Habitat Conservation Planning and the End of Endangered Species "Trainwrecks"

Bruce Goldstein
Rm. 106, Department of Urban Affairs and Planning (0113),
Virginia Tech, Blacksburg, VA 24061
Brugo (at) vt.edu

Abstract

This essay explores why Clinton-era initiatives in Habitat Conservation Planning (HCP) were so successful in reducing conflict over endangered species nationwide since the early 1990's. After describing the origins of the 1973 Federal Endangered Species Act (ESA) during a brief moment of opportunity for innovative environmental law, I follow the riding tide of opposition to the ESA from the late 1970's onward. I then review the legislative history of the HCP provision of the ESA, which established the conditions under which private landholders and non-federal governmental jurisdictions can kill a limited number of endangered animals or eliminate a portion of their habitat. I describe the proliferation of large-scale regional HCPs after the Clinton administration "sweetened the deal" for HCP permit applicants, and consider why applicants found the HCP initiative preferable to continuing to press for relief from the courts or legislature. This reinvigorated HCP program was also acceptable to the environmental community, many of whom reasoned that HCPs offered species protections that were otherwise unavailable under strict enforcement of the ESA. In addition to describing the perceptions of the major antagonists over endangered species policy to these substantive changes in HCP provisions, I explore how the federal wildlife agencies implemented the new HCP provisions in a manner that was integral to the program's success. The agencies permitted private landowner and public jurisdiction applicants considerable flexibility in plan preparation, especially in terms of inviting or excluding participation by other stakeholders. I conclude that the agencies' hands-off approach to plan preparation provided public jurisdictions and private landowner applicants with powerful incentives to prepare plans in a manner that was suited to their particular constraints, opportunities, and capabilities.

The Endangered Species Act[1]

Origins

Habitat conservation planning is an element of the Federal Endangered Species Act (ESA), a law that provided an unprecedented degree of protection to habitat and species. The ESA was one of the laws passed in the few years following the first Earth Day on April 22, 1970, which signaled the political importance of environmental concerns such as population growth, pollution, and endangered species. Some of the other environmental laws of this time shared the ESA's aggressiveness by setting strict prohibitions on the actions of private citizens as well as governmental jurisdictions, such as the 1972 Federal Water Pollution Control Act Amendments (Clean Water Act). The ESA contained mandatory provisions to protect species threatened with extinction and the habitats on which they depend. It placed these restrictions on both government agencies and private citizens, and explicitly excluded any consideration of the economic impact of applying these restrictions. The ESA's preamble stated that "species of fish, wildlife and plants are of esthetic, ecological, educational, historical, recreational, and scientific value to the Nation and its people". With this broad rationale, the ESA applied its protection to a wide taxonomic range of species, including invertebrates but excepting micro-organisms.

The passage of the ESA was due to a confluence of developments: an effective and capable federal bureaucracy had the capacity to implement wildlife protection, there was strong public support for species survival, high profile species like the American eagle were going extinct, and a legislative window of opportunity had opened allowing for the Congressional mandate of restrictions on one of American's most cherished values, individual control of private property. The law actually gained regulatory authority and scope as it passed through the House and Senate with little opposition, and the ESA was signed into law by President Nixon on December 28, 1973.

Contents

The ESA was assigned for administration to the Fish and Wildlife Service (FWS) in the Department of the Interior, as well as the National Marine Fisheries Service (NMFS) in the

[1] This description of the ESA is largely drawn from the Stanford Environmental Law Society (2001), Timothy Beatley (1994), Brian Czech and Paul Kausman (1998), and Reed Noss, Michael O'Connell and Dennis Murphy (1997).

Department of Commerce, which assumed responsibility for certain anadromous (e.g. salmon) and marine species (both agencies are hereafter referred to as the "Services"). The Services had a long list of responsibilities under the ESA. They coordinate the listing process, designating where a species "critical habitat" was located, and prepared recovery plans for species. Species could be listed in two ways, with different levels of protections. Endangered species are those that were in imminent danger of extinction, and threatened species were likely to become endangered within the foreseeable future. The ESA mandated that considering whether species should be listed should be based solely on the best available scientific evidence, with economic concerns explicitly excluded from consideration.

The prohibitive power of the ESA was concentrated in Section 7 and Section 9 of the Act. Under Section 7, the Services were empowered to evaluate potential threats to species from the permitting or land management activities of all of federal agencies, including their own actions. The Services were obligated to recommend changes to a federal agency's activity if it would threaten the continued existence of the species or significantly modified its critical habitat. If altering the federal agency's activity was impossible the Services were required to forbid the activity altogether. Under Section 9, activities on private and non-federal public lands were prohibited if they "take" an endangered animal species[2], broadly defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.". Court decisions later applied this definition of take not only to individuals of the species but also to any alteration of essential habitat, with violators facing fines and even jail terms. The ESA also contained provisions for funding state efforts to conserve endangered species, and mandated that the Services enter into cooperative agreements with state wildlife agencies.

