ESA critics implying that this and other species protection efforts have been misbegotten.[65] The species has since been down-listed to threatened status,[66] and hopefully will survive the loss of its major rel-

showing the unconstrained dysfunction of honored establishment institutions like the TVA, one of the New Deal's brightest roses, are depressing. Over the course of the six years of the snail darter case I personally spoke to more than 120 reporters, some more than 20 times, and though I may not be a great press representative, it is nonetheless surprising that there never was a national media story covering the not so fascinating merits of the conflict.

62 *See* Oliver A. Houck, *With Charity for All*, 93 YALE L. J. 1415, 1419-21 (1984).

63 *See* Marks, *supra* note 51, at 42.

64 ENVIRONMENTAL LAW AND POLICY, *supra* note 6, at 670-72.

65 As former Sen. Robert Packwood (R-Or.) said of Tellico in retrospect in 1990, "[t]he ultimate irony of ironies, the gate came down, water gurgled up . . . it is amazing, but the fish now exists in all of these streams that flow into the reservoir. It has not disappeared at all." 136 CONG. REC. S16771-72 (1990).

66 *See* Final Rule Reclassifying the Snail Darter (*Percina Tanasi*) from an Endangered Species to a Threatened Species and Rescinding Critical Habitat Designation, 49 Fed. Reg. 27,510, 27,512 (July 5, 1984) (codified at 50 C.F.R. § 17.11 (1996)). In downlisting the snail darter, the United States Fish and Wildlife Service (USFWS) noted that:

ict population. As a one-sided deprecatory anti-environmental cliché, however, the darter seems certain to live long in popular lore as an irrational extreme, which, as Alexander Bickel used to say, not only misses the point, but misses the wrong point.

IV. Some Lessons From a Little Fish on the Promise and Perils of Amending the ESA

Although the merits of the snail darter case are obviously not the same in every endangered species controversy,[67] the fish has some useful lessons for the imminent Endangered Species Act (ESA) debates generally, and some in particular for the Habitat Conservation Plan (HCP) Amendment initiatives.

A. On The Endangered Species Act's Indicator Function

Needless to say, a continuing basic lesson is the need to acknowledge the indicator role species can play for human welfare. A generic governmental failure to integrate the darter's utilitarian indicator function probably explains why the Tellico dam's irrational economics ultimately were able to roll on over the species. The trigger-indicator social utility function of the ESA continues to be an important factor in other endangered species cases.[68] If in coming months the basic goals of the ESA are narrowly

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[p]rior and subsequent to the completion of the Tellico Reservoir project, snail darters were introduced to other streams in the Tennessee River Valley. To date, these introductions have proven successful only in the Hiwassee River, Polk County Tennessee. Snail darters were found in the Tennessee River, Loudon County, Tennessee, near the mouth of the Little Tennessee River in 1979. Subsequently, they were discovered in South Chickamauga Creek, Hamilton County, Tennessee, in 1980 and later in Catoosa County, Georgia. These discoveries led to additional searches in the Tennessee River and its tributaries. These searches resulted in the discovery of snail darters inhabiting three other Tennessee River tributaries (Sewee Creek, Meigs County, Tennessee; Sequatchie River, Marion County, Tennessee; and Paint Rock River, Jackson and Madison Counties, Alabama), and the main stem of the Tennessee River near the mouth of two tributaries, South Chickamauga Creek (Nickajack Reservoir, Hamilton County, Tennessee), and Sequatchie River (Guntersville Reservoir, Marion County, Tennessee).

49 Fed. Reg. at 27,510. USFWS went on to note that "the snail darter is presently known from only six Tennessee River tributaries and from the main stem of the Tennessee River near the mouth of the three tributaries." 49 Fed. Reg. at 27,512.

67 Is the snail darter an atypical example of ESA utility? The remarkable economics of the case, where species conservation development alternatives still outweighed the official development project in tangible dollar terms even after millions had been spent on construction, is surely not typical. But the spotted owl, the Mt. Graham squirrel, pacific salmon, Barton Springs salamander and a parade of other species controversies would seem to affirm the same utilitarian indicator role, and enforcement of the ESA can encourage alternate planning and program designs to integrate and accommodate the contending values. Though the snail darter controversy transpired under ESA section 7, some of the lessons from the darter saga appear directly relevant to HCP issues arising under ESA section 9 and section 10 as well.

68 The northern spotted owl is an endangered species that opened up the merits of national forest clearcutting not only to public debate, but also to legal mechanisms to force serious consideration of the public interest at stake, ultimately bringing a President to the

cast merely in terms of biological aesthetics and morality, the Act will be eroded in the legislative process and HCPs will be diluted into reductionist exercises about how many individual animals can feasibly be dealt away without reaching jeopardy, or about skewed and false tradeoffs.