Controversies

While the taxonomic range and prohibitive power of the ESA were not initially appreciated, this ignorance was dispelled during the famous conflict over the construction of the Tellico dam on the Little Tennessee river. In 1975, a biologist opposed to the almost-completed federal dam found a previously unknown three-inch perch in the river reach that was to be flooded and decided to call it the "Snail Darter". The Snail Darter was quickly listed as endangered, since it

[2] Plants received lesser, but still significant, protections.

was only found in a stretch of river that was about to be flooded by the dam, and environmental groups then sued to enjoin the completion of the dam. After trial and a series of appeals, in 1978 the Supreme Court ruled that the plain language of the ESA forbids any consideration of economic implications in evaluating whether an activity may cause a listed species to become extinct. Many Congressional representatives were astonished that the law could imperil a hundred million dollar federal investment in order to protect such an obscure and unremarkable species, and Congress amended the Act in 1978 to provide a means for vacating endangered species protections in favor of other societal objectives. Responsibility to make this decision was assigned to a group of high level political appointees, but the political and moral consequences of consciously voting for extinction are so daunting that this so-called "God Squad" has rarely been convened. Another amendment Congress made to the ESA at the time had a greater impact – it tied the listing of new species to designation of critical habitat, which requires consideration of economic impact. This time-consuming and expensive provision, and the rising political opposition to the ESA, prompted the Services to withdraw over two thousand species from the listing process during the first years of the Reagan administration.

From this point on, only a continuing succession of lawsuits by environmental groups have impelled the Services to list additional species. The central role that environmental groups play in ESA implementation is facilitated by the way that the law eliminates many of the usual impediments to establishing legal standing. The ESA permits citizens and private organizations to initiate new species listings, which they have done for many politically sensitive species, such as the Northern Spotted Owl. When citizens propose a species for listing, the Services are obligated to rapidly respond to the proposal, and be prepared to defend their judgment in court. Citizens also have significant enforcement powers in the ESA, including the ability to secure injunctions against private landowners and governmental entities who violate the ESA. Citizens and private and non-profit organizations can also legally challenge the procedural and substantive integrity of the Service's judgment over whether another federal agency's activities cause a species to be in "jeopardy" (section 7) and whether a non-federal government or private landowners is engaging in species "take" (section 9). Citizens can also force the Services to perform nondiscretionary actions, such as the designation of critical habitat for listed species.

Habitat conservation plans[3]

Ten years after the passage of the ESA, a provision was added to the ESA allowing private landowners and local and state public jurisdictions to regain some control over their restricted land by writing habitat conservation plans (HCPs), which established the conditions under which private landholders are can kill a limited number of endangered animals or eliminate a portion of their habitat.

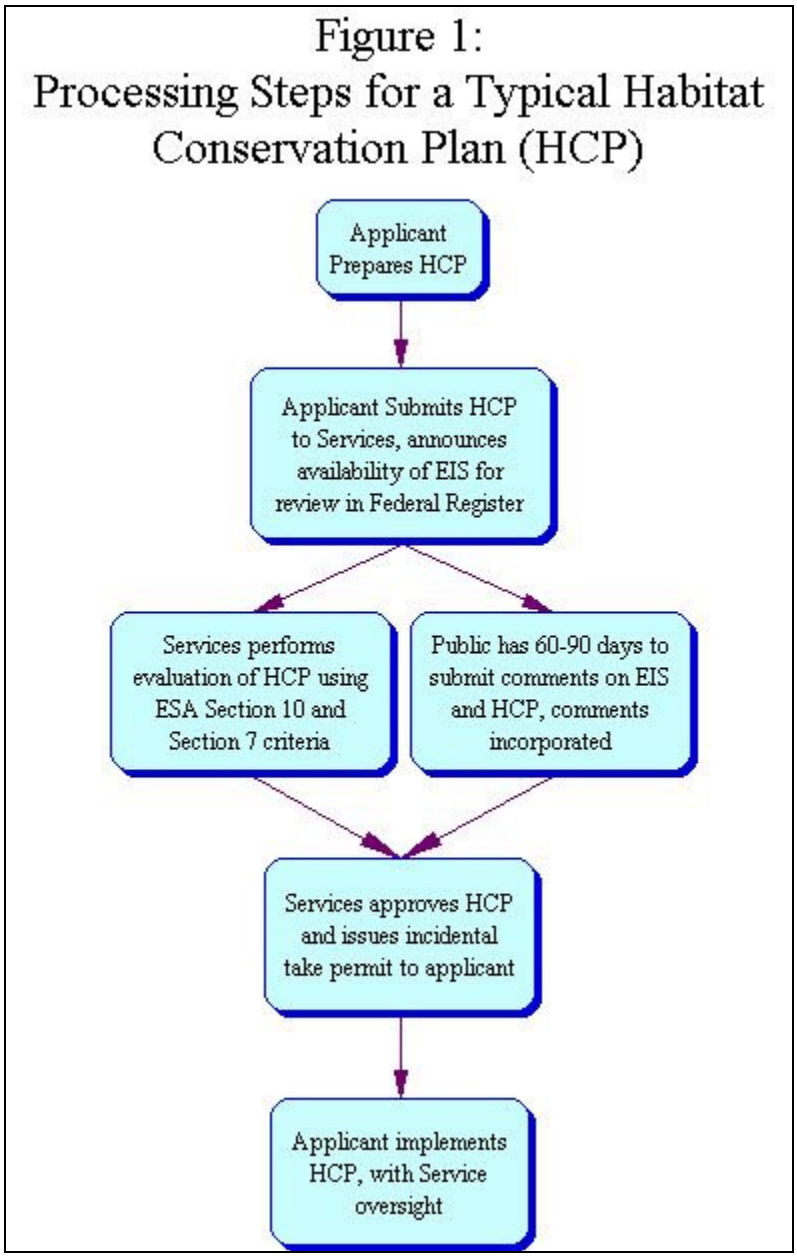
While enforcement actions against private landowners and prohibition of federal actions under the ESA were quite rare, a few well-publicized cases created a perception of unjust use of government power among certain property owners and state and local governments. This perception was particularly strong in the western states, where a long-standing resentment of federal control had coalesced into a political movement called the "Sage Brush rebellion". Counteracting this increasingly fierce opposition to the ESA among particular landowners and property rights advocates was wide public support for the ESA, especially in urban centers. In an attempt to find middle ground, Congress amended the Act during the 1982 reauthorization hearings to create an exception to the strict Section 9 prohibition of "take" of endangered species by private landowners and non-federal public agencies. Congress created Section 10(a), which established the conditions under which private landholders could kill a limited number of endangered animals or eliminate a portion of their habitat, as long as this occurred as a by-product of construction, resource harvesting, or other legal activity. The Services issue a permit for this "incidental take" in exchange for a commitment to abide by the terms of a habitat conservation plan (HCP).

Congress modeled the HCP program on a pilot planning effort at San Bruno Mountain, one of the few large undeveloped areas of private land adjacent to the City of San Francisco. A developer was permitted to build homes there, in exchange for a commitment to dedicate about ninety percent of the mountain for the permanent conservation of the endangered Mission Blue butterfly, and provide funds for ecological monitoring, restoration and management of the butterfly's habitat. A multi-year ecological study of the butterfly's biology was conducted before the plan was drafted, and Stanford

[3] This account is informed by Beatley (1994), the US Department of Interior (USDOI 1996) handbook on HCP procedures, and Hood (1998), who provides an environmental perspective on HCP's administrative guidelines.

University Professor Paul Ehrlich was hired as a independent peer reviewer to certify that the plan was based on sound science.

With the notable exception of requiring this type of scientific review, this amendment to the ESA codified the basic elements of the San Bruno Mountain experiment. Section 10(a) laid out the following steps to completing an HCP (see Figure 1):



From 1982 to 1992, HCPs remained unfamiliar to most landowners, and only twelve plans were submitted and approved. The HCP program was not promoted by the Services, and some

potential applicants were concerned that the federal government might renege on the terms of the agreements if the species continued to decline toward extinction, which often depended on circumstances beyond the landowner's control. One attorney for landowners summed up this sentiment when he questioned whether it was, "… reasonable public policy to require landowners to convey away their property only to have the government come back later (for reasons completely unrelated to the landowners performance of his obligations) and say "Surprise – we need more land!" (Thornton 1997:66).

Lets Make a Deal

Policy innovation and promotion

HCPs were an obscure, little-used provision of the ESA until the early 1990's, when Clinton Administration Interior Secretary Bruce Babbitt set about making HCPs the centerpiece of the administration's strategy to reduce political fallout over endangered species and save the ESA from legislative evisceration (Baur 1997:11; O'Connell 1997; Baur 1997). By the early 1990's the "sage brush rebellion" of the Reagan era had metamorphosed into the "wise use movement", a loose confederation of ranchers, miners, public lands recreationists, and landowners who felt that the ESA and other federal laws violated both their private property rights and their right to unrestricted access to public lands (Echeverria and Eby 1995). Rather than reauthorize the ESA in 1992, Congress chose to fund it in one-year increments (an approach that continues to this day), and bills to weaken the ESA were introduced in both houses of Congress, boosted by the deregulatory "Contract with America" that propelled the 101st Congress to power. Wise Use groups and their political allies also fought to undermine the ESA and other environmental laws and regulations on a variety of other fronts, promoting legislation to require federal compensation for any regulatory "take" of private property[4], lobbying against funding for endangered species research (Ehrlich and Ehrlich 1996), and challenging federal resource management officers in the field through anonymous acts of sabotage or by claiming local authority over federal land.

Interior Secretary Babbitt aimed to counter opposition to the ESA by demonstrating that HCPs allowed the law to be enforced without precluding land development and resource extraction. He

[4] "Take" is a useful mnemonic for encapsulating most conflicts over endangered species: one side opposes property "take", the other side opposes species "take".

also argued that the purpose of ESA listing was not permanent protection for species, but rather recovery and removal from the list. He backed up this argument by delisting the gray wolf, bald eagle, and ten other species, despite the belief of many conservation groups and scientists that these species should remain protected.

Babbitt saw delisting and the HCP program as two ways to reduce political pressure on the Services while also reducing their work backlog. The Service's budget for endangered species issues had been held constant during the 1980's and early 1990's, despite an ever-increasing workload as more species were listed and more lawsuits filed. Just in the five years between 1990 and 1995, formal consultation on development projects increased by two hundred and eighty percent, and the number of species listed grew by thirty seven percent (Hoffman, Bazerman, and Yaffee 1997). In fiscal 1994, Congress appropriated $67.5 million for the FWS endangered species program, which amounted to only 1.5 % of the budget of the Environmental Protection Agency (Hoffman, Bazerman, and Yaffee 1997). Accordingly, the Services found it difficult to perform all the duties enumerated in the ESA, and had especially fallen behind in designating critical habitat and writing and implementing recovery plans for listed species.

Large-scale HCPs were an opportunity for the Services to reduce their workload by devolving their authority to state and local jurisdictions, who would have the authority for administering the incidental take permits. Rather than having an ever-increasing torrent of Section 7 biological opinions to write and Section 9 enforcement actions to pursue, the Services would only have to monitor compliance in areas where an HCP was in force, and their enforcement action would be limited to wielding the threat of permit revocation if the HCP fell short of its goals and commitments. Secretary Babbitt also believed that HCPs could bring some of the Service's harshest opponents into a cooperative relationship with the government, and even make them advocates of increasing Service budgets in order to efficiently process their HCPs.