B. On the Rhetoric of the Analytical Debate

The national debates on endangered species are not necessarily carried on at a high level of intellect and rhetoric as the keynote quote at the head of this essay demonstrates,[69] but a sophisticated debate has been developing.[70]

There is, however, little agreement on goals. Some of the arguments are aimed at intrinsic improvement of the ESA, modifications designed to make the Act serve its internal statutory objectives better, preserving species and more recently entire ecosystems. Others are predominantly extrinsic: the Act must be modified (or repealed) so as to eliminate its excessive obstruction of business profits or the Act must be changed now through HCPs to forestall a powerfully anti-conservationist backlash. It would be naïve to ignore the extrinsic arguments, but it is likewise naïve not to distinguish them from intrinsic issues of protecting endangered species. In *Noah's Choice*, a beautifully-written 1995 book,[71] ostensibly seeks to bring a rational societal overview to the field. It surveys many of the scientific delights and philosophical challenges of endangered species conservation, and advances several major lines of argument. One is that we get very limited tangible benefits from the ESA,[72] and that in effect the ESA is a practical failure because few species have been successfully removed from the endangered list (a conclusion powerfully contested by Professor Rachlinski).[73] *Noah's Choice* also notes the powerful perverse incentives the Act gives, especially to private property interests, to subvert

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Pacific Northwest to listen and to attempt to negotiate a regime of clear cutting on federal forests that threatened erosion, sedimentation, flooding and the commercial salmon industry, as well as the owl in its role as canary. The endangerment of several populations of ground fish off the New England coast have forced the government and the public to recognize and take legal precautions against the extraordinarily destructive fish harvesting methods that have reduced a world class fishery resource to the edge of extinction. The Barton Springs salamander has forced public and private players to acknowledge the negative consequences of pumping and contaminating a fossil ground water aquifer as if it was a self-renewing resource.

[69] *See* Limbaugh, *supra* note 1.

[70] See the bibliography the UNITED STATES FISH & WILDLIFE SERVICE & NATIONAL MARINE FISHERIES SERVICE, HABITAT CONSERVATION PLANNING HANDBOOK App. 2 (1996) [hereinafter HCP HANDBOOK].

[71] CHARLES C. MANN & MARK L. PLUMMER, NOAH'S CHOICE: THE FUTURE OF ENDANGERED SPECIES (1995) [hereinafter NOAH'S CHOICE].

[72] Id. at 245.

[73] Professor Rachlinski powerfully contests NOAH'S CHOICE's conclusions:

> Although Noah's Choice provides a colorful description of the Act's costs, the book fails to carefully assess its benefits. It portrays an undisciplined program created by a statute that exaggerates the value that the general public places on biodiversity. Unfortunately, Mann and Plummer's case against the Act is based only on anecdotes and cursory evaluation of evidence of the Act's benefits. . . . If the Act's principal impact

its protections. The authors do not take these as reasons to strengthen the Act. Rather, after asserting the lack of success of the ESA and downplaying collateral species protection benefits, they argue that the undoubtedly substantial cost of species preservation is a fundamental reason to back down. Their main argument then, as the book's title indicates, is that endangered species pose an inescapable loaded choice: If we as a society want to save species for whatever their charms, we would have to ratchet back living standards and pay trillions of dollars; otherwise we must regretfully override endangered species according to whatever may be dictated by the marketplace.

It is easy to say that society should extract money from developers and give it to black-capped vireos that need protection. But it is not possible to do this and simultaneously ensure that good housing is available and affordable to everyone. Or good health care, for that matter, or a good education. Embracing the goal of saving biodiversity and the goals of providing housing, health care, and education, as well as the many other goals

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on federal activity is to make it more difficult to undertake wasteful pork barrel projects like the Tellico Dam, it is surely a welcome addition to the U.S. Code.

Jeffrey J. Rachlinski, *Noah by the Numbers: an Empirical Evaluation of the Endangered Species Act*, 82 CORNELL L. REV. 356, 357, 359 (1997) (book review).

Professor Rachlinski continues, stating:

> [a]lthough others have criticized their book for failing to propose specific alternatives, Mann and Plummer need not offer such proposals. Their mission is accomplished once they reach the conclusion that the Act has no benefits. Costs without benefits are not tolerated in contemporary America, nor should they be. Mann and Plummer do not pronounce final sentence on the Act, but given their verdict, repeal is the most obvious reform.

Id. at 365. Rachlinski then undertakes an extended statistical analysis essentially refuting the book's no-benefits claim:

> In their analysis of whether the Act works, Mann and Plummer commit two critical errors. First, they fail to determine the Act's marginal impact on biodiversity. Even if 721 more species are endangered today than in 1973, in order to assess the Act's impact on endangered species, one must ask how many *more* would have been endangered or even extinct if the Act had never become law. Second, their description of the data provides a snapshot of biodiversity, but their conclusions require a short video. Data on the present status of species provide little indication of biodiversity trends. Unfortunately, Mann and Plummer overlook a wealth of data available on the status of endangered species. . . . In its 1994 report . . . the FWS observed that 58% of those species listed for twenty years or more have stable or improving populations, as opposed to 44% of those species listed for four to twenty years, and 22% of those species listed for less than four years.

Id. at 366-69. Rachlinski continues:

> If the Act remains in its present form, and current trends continue, the status of listed species can be expected to improve. Ten years hence, the percentage of currently listed species in decline will drop from roughly one-half to about one-third. This beneficial trend would likely be furthered by continuing to designate critical habitat and to develop recovery plans. If all 835 [] species on the list had both, it can be said that today only roughly one-third would be in decline. If all 835 species remain on the list for another ten years each and each obtains a recovery plan and critical habitat, 81.2% will be stable or improving.

Id. at 385-86.

we have taken up during the past two hundred years, makes our choices difficult . . . To borrow from Freud, what do we humans want?[74]

The book, in other words, is seductively written to frame a version of the classic allegedly unavoidable all or nothing tradeoff between ecology and economics.