The applicant community: sweetening the deal

Interior Secretary Babbitt strategy for increasing applications for HCPs relied principally on increasing the incentive to apply. Some of these incentives streamlined the permitting process. The administration created a new category of "low impact" HCPs that were quickly reviewed by the Services and did not have to complete a full environmental impact statement (EIS). The Services also attempted to make the planning process more consistent and transparent by

preparing an official handbook on how to prepare HCPs (U.S. Department of the Interior 1996). The HCP handbook provided applicants with a partial guarantee of procedural uniformity, allaying permit applicant concerns about being subject to the interpretive discretion of regional and district Service staff, who were often transferred in the midst of lengthy plan preparation processes. The administration also increased the money available for planning grants, targeting this money at larger area, multi-species HCPs.

In addition to streamlining plan preparation, Babbitt expanded the regulatory assurances that successful HCP applicants received. The "no surprises" guarantee was most significant of these assurances. "No surprises" released the HCP permit holder from having to provide any more money or land for species protection over the duration of the permit, regardless of how badly the species was doing. This was very attractive to potential applicants, particularly to private developers whose cost of lending would be reduced by their ability to secure this guarantee[5]. The "no surprises" guarantee also made more comprehensive multi-species HCPs more attractive to landowners, who could indemnify themselves against all potential species listings by covering every native species in the area that might foreseeably become listed. While understanding the life history and habitat requirements of all of these species was a daunting task, applicants could reduce this complexity by preparing the plan using a habitat-based approach. Conserving by habitat reduced the need for detailed life history studies of every species included in the permit, and also reduced the need to keep close watch on every covered species in order to remain in compliance with an incidental take permit (Monroe 1998:14; Vogel and Hicks 2001).

Potential applicants were also attracted to the new adaptive management provisions of HCPs. As first coined by Holling (1978) and understood in the scientific community (e.g. Noss, O'Connell, and Murphy 1997:133), adaptive management meant an active research program that tests different management hypotheses. For example, scientific monitoring of the effects of deliberate overfishing could help determine the maximum sustained yield of a fishery. HCPs strayed from this original definition of adaptive management and defined adaptive management as an obligation of landowners to commit more money and land to address "foreseeable circumstances" that were specified in the written HCP, such as improved scientific assessment of habitat conditions or drastic ecological circumstances, like prolonged drought or climate change

[5] Michael O'Connell of the Nature Conservancy of Southern California, personal communication, February 2000.

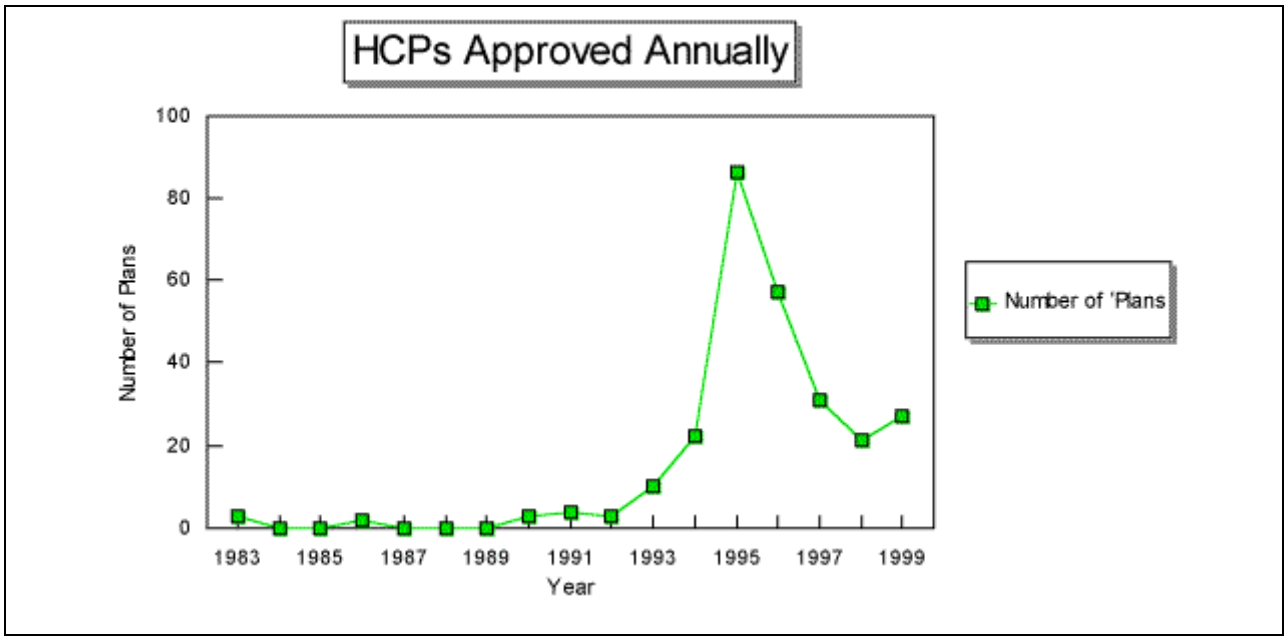
(Walley 1996), Scientists and environmentalists supported the adoption of adaptive management provisions in HCPs because they felt that adaptive management was a way to place limits on the degree that the "no surprises" guarantee freed permit holders from fiscal responsibility if species declined or subsequent monitoring showed that assumptions about species range or behavior were inaccurate (Walley 1996; Jackson 1997). From the landowners perspective, adaptive management provisions in an HCP were also attractive because they provided a way to acknowledge scientific uncertainty during the permitting process without having to spend time and money on additional ecological studies (Dohner and Smith 1997; Baur 1997). The limited scope of "foreseeable circumstances were also attractive to HCP permit applicants. For example, the adaptive management provisions within the HCP prepared by the Plum Creek timber company in Washington State circumscribed the kind of circumstances the company was obligated to redress, and included a guarantee that the federal government will be the first land donor if additional lands were required (Hicks 1997; Monroe 1998).

A vast increase in HCPs

In the first five years of the Clinton administration, from 1992 to 1997, the administration reforms encouraged widespread use of the HCP provisions by private landowners and state and local governments. Over two hundred new HCPs were approved by the Services, seventeen times as many as had been issued between 1982 and 1992 (see Figure 2). This flurry of HCPs covered over 300 different species occupying approximately twenty million acres of land (Aegnst et al. 1997), an area equal to the size of the State of Maine.

Figure 2: HCPs Approved Annually 1982-1999[6]

[6] Obtained from Defenders of Wildlife HCP database website, http://www.defenders.org/hcp/charts.html.

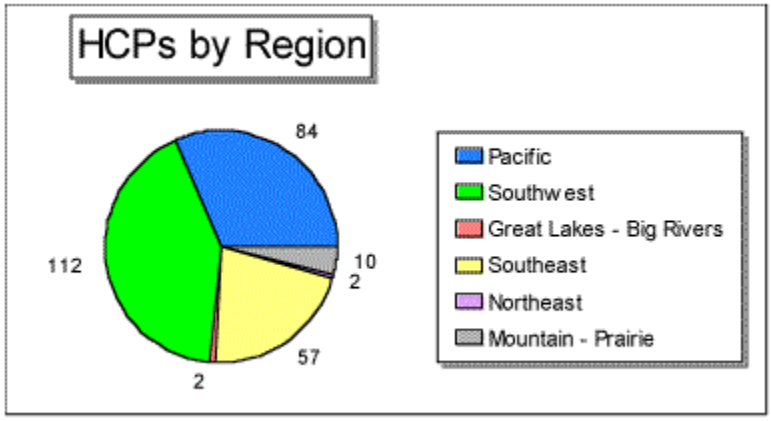


These numbers alone don't fully capture the ecological significance of these new HCPs. Planning efforts were concentrated in the areas of the nation that were the most biodiverse, where endemic[7] species were most abundant, and where conversion of habitat to human uses had moved slowly over the initial centuries since the European conquest of the continent, but was now proceeding very rapidly. The area of greatest HCP activity were in the three states on the Pacific coast, from the coastal sage scrub of southern California to the vernal pool wetlands of the central valley and throughout the northern forests of California Redwood and Douglas Fir ranging up to the Canadian border. Land ownership and use were influential in determining which biologically diverse regions were particularly heavily enrolled in the HCP program. For example, in the Pacific Northwest, large private timber companies were already convinced that federal government had the power and the intention to protect two birds, the Northern Spotted Owl and the Marbled Murrelet, as well as variety of salmon species even if it reduced the industries' capacity to extract a profitable timber yield from their lands. Accordingly, many large timber companies including Weyerhaeuser, Plum Creek, and Simpson Timber embraced the opportunity to negotiate HCP agreements. By 1997 nearly thirty percent of commercial forest land in the Pacific Northwest (about three million acres) was enrolled in the HCP program (Cullinan 1997). Other regional HCP hotspots included the Texas "hill country" around the fast-growing city of Austin, and in the southeastern states, where Longleaf Pine forests were being

[7] Endemic species are confined to a small geographic area.

converted to faster-growing Slash and Loblolly Pine and shade-tolerant hardwoods, which are poor habitat for the Red-cockaded Woodpecker. This emphasis is reflected in Figure 3 which breaks down where HCPs were located regionally.[8]

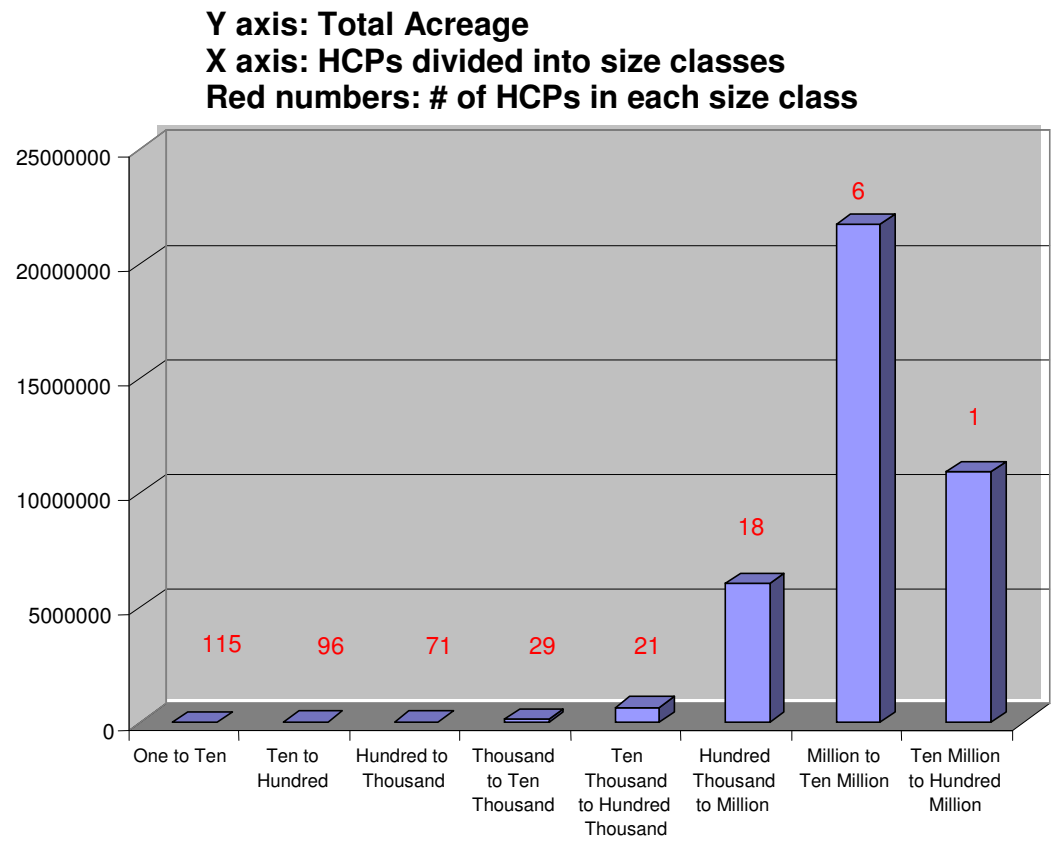
Figure 3: Regional location of HCPs 1982-1999[9]