The snail darter reveals *Noah's Choice* as a false choice. Beyond its authors' apparent linkage to the Act's industrial opposition,[75] doubts about the book's integrity come from its use of history, including the Tellico case. In the book's Chapter 6, "The Awful Beast is Back," the authors frame the snail darter as a prime example of misuse of the Act, and, significantly, ignore its economic utility function.[76] When researching the book, the authors spoke with me in an extended telephone interview during which I repeatedly stressed the "canary" function of the darter, the human economic harms and benefits it had brought to light, and the creative alternatives that had emerged from the ESA negotiations. As in hundreds of other species conflicts, the snail darter case showed that conservation need not be a draconian choice. One does not have to choose either total development shutdown to save a species, or total acceptance of whatever market players desire. Rather the darter showed how even in "extreme" cases there were opportunities to make adjustments in project timing, scale, design, and so on, so that human and ecological benefits could both be maximized by intelligent planning. For *Noah's Choice* to acknowledge these strategic aspects of the darter case would have opened the door to recognizing potential general benefits of species protection that directly contradicted the book's mission, and so they were ignored. Likewise the God Committee's economic vindication of the darter's case for species protection was sidestepped in *Noah's Choice*.[77]

Nevertheless, even a balanced analysis of endangered species protection will be forced to address some of the issues raised in *Noah's Choice*. The potentially large numbers of listable species make it impossible even to consider, never mind reverse, every anthropogenic threat of species extinction. As with national health care, implicit or explicit prioritizing and rationing are anathema yet may inevitably be necessary, though much thoughtful effort would have to be devoted to that end. Likewise, there must be systemic recognition of a difference between private property and state and federal government lands. The snail darter suit was brought under section 7 against TVA; it is far easier to justify burdening public

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74 NOAH'S CHOICE, *supra* note 71, at 213.

75 The Discovery Institute, a base of operations for one of the NOAH'S CHOICE authors, is an enigmatic entity with George Gilder as a Senior Fellow and is generally regarded as a right-wing industry-oriented think tank. The other author is married to a lobbyist for one of the major industries lobbying against the ESA.

76 NOAH'S CHOICE, *supra* note 71, at 147.

77 Instead of examining the illuminating economic record of the God Committee record the authors attempt to discredit it with innuendo: " . . . Secretary of the Interior Cecil Andrus, chair of the committee, made it clear that Tellico had never stood a chance. 'Frankly,' he said, 'I hate to see the snail darter get the credit for stopping a project that was ill-conceived and uneconomical in the first place.'" NOAH'S CHOICE, *supra* note 71, at 171.

agencies with newly-evolving public values. When private lands are burdened under section 9, especially when the burdens are severe, the calculus of fairness and perhaps constitutional due process requires consideration of some structure for negotiated accommodations.[78]

Hence the current generation of initiatives to consider amendments to the ESA, which have aroused pitched debates within the environmental community as well as between it and industry.[79] The depth of those debates will have to be plumbed elsewhere, but the darter has discrete contributions to make in this process, most of the warning variety.

C. On the Contending Forces

Beginning with the snail darter, there have been sustained marketplace pressures to undercut the legitimacy of species protection in the agencies, in Congress, and in the press, and that has continued most recently with the feature of the so-called Wise Use political movement.[80] For current reauthorization battles, industries have formed a National Endangered Species Act Reform Council (NESARC),[81] a coalition that continues the membership of many of the components of the "Project Relief" bloc that tried to turn the 104th Congress into the most dramatic rollback of environmental protections in the past generation. Given the past as prelude, it is altogether likely that the nation will be exposed to a continuing series of piquant anecdotes about the extreme irrationality of endangered species protections, like the kangaroo rat that burned a California suburb,[82] and the legendary caricature of the snail darter. Part of the strategy of the opposition to the ESA undoubtedly will be to continue the marginalization of the Act's social benefits. If the Act can be characterized as a shallow emotional impulse to protect photogenic creatures, or a non-traditional religious animysticism, then the Act becomes marginalized in its terms and justifications. The analysis and rhetoric coming from the Act's

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[78] *See* Mark Sagoff, *Muddle or Muddle Through? Takings Jurisprudence Meets the Endangered Species Act*, 38 WM. & MARY L. REV. 825 (1997).

[79] See the interchange between Environmental Defense Fund's Michael Bean and David Wilcove in *The Private Lands Problem*, 11 CONSERVATION BIOLOGY 1, 1 (Feb. 1997) and Douglas Honnald et al., *HCPs and the Protection of Habitat*, 11 CONSERVATION BIOLOGY 2, 1-4 (Apr. 1997); Sharon Begley & Daniel Glick, *The Eye of the Storm: in Today's Environmental Debates*, NEWSWEEK, July 1, 1996, at 59.

[80] *See* Andrea Hungerford, *"Custom and Culture" Ordinances: Not a Wise Move for the Wise Use Movement*, 8 TUL. ENVTL. L. J. 457, 458 (1995); *see also* Ray Vaughan, *State of Extinction: The Case of the Alabama Sturgeon and Ways Opponents of the Endangered Species Act Thwart Protection for Rare Species*, 46 ALA. L. REV. 569, 588 (1995) ("The main, stated goal for the wise use movement is indeed the annihilation of environmental groups and their influence.").

[81] The NESARC Web site is quite impressive: <http://www.nesarc.org>. NESARC will be a high-powered player in the ESA debates with what one suspects is a budget that the federal species protection program would envy.

[82] *See* Michael E. Soule, *Perspective on Endangered Species*, L.A. TIMES, Oct. 25, 1995, at B9 (asserting that ESA-imposed restrictions on habitat modification to protect the kangaroo rat were not responsible for the destruction of many California homes in 1993).

opponents is likely to track *Noah's Choice* in circumventing the available balanced arguments for species protection.