Throughout this period of HCP program growth, the median size of the HCP planning areas remained constant, although the size range increased, from an HCP on a tiny building lot in Florida of less than half an acre to a plan that covered over three million acres (Kareiva et al. 1999). While there were few plans toward the upper end of this size range, these large area plans accounted for the vast majority of the total acreage entered in HCPs (see Figure 4).

[8] Note that the dominance of the southwest in this figure is a misleading indicator of overall regional importance, because it includes 60 small-area HCPs prepared around the Austin area.
[9] Obtained from Defenders of Wildlife HCP database website, http://www.defenders.org/hcp/charts.html.

Figure 4: Total acreage of all HCPs, sorted within different size classes[10]



Permit intervals were highly variable across HCPs, from a low of seven months to a high of one hundred years (NCEAS 1998:4). The Services tended to approve longer permit intervals for the larger plans, justifying this policy by reasoning that it takes a long time to implement landscape-level management prescriptions or acquire habitat preserves, especially when habitat acquisition relies on the gradual collection of mitigation fees from developers. The larger plans had much greater conservation significance than smaller area HCPs not only because the large area plans tended to remain in force longer, but also because they covered more species. For example, the 1.6 million acre Washington Department of Natural Resources HCP will remain in force for seventy years and covers over two hundred listed and unlisted species.

[10] Excel database of HCP acreages obtained on April 9, 2003 from U.S. Fish and Wildlife Service website, at http://endangered.fws.gov/hcp/index.html.

Planning Process Flexibility

Big HCPs and little HCPs, type 1 and type 2 HCPs

HCPs can be divided up in terms of size of the planning area as well as whether the plan was prepared with broad participation or by the applicant acting alone. Smaller HCPs that ranged up to ten thousand acres were generally submitted by individual landowners or small corporations, who prepared their HCPs by writing them themselves and holding bilateral negotiations with the Services. Karkkainen (2003) calls these smaller plans "type 1" HCPs, to distinguish them from "type 2" plans that were prepared using multistakeholder planning processes. Once approved, most of these smaller plans provided permit coverage for a single species, and were active for ten years or less. The larger plans had three types of applicants: large timber or paper companies, single-purpose regional or state agencies (e.g. water supply or forest management), and public jurisdictions with authority over large areas (commonly a county government and the city governments located within the county). While these larger plans constituted the minority of plans overall, they contained the overwhelming majority of acres enrolled in the program (see Figure 4), and tended to provide coverage for multiple species over long time frames (up to 100 years). These larger, more ecologically and politically significant plans are the primary concern of this essay.

Public jurisdiction applicants for large-area HCPs usually adopted a very inclusive approach to plan preparation. Typically, during the first year of a 3-10 year process (Aegnst et al. 1998), planning staff from the public jurisdictions that are seeking the incidental take permit identify a planning funds (large plans commonly cost between one and three million dollars) and convene a volunteer steering committee, bringing together anywhere from five to twenty-five stakeholders. These stakeholders on the steering committee typically represent environmental advocacy groups, private land developers, farmers, as well as mid-level staff from local and state government. The steering committee establishes the goals and ground rules of the HCP process and selects a consulting firm to coordinate the planning process, conduct technical analysis, and draft the HCP. The steering committee also organizes and selects volunteer expert subcommittees, such as a scientific advisory subcommittee, an institutional design and implementation subcommittee, and economic subcommittee. Usually meeting for full-day meetings monthly or bimonthly, the steering committee and subcommittees deliberate and review reams of information provided by the

consultant. During the final year of preparation the steering committee agrees on the length of the permit request, a preferred preserve design and an institutional structure for funding and implementation. Before the HCP is submitted to the Services for review, the public jurisdiction applicants approve the HCP through their own electoral bodies.

Karkkainen (2003) attributed this consistency in the preparation of "type 2" HCPs to administration pressure on large public agency applicants to organize multistakeholder planning efforts, in lieu of strict enforcement of the ESA. However, Karkkainen's analysis focused on HCPs produced in southern California in response to the proposed listing of a rare bird reliant on Coastal Sage Scrub, the California gnatcatcher. When the broader universe of HCPs is considered a different picture emerges, particularly in the forests of the northwest and southeast U.S. Many single-purpose regional and state agencies and large corporate applicants prepared large-area HCPs in the similar manner as their private sector brethren who prepared smaller plans. Applicants tended to minimize public input, beyond a few carefully orchestrated public information sessions and the required National Environmental Policy Act (NEPA) comment period. Plans were prepared by in-house technical experts or private consulting firms. When the HCP was nearly in its final form, the public would be offered hundreds of pages of densely-packed technical minutia to read through during the 30-60 day NEPA period allowed for review and comment. Plan preparation was strictly a 2-party affair, with Service staff being regularly consulted during preparation of these plans and higher level Service decisionmakers intimately involved in negotiations over the extent of mitigation to be required.