D. On the Media

The snail darter saga demonstrates how intelligent media coverage is crucial to rational national governance, and rare. Without the sunlight of intelligent press coverage, insider politics prevail. Tellico shows that it is not enough that agency administrators and members of Congress know the factual merits of a controversy. Every member of Congress had been informed of the Tellico dam's economics before the ultimate vote overriding the snail darter's protections—through extensive briefings and an individual letter to each member from the God Committee—but they also knew that America did *not* know the facts, so pork-barrel politics could roll on with impunity. To make the legislative process turn on the merits, they must be known to the public through the press; otherwise our politicians will stay with the traditional cynical insider game.

The ESA today still has its media problem. The national press largely follows the marketplace framing of issues—it's spotted owls versus jobs and revenues, salamanders versus farmers, kangaroo rats versus subdivisions. To the extent that the press does not examine the particulars of representative cases, nor explore the actual record of HCPs in practice, the Act will be seriously vulnerable to marketplace attacks.

To the extent that the press fails to discover the logical social utility role played by species as indicators, the debate will continue to be skewed toward a trivialization of the Act's social purposes. It would be extremely useful and interesting for the press to examine in retrospect or in prospect the social human values represented by endangered species in a number of classic past cases, or ongoing cases, but the past is sufficiently difficult and the story sufficiently complex and at variance with conventional wisdom that such coverage doesn't appear likely anytime soon.

E. On the Promise and Perils of HCPs.

The ESA is currently in the throes of a Delaney Clause-type debate.[83] The ESA has been notable, or notorious, for its strict "roadblock" stark prohibition terms, directly enforceable by citizen lawsuits. ESA section 7 prohibits all federal agency action which threaten listed species, and section 9 goes even further, prohibiting any act, by anyone, that "takes" a species, under a definition that includes harms from habitat disruption as well as direct harm.[84] Now, however, like the amended Delaney Clause,[85]

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[83] The Delaney Clause was enacted in 1958 and absolutely prohibited the use of any food additives which were found to cause cancer in either humans or animals. 21 U.S.C. § 348(c)(3) (1972) (codified as amended at 21 U.S.C. § 348(c)(3) (1994)). The absolute prohibition of the Delaney Clause is the source of its zero-risk label.

[84] *See* Babbitt v. Sweet Home Chapter of Communities for a Great Or., 115 S.Ct. 2407 (1995).

[85] On August 3, 1996, President Clinton signed into law the Food Quality and Protection Act of 1996, Pub. L. No. 104-170, 110 Stat. 1489 (1996), which significantly amended both the

the ESA appears to be in a process of transition away from stark, strict standards toward more qualified, subjectively-articulated, compromising standards.

With major congressional battles over reauthorization of the ESA impending, HCPs have emerged as a focus issue around which the much larger question is being debated, how, if at all, should the ESA be changed? HCPs may serve as vehicles for improving and fine-tuning protections for species and ecosystems beyond the first-generation terms of the current Act, or as a Trojan Horse designed to overthrow the Act's remarkable legal protections. Unfortunately, there is no consensus on goals, or even on how to ask relevant questions about how well the Act and HCPs are working, not to mention the almost total lack of basic data about how HCPs have been implemented in the past fifteen years since the 1982 amendments, particularly over the past four frenetic Clinton years.

Some members of the citizen environmental protection bloc are pushing ecosystems protection concepts including HCPs forward to broaden and strengthen the protections of the ESA, which admittedly is too narrow in its protections. ESA sections 7 and 9 by their terms are focused on only the most extreme species jeopardy situations. Other environmentalists seek change to pre-empt a greater market onslaught. Some corporate lobbies, and the privateer Wise User movement, seek to advance HCPs as a vehicle to reduce the protective functions of the ESA, circumventing section 7 and 9, permitting development projects to go forward. Thus, there is a danger that HCPs will become a Trojan Horse.

Ultimately, the question is how much should be added to or subtracted from the current ESA.[86] Given the pressures and legitimate needs of private property, HCPs and other vehicles for section 9 balancing will inevitably be part of the mix.

Federal Insecticide, Fungicide, and Rodenticide (FIFRA) and the Federal Food, Drug, and Cosmetic Acts (FFDCA). The most important outcome of theses amendments is that the zero-risk Delaney Clause has been repealed insofar as pesticide residues are concerned and was replaced with a determination of safety standard of "reasonable certainty that no harm will result from aggregate exposure." The recent amendments did not comprehensively repeal the Delaney Clause, but instead removed pesticide residues from its ambit by amending the FFDCA's definition of food additive to exclude pesticide chemical residues on raw or processed foods. Thus, the Delaney Clause remains in effect with regard to other food additives.

[86] At the National Wildlife Federation Conference held this past May, Professor Oliver Houck told a story about a heckler at a lecture of the great scientist Louis Agassiz, who kept insisting that Agassiz tell the audience not only about the wonders of the planet, but also what held the planet itself in space. The heckler rejected Agassiz's explanation of orbital mechanics, so Agassiz asked her what *she* thought the earth rested upon. She replied that the earth sits on the back of a big turtle. When Agassiz asked what the turtle would be standing on, she said "Another turtle. You cannot fool me, Mr. Agassiz. It's turtles all the way down!" Professor Houck argues that the heckler was right; if you want to save broad ecosystems, it's the individual species that *must* provide the handle—"it's turtles all the way down."

In HCP discussions one repeatedly hears a number of what Professor Houck calls environmental "mantras,"[87] each with HCPs as the punchline, almost all of which deserve critical scrutiny. Each of these mantras contains some truth, but note as well the uncertainties and the contentious political forces lying within them:

- "The ESA focuses on species, not ecosystems. Focusing protection on the threads when we should be focusing on the tapestries." If it is true, however, that ecosystems are fiendishly hard to define and regulate, might not abandonment of the use of individual species as a practicable legal handle on ecosystems ultimately weaken the protective enterprise?[88]

- "The ESA comes along with too little too late." This is not necessarily a good argument as some imply for doing less or nothing at all.

- "Biodiversity is the fundamental goal to be maintained." Biodiversity, however, is extremely difficult to define, and may miss the point: if an HCP allows a road through a wilderness forest or tundra, it may actually increase the number of species, but extirpate unique native indicator species. Thus prevention of extirpation may be a preferable and contrary goal to diversity per se.

- "Sometimes you have to draw the line: what do you care about, humans or animals?" This hoary syllogism captures the classic false tradeoff between ecology and economics, and avoids recognizing accommodations and the utilitarian indicator function of species conservation.

- "Private property is a different animal: what makes sense for federal lands, where aesthetic ecological goals may be okay, doesn't make sense for private lands." There is undoubtedly a valid distinction here because private property traditionally must absorb some public value burdens so long as they don't go "too far." And some of the benefits of species protection, in an impetus to foresight and sound planning, will sometimes be likewise relevant to private actors.

- "Everything is a trade-off: environmental standards are too drastic, and must be made flexible, based on administrative discretion, or market forces will repeal the whole she-bang." The lessons of environmental legal history, however, are that citizen enforcement of litigatable legal standards is crucially important to achieving statutory compliance, and delegation of standard-setting and enforcement to the malleable subjective discretion of agencies is a prescription for erosion of public values.

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[87] *See* Oliver A. Houck, *On the Law of Biodiversity and Ecosystem Management*, 81 MINN. L. REV. 869, 959 (1997). This is a superb article that everyone in this field must read and contend with.

[88] As Professor Houck argued at the NWF Conference, Agassiz's heckler was correct: if you want to identify the most credible support for the world of wildlife protection, "it's turtles all the way down!" *See supra* note 86.

F. On the ESA Utility Presumption for Private and Public Lands

The canary in the coalmine function resonates differently on private lands than in cases involving government agencies,[89] but holds legal relevance there as well. As to government agency actions, the social utility function of endangered species conservation is explicit. The God Committee process of section 7 of the ESA expressly invites consideration of the utilitarian benefits of development alternatives consistent with species protection.[90] As to incidental take exemptions for federal actions under section 7,[91] the utility balance is only implicit, but unlike petitioners for section 10 exemptions,[92] petitioning agencies under section 7 are presumably subject to a full public values balance and do not represent claims based on private property rights.

What relevance does an endangered species' social utility function hold for private parties in the section 10 incidental take process? In some cases, the presence of an endangered species on private lands may tangibly serve to benefit private interests by identifying utilitarian concerns. The Barton Springs salamander may be such a case, where the threat to the species serves to signal diminishing and contaminated water supplies necessary for private development, as well as serving to protect public health.[93]

But in most cases, and as in the spotted owl controversy, it is likely that the endangered species social utility indicator function serves *public*

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89 "Government agencies" usually means federal agencies. Note that the political divide on ESA application is usually drawn between federal and nonfederal lands and actions, with state-level agency programs usually aligned with private enterprise and the marketplace. Several recent major timber HCPs have been negotiated with state government agencies, not private companies. It at least deserves note that state government programs should be regarded in a different posture from private property interests. State government programs presumably do not hold the same constitutional regulatory takings claims against the federal government as private citizens might, and as governmental entities they partake in a *parens patriae* role that internalizes overall social value benefits involved in the regulation in a way that private property owners do not. State HCPs, therefore, could be expected to give more to species protection than HCPs negotiated with corporate interests. Instead it appears that the strong federal profile on the ESA may act to relieve state entities form their endangered species conservation functions, freeing them to play more market-oriented entrepreneurial roles.

90 Two of the criteria that the God Committee must consider when deciding whether to grant an exception are: 1) whether the benefits of such action clearly outweigh the benefits of alternative courses of action consistent with conserving the species or its critical habitat and such action is in the public interest, and 2) whether the action is of regional or national significance. 16 U.S.C. § 1536(h) (1994).

91 *Id.* § 1536(b).

92 *Id.* § 1539.

93 Dan Muller, The Consequences of Urban Development on Barton Springs and the Edwards Aquifer, *available at* <http://www.sosldf.org/news995.html>. Other possible private utility examples may include impetuses toward long-term planning in private forestry practices triggered by HCP planning for the red cockaded woodpecker, or the undoubted importance to private fishing interests of fisheries conservation measures triggered by endangered groundfish populations in the North Atlantic banks. *See* Zygmunt J.B. Plater, *Facing a Time of Counter-Revolution-The Kepone Incident and a Review of First Principles*, 29 U. RICH. L. REV. 657, 674-77 (1995).

rather than private interests. When species protections operate to identify externalized social costs and socially preferable alternatives, they normally act as a brake on private profit maximization. That is, after all, the source of most marketplace hostility to the ESA. It would be too much to expect species protection to regularly serve private entrepreneurial objectives as well.