Same planning process, different incentive structure

Why did these applicants prepared their HCPs without including any other potential stakeholders, while the public jurisdictions were using highly participatory planning procedures for their HCPs? This dichotomy between the way that different applicants involved other stakeholders cannot be attributed to a procedural mandate from the Services, who confined their assessment to the documents they received from the applicant, not the planning procedures used to generate them (U.S. Department of the Interior 1996). Applicants for large area HCPs were free to choose their own planning process after weighing the costs and benefits of inviting other interested parties to help them draft their HCP. Their concerns over the expense and duration of multistakeholder processes were compounded by the possibility that plan preparation might be

delayed or deadlocked if other stakeholders disagreed with what the applicants were attempting to achieve. For example, an environmental planner working for the Weyerhaeuser Corporation (Phillips 1997) advised her company not to include environmental groups in the preparation of the Weyerhaeuser HCP in Washington State because her company disagreed with regional environmental advocates over how much mitigation was required. Statements made by leading environmental activists and conservation biologists have substantiated these concerns, such as their frequent recommendation that HCP applicants be required to contribute to the recovery of species rather than simply not making things any worse, the standard that most permit applicants prefer to apply (Wilcove et al. 1996; Noss, O'Connell, and Murphy 1997; Kaiser 1997; Hood 1998). The language of the law itself is ambiguous on this point, and the Services refused to commit to either interpretation, only stating that they "encourage" that HCPs help achieve the goals laid out in species recovery plans (U.S. Department of the Interior 1996:1/15, 3/20-1).

Public jurisdiction applicants shared Weyerhaeuser's trepidation about including a wide array of stakeholders in plan preparation, since many city and county governments had experience with costly multistakeholder planning process that were delayed or gridlocked. Nonetheless, these public jurisdictions were much more collaborative in the crafting of their HCPs, arranging extensive public forums and public advisory groups and organizing steering committees with decision-making authority (Noss, O'Connell, and Murphy 1997). Coalitions of counties and cities in fast-growing urban areas were particularly apt to prepare their HCPs through highly participatory multistakeholder collaborative processes (Hood 1998; Aegnst et al. 1998; Ostermeier 1999), structured and mediated negotiations in which participants collaboratively acquire, introduce and interrogate evidence and reach shared decisions after protracted dialogue (see literature review for longer discussion of this approach).

Weber (1998) has shown that planners often choose to embark on highly participatory planning approaches when the potential costs and delays that may occur by excluding other parties in a planning process are comparatively less attractive than the costs and delays associated with enrolling many other players in plan negotiation. A variety of studies examining public participation in large-area HCPs (Beatley 1994; Hood 1998; Aegnst et al. 1998; Ostermeier 1999) suggest the ways that public jurisdictions view these transaction costs differently than private corporations or single-purpose public agencies:

- **Need for local approvals**: Before a public jurisdiction submits an HCP to the Services for review the jurisdiction often must seek approval from one or more public bodies that are very sensitive to constituent concerns, such as the county commissions or city councils.
- **Greater public interest**: HCPs prepared by public jurisdictions tend to cross ownership patterns and effect a wider array of interests, and interest in them is heightened because the decisions being made are likely to effect public finances, influence opportunities for public recreation, and set the direction for future development[11].
- **Disclosure requirements**: State laws and local ordinances often require public jurisdictions to hold publicly-noticed meetings and make more frequent disclosure of their documentation, while private landholders are reluctant to share proprietary information about the ecological status of their lands with either competitors or potential environmental litigants.
- **Organizational capacity**: Cites and counties are generally more experienced and comfortable with involving the public in their policy deliberations than applicants from private corporations or state agencies with a narrow mandate.

The use of multistakeholder planning processes by public jurisdictions may have also been influenced by wider trends within the planning profession during the 1990's. Planning researchers including Susskind (1987), Innes (1994), and Forester (1999) were publishing widely read studies that explored the potential of collaborative negotiation to evoke a simultaneous emergence of shared language and knowledge, recognition of common interests, and personal trust. Professional mediators and facilitators were busily garnering recognition of the validity of their new field, and high-profile efforts at conflict resolution within the environmental field such as the CAL-FED Bay Delta Program (Connick 2003) were being recognized as models for resolving otherwise obdurate conflicts. This growing recognition of the efficacy of collaborative negotiation may have contributed to the increasing popularity of multistakeholder consensus-based planning processes among public jurisdictions as the decade progressed.

Environmentalists: Most Eager For Change

A few environmentalists criticized HCPs, arguing that the best way to protect endangered species was to list more species, designate more critical habitat, write more recovery plans and provide funding to follow their guidance, and enforce more violations – in short, to aggressively implement the ESA (Shilling 1997)[12]. However, most environmentalists were willing to consider

[11] Of course, interest in private forest lands management is particularly keen among certain segments of the public, especially in the Pacific Northwest.