Explicit acknowledgment of the canary function, however, can play a relevant defensive role when ESA regulatory constraints are legally and politically weighed against private property. By expanding the breadth of recognized public values served by species protection beyond ethics and aesthetics so as to include human utilities, the legitimate scope of such regulation is enhanced. Today the harms of pollution are widely recognized to justify substantial concessions from private enterprise. To the extent that the indicator function of the ESA, albeit less direct, comes to be seen to identify tangible social harms, to that extent the legitimate scope of species regulation is reinforced. Acknowledgment of the generic potential of the ESA for social utility can likewise weigh into the balance of HCP negotiations, in which the values served by species protection sometimes appear to be politically under reckoned. In this was, endangered species' natural indicator function illustrates a fundamental and instructive interconnection between Professor Sax's competing economies: the marketplace's short-term consumptive "transformative economy" and "the economy of nature."[94]

G. On the Desirability of Negotiation and Agreements

It surely is desirable to try to bring market players and their resources into serious negotiations about resolving species-development conflicts. Time and again the darters' advocates sought constructive mediation with

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[94] Joseph L. Sax, *Property Rights and the Economy of Nature: Understanding* Lucas v. South Carolina Coastal Council, 45 Stan. L. Rev. 1433, 1442 (1993). Professor Sax explains:

> There are two fundamentally different views of property rights to which I shall refer as land in the "transformative economy" and land in the "economy of nature." The conventional perspective of private property, the transformative economy, builds on the image of property as a discrete entity that can be made one's own by working it and transforming it into a human artifact. A piece of iron becomes an anvil, a tree becomes lumber, and a forest becomes a farm. Traditional property law treats undeveloped land as essentially inert. The land is there, it may have things on or in it (e.g., timber or coal), but it is in a passive state, waiting to be put to use. Insofar as land is "doing" something-for example, harboring wild animals-property law considers such functions expendable. Indeed, getting rid of the natural, or at least domesticating it, was a primary task of the European settlers of North America. An ecological view of property, the economy of nature, is fundamentally different. Land is not a passive entity waiting to be transformed by its landowner. Nor is the world comprised of distinct tracts of land, separate pieces independent of each other. Rather, an ecological perspective views land as consisting of systems defined by their function, not by man-made boundaries. Land is already at work, performing important services in its unaltered state. For example, forests regulate the global climate, marshes sustain marine fisheries, and prairie grass holds the soil in place. Transformation diminishes the functioning of this economy and, in fact, is at odds with it.

Id.

TVA, but were rebuffed by a leadership understandably determined to avoid the project's public merits if at all possible. The darter story affirms that even the allegedly most extreme conflicts are likely to be susceptible to good faith accommodations and resolution. If TVA had been willing to modify its initial project plan, a beneficial accommodation between the ecological imperatives and the Tellico project's avowed objectives could have been achieved. If there is a strong perception that the ESA will be enforced, the history of the ESA shows that rational accommodations of public and private interests can be achieved.

H. On the Need For Clear and Enforceable Standards

The Tellico litigation underscores the absolute necessity of clear stark standards for statutory enforcement in politically-charged settings, particularly citizen enforcement. The standards for approval of an HCP plan quite open to subjective variation in implementation, depending upon who is in charge. When incidental take permits are sought, the harms involved are almost always "incidental." It is only required that planning "to the maximum extent practicable, minimize and mitigate the impacts of such taking."[95] Section 10 is a flexible discretionary call by the Secretary upon whom political pressures are focused, as are the requirements that the permitted taking "not appreciably reduce the likelihood of the survival and recovery of the species in the wild,"[96] and "the permit shall contain such terms and conditions as the Secretary deems necessary or appropriate to carry out the purposes" of the HCP.[97] Note that although these standards cannot be bent to allow jeopardizing the continued existence of a species (the Secretary is barred from so doing by Section 7), the standards abandon the prior (Section 4) goal of affirmative *recovery* for listed species.

When an HCP is in place it can be enforced by any participant in the negotiation process through which it was executed. This enforceability may extend to environmental groups that have been allowed to participate. However, there is no direct enforceability of HCP agreements under the ESA and the official HCP Handbook expressly suggests that in order to encourage project promoters to enter into HCPs there should be a clear exclusion of third party beneficiary claims.[98]

I. On the Need For Citizen Enforceability

The snail darter vividly illustrated that federal agencies and the marketplace on their own cannot be counted on to enforce the law, even when the economics of the public interest manifestly support compliance.[99] The pressures on the official players are too substantial, constant, and intru-

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[95] 16 U.S.C. § 1539(a)(2)(B)(ii) (1994).

[96] *Id.* § 1539(a)(2)(B)(iv).

[97] *Id.* § 1539(a)(2)(B)(v).

[98] *See* HCP HANDBOOK, *supra* note 70, at app. 9, Template HCP Implementation Agreement § 14.8.

[99] At one point an official in the Department of Interior asked me please to sue his department so that they could be freed politically to do what they knew they should.

sive. We cannot rely on the old bi-polar paradigm, whereby faithful government agency watchdogs protect us all from marketplace excesses. The backstop of citizen enforcement under ESA section 11,[100] as with the pollution statutes, has been a vital credibility factor that drives the bureaucracy's implementation of the law.

It therefore is very troubling that current HCP strategies may tend to limit citizen enforcement. Citizen enforcement suits require clear statutory standards, not fuzzy subjective agency discretion, yet terms and procedures in the 1982 and proposed amendments tend to rely on agency discretion. If the Secretary does not choose to see and prosecute violations of HCPs, judicial deference to agency discretion makes it difficult for citizens to prosecute. The United States Fish and Wildlife Service (USFWS) itself expressly proposes that the public not be granted the status of third-party beneficiaries; this prevents them from enforcing HCP agreements contractually.[101] If eligible species are derailed from being listed under the terms of Candidate Conservation Plans, of which the USFWS is currently so enamored, citizen enforcement of the plans or ESA provisions is effectively stymied.[102]

J. On Avoiding Preemptive Capitulation

At critical moments in the snail darter story agency officials only narrowly resisted pressures to undercut the factual record. Ultimately, in forty-two seconds, the House of Representatives overturned fact and law.[103] Close observers of Washington D.C. are often shocked by the peremptory volatility of the legislative and regulatory processes, which are so subject to lobbying pressures that the intrinsic merits of a matter often seem only accidentally to play any role in its resolution. Powerful extrinsic pressures can lead to ill-considered, preemptive capitulation, both in the agency HCP implementation process under the 1982 amendments and in the ongoing legislative process. There is a real danger that in Washington's hothouse climate the congressional, executive and citizen defenders of the societal goals of the ESA will make unnecessary preemptive erosions in the existing statutory framework.

Has the HCP process been a salutary rational adjustment process to achieve necessary protections of species while allowing necessary accommodations with marketplace enterprises, or is it an invitation to low-visibility, preemptive capitulation by bureaucrats under pressure? The answer of course depends in part upon your definitions of the respective necessities and upon how statutory standards are applied and enforced in practice.

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100 16 U.S.C. § 1540(g)(1)(1994).

101 *See* HCP HANDBOOK, *supra* note 70, at app. 9, Template HCP Implementation Agreement § 14.8.

102 *See* 16 U.S.C. § 1540(g) (1994). Citizens could theoretically sue the Secretary to force a listing under section 4, and then sue violators to try to enforce the provisions of section 7 or section 9, but this would be quixotic.

103 *See supra* Part III.C.

An example of the promise and perils comes from the USFWS's innovation of "candidate conservation agreements (CAAs)."[104] CCAs are agreements made with private and state parties that a species or population will *not* be listed by the Department of Interior (DOI) if certain steps are taken.[105] If this occurs well in advance of endangerment, it offers a desirable, expanded, early-anticipatory protection of species. If CCAs are employed at the eleventh hour, however, to head-off prepared listings for species that are already seriously endangered in fact, they operate (perhaps in violation of section 4's listing obligation) to undercut citizen enforceability which is generally impractical unless species are listed.

Unfortunately there is no consensus on goals, or even on how to ask relevant questions about how well the Act and HCPs are working, not to mention the almost total lack of basic data about how HCPs have been implemented in the past fifteen years since the 1982 amendments, particularly over the past four frenetic Clinton years.

As usual, the reality of environmental law turns upon who will do what under the terms of statutes and regulations, and God is in the details. It becomes important to review what the actual implementation of HCPs in the past has been in order to gauge what changes are necessary or acceptable for the future.

K. On the Need For Good Information

Just as the Tellico controversy was hampered by difficulty in getting biological and economic data—notably an assessment of the attractive benefits and costs of altering the project to a river-based format to protect the species—the landscape of the HCP debates is further obstructed by the lack of anything but selective anecdotal data on what has actually been going on with HCPs on the ground. We need both good science and good history.[106]

It would be useful to know how in practice the Service is interpreting pivotal phrases in the 1982 HCP amendments—about what measures are "practicable," and how many takes "will not appreciably reduce the likelihood of the survival and recovery of the species in the wild."[107]

If a federal agency action is linked to a private developer who faces a potential section 9 take, it can link the project to a federal agency action or permit substantial benefits follow. No HCP is required under the sec-

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104 The Department of the Interior announced its proposed rules for candidate conservation agreements on June 12, 1997. 62 Fed. Reg. 32,189 (June 12, 1997) (to be codified at 50 C.F.R. pts. 13, 17).

105 *Id.*

106 In this area, we must always worry about good science. TVA scientists worked for the dam building division, with excruciating ethical dilemmas: "Whose bread I eat, his song I sing" could be sound pragmatic advice for biologists who want their families to eat. It sometimes takes courage to get important but politically unwelcome data into the public record. Like most public interest lawyers, I would never get very far without off-the-record tip-offs from insiders with a conscience.

107 Endangered Species Act Amendments of 1982, Pub. L. No. 97-304, 96 Stat. 3760 (1982) (codified as amended at 16 U.S.C. § 1539(a)(2)(A) (1994)).

tion 7(b) incidental take exemption provisions, and the agency also will usually pick up the tab. It would be useful to know whether accordingly there has been a tendency to "federalize" incidental takes.[108]

It would be useful to know what the quality of existing HCPs has been. Anecdotal experience with one particular HCP, the State of Massachusetts' Atlantic Coast Piping Plover HCP seems to be a superb example of the genre. Its burdens on dune buggies and other coastal economic interests are substantial, but accommodations are real. The standards to be fulfilled are clearly spelled out, citizen enforcement appears feasible, and the incidental take permit is expressly experimental, lasting only three years. On the other hand, anecdotal reports indicate that some recent HCPs are superficial.[109] Only one HCP has been challenged in court, the prototypical San Bruno Mountain Mission Blue Butterfly HCP.[110] The San Bruno HCP survived court review, but its terms and physical consequences have been bitterly criticized by local observers.[111] Have the Clinton HCPs been at least as good as the San Bruno HCP?

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[108] *See* Patrick A. Nickler, Research Note, *A Tendency to Federalize Incidental Take Exemptions: Shifting Private Development Projects From ESA Section 10(a) to Section 7*, in ZYGMUNT J.B. PLATER ET AL., ENVIRONMENTAL LAW AND POLICY, 1997-98 TEACHER'S MANUAL UPDATE 34 (1997); *see also* Christopher H.M. Carter, Note, *A Dual Track for Incidental Takings: Reexamining Sections 7 and 10 of the Endangered Species Act*, 19 B.C. ENVTL. AFF. L. REV. 135, 153-54 (1991).

[109] What would most of us say about an HCP that would allow private foresters, when they see an endangered woodpecker nesting inside a corporate tree, to search out a similar tree in a federal forest within twenty miles, drill a nesting hole in the federal tree, wait thirty days, then cut down the private stand? That would seem like an inappropriate standard, especially if the private party is a large corporate landowner with thousands of acres of surrounding woodlands. In reality, the evasions of the Act's stringency's seem to be most available to the larger private and public-private enterprises that need them least. The attacks on the spotted owl's protections are made in the name of and backed by the image of rugged little guys, tree-cutters, whose jobs would actually *increase* with the implementation of selective cutting under owl-protection regimes.

[110] *See* Friends of Endangered Species, Inc. v. Jantzen, 760 F.2d 976, 982-84 (9th Cir. 1985). The court's review seems largely to have turned on deference to the agency. Severe criticism of HCPs continues. *See* Tara Mueller, *Habitat Conservation Plans: Not All They're Cracked Up to Be*, *available at* <http://www.humnat.org/epic /HCPfact.htm>.

[111] Enacted in 1982, the San Bruno Mountain HCP has served as a prototype for HCPs. The plan allowed for limited development on 3600 acres of private lands which are the sole known habitat of the Mission Blue butterfly, with landowners agreeing to leave 81% of the mountain undeveloped. Friends of Endangered Species, Inc. v. Jantzen, 760 F.2d 976, 980 (9th Cir. 1985). Furthermore, all lots were burdened with covenants, requiring the owner to pay an annual assessment to fund conservation efforts on the mountain. The HCP withstood judicial scrutiny in *Friends of Endangered Species*, 760 F.2d at 984. Other legal challenges to the San Bruno HCP also have been rejected. *See, e.g.*, *W.W. Dean & Associates*, 236 Cal. Rptr. at 17. A thorough survey of some environmentalists' distaste for the HCP is available from Savannah Blackwell, *The Sack of San Bruno*, S.F. BAY-GUARDIAN, Dec. 11, 1996, at 1. Current information is available by mail from San Bruno Mountain Watch, P.O. Box AO, Brisbane, CA 94005; (415) 467-6631. The information is also available from several on-line sources, including <http://www.humnat.org/hcp.htm>, <http://www.humnat.org/epic/HCPfact.htm>, and <http://www.defenders.org>. The environmentalists' arguments are summarized as follows:

> There was a big problem with the approach, which is that they traded the prime habitat for the lesser habitat. It was a flawed approach from the start. The concern

V. Conclusion: A Noah Presumption

The Endangered Species Act (ESA) reauthorization debates present us in the months ahead with a challenge to craft a process that merges wise planning and species preservation, avoiding the short term pressures urging preemptive capitulation. We need wise and enforceable legal standards, procedural and substantive, and the current ESA with its 1982 Habitat Conservation Plan (HCP) amendments falls short of that ideal. The tone of this article, skeptical of the forces arrayed against species protection, reflects a warning that without good enforceable fences, HCPs may make bad neighbors.

The social 'canary-in-the-coalmine' function of the ESA often provides a compelling utilitarian argument for species protection laws. We must take care not to risk losing that utilitarian societal function in pragmatic compromises that fail. If the ESA is further modified with an insufficient and impotent HCP process substituted for the enforceability of section 9, one of many serious consequences will be the loss of the canary function. Making narrowly-conceived HCPs is somewhat like designing gas masks for our canaries. Given the inexorable pressures, unless all HCPs are held to enforceable high standards, those gas masks are quite likely to leak.

The assertion of the function of the ESA as an indicator and triggering element of legal protection for social policy interests cannot claim that that function occurs in the case of every endangered species. There are far too many species, and far too many unknowns, to assert a plenary role for this function, but to do so would also miss the point that protection of endangered species, like protection of many other social policies, should not be implemented or abandoned dependent upon its direct payoff in every case. The job of most socially dictated regulations is to implement civic values that the market place cannot or will not take account of. If a particular protection has a tangible payoff, it is likely already to be incorporated within market mechanisms. The existence of the social utility function of endangered species protection, therefore, is best regarded as one more reason, in addition to moral and aesthetic reasons, that society

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> was that if you tried to get what was the best environmentally that it would seem so outrageous that the Endangered Species Act would go down in flames . . . we should have protected the best habitat. You don't give away the best habitat and take something marginal and say it works.

Ellen McGarrahan, *The Mission Blue Mission*, S.F. Weekly, Aug. 9, 1995 (quoting Julie Bott of the Sierra Club). The San Bruno HCP arose from unique circumstances. San Bruno Mountain sits in the middle of a highly developed, suburban area near San Francisco. As a result, the land was very valuable by the time its development was first proposed in the 1970s, and it would have been politically difficult to pay the high costs necessary to stop development completely. Furthermore, even if no development took place, the Mission Blues on the mountain still would have faced extinction because nonnative plants in the area were encroaching on the grasslands on the mountain which form the Mission Blue's critical habitat. By enacting the HCP and allowing limited development, local officials avoided the high costs associated with nondevelopment, while simultaneously securing perpetual private funding for the proactive steps which were needed in any event to preserve the critical habitat on the mountain. It is likely that the tradeoffs made in recent HCPs have been far less principled than tradeoffs that were made at San Bruno.

should continue to implement a *presumption* that endangered species will be protected and will not be threatened by particular human activities unless a process of scrupulously careful review shows unavoidable and overriding human necessity.