[12] Some property rights advocates also opposed HCPs on principle, since cutting a deal with the government undercut their defense of property rights against unjust government regulation. For example, one conservative think-

the merits of the administration's push to expand the HCP program because they felt that the Services had never been able to implement the ESA's unambiguous statutory language, and probably never would. The ESA's track record backed up their skepticism. On federal land, only about twenty percent of listed species seemed to be getting in better shape, while on private lands the figures were far worse, with only three percent of species improving (figures quoted from Wilcove et al. 1996). Only about forty percent of listed species had an approved recovery plan, and recovery plans weren't even begun for about half of those remaining (Oliver Houck, quoted in "Noss, O'Connell, and Murphy 1997)[13]. Species with recovery plans were seldom better off, since analysis of these plans concluded that most had little value for coordinating recovery (Tear et al. 1993). Only five species had recovered enough to be removed from listing between 1973 and 1991, amounting to less than one percent of the number of species added to the list during the life of the Act (Cheever 1996:11). Thousands of other species continued to decline without any federal protection because of constraints on the budget for processing listing applications and two listing moratoriums that had been imposed by Congress and the Executive branch.

Many environment activists blamed the Services for these problems. They were dissatisfied with the way that the Services allocated resources for species protection, a concern that was validated by a statistical analysis of the relation between taxonomic categories and funding allocation that concluded that funding decisions were dominated by the charismatic appeal of a species (e.g. Grizzly Bears and Bald Eagles are more appealing than the Furbish Lousewort and the Dehli Sands Flower-loving Fly) as well as the level of conflict with local interests (Metrick and Weitzman 1996). Some policy analysts were more charitable toward the Services, seeing the Service's politically astute interpretation of its responsibilities as the inevitable result of working within a maze of agency regulations, political and budgetary control, and judicial interpretation (Clark, Reading, and Clarke 1994). However, even some of these more sympathetic analysts described the ESA as a regulatory anachronism in an era when "command and control" regulation was being criticized as obsolete (Cheever 1996).

Even before Secretary Babbitt began his HCP initiative, conservationist activists had already been exploring alternatives to the ESA's devotion of resources and regulatory power to

---

tank called HCPs "centralized zoning schemes that operate as legalized extortion rackets." (National Center for Public Policy Research 2003).

[13] For current figures see USDOI website at http://www.fws.gov/r9endspp/boxscore.html.

protecting single species that were on the brink of extinction. Conservationists realized that the large sums devoted to saving species such as the California Condor and Black-footed ferret could never be mustered for the thousands of listed and endangered species, let alone the thousands more who were not listed. As one commentator put it, this disenchantment with an "emergency room" approach led conservationists to "…shift "from a "save the whales" to a "save the wetlands" perspective – a holistic view, and an increasing emphasis on protecting entire habitats." (Kloor 1999:14). Conservationists were exploring how to adapt existing governance structures to understand and manage whole natural systems (Dryzek 1987; Ostrom 1990; Goldstein 1992; Lee 1993). To work at this scale, they were developing new methods of analyzing whole landscapes using geographic information systems (GIS). Computer mapping using GIS allowed conservation groups to identify biological "hot-spots" where species richness was particularly high or representative natural communities could be identified and protected in order to ensure that more species did not decline to the point where they needed extraordinary intervention (Scott 1994). Conservation land trusts led by the Nature Conservancy adopted these tools to reorient their preserve selection and design criteria away from single, rare species toward identifying conservation needs for entire natural communities (Noss and Cooperrider 1994).

Environmentalists tended to be receptive to Babbitt's HCP initiative if they agreed that the ESA's problems were the inevitable consequence of an underfunded agency implementing a law that was both unpopular and ecologically and politically outmoded. Some even subscribed to environmental lawyer Michael Bean's argument that HCPs offered the only hope for survival for some species (Kaiser 1997:1636). They argued that forging new cooperative relationships with landowners could enhance the Service's ability to protect species, for example by reducing landowner resistance to allowing species surveys on their property rather than practice a "scorched earth" strategy on habitat under their control (Wilcove et al. 1996; Hood 1998). These pragmatic environmentalists also agreed with Babbitt that the administration's new emphasis on HCPs could alleviate political pressure to scale back the ESA during Congressional reauthorization and allow the administration to appropriate more funds for agency wildlife programs (Wilcove et al. 1996). Some of this support for the HCP program extended beyond wary approval of the administration's reforms. Many national and local conservation groups made significant commitments of staff and volunteer time to helping prepare individual HCPs when their involvement was solicited by permit applicants.

Success

The Clinton era reforms were attractive to landowners as well as environmentalists, who embraced the program as an opportunity to take some of the political pressure off the ESA while providing resources and organizational structure for managing species at a landscape scale.

Private landowners with large landholdings wrote plans through bilateral negotiations with the wildlife agencies, while states, counties, and cities preferred to adopt a multistakeholder collaborative planning approach. This ability to customize the planning process allowed meant that only a few HCPs were abandoned during their multi-year preparation, either because of loss of support from steering committee stakeholders (e.g. agricultural interests in Tulare County, California derailed a county-wide multi-species HCP) or a change of heart among elected representatives of public jurisdictions (e.g. newly-elected county commissioners refused to submit a proposed Scrub Jay HCP in Broward County, Florida). Once submitted to the Services, nearly all were approved with few modifications. Furthermore, once applicants at both public jurisdictions or private corporations received their incidental take permit from the Services, the plans weathered nearly every legal challenge, even in areas where extremely litigious opponents of species "take" as well as opponents of private property "take" were active (Beatley 1994; The Stanford Environmental Law Society 2001). By 2004, over four hundred HCPs had been approved throughout the country on over thirty million acres (which is about one-third the size of the state of California)[14], and millions more acres are in plans under preparation and federal review. Furthermore, Congressional and Administrative efforts to modify the ESA were muted during the first six years of the Bush Administration, despite the hostility of the administration to environmental regulation, and propensity to exercise its rule-making authority to favor private property rights. By averting environmental "train-wrecks" over endangered species all over the country, the HCP's program succeeded in removing endangered species law from the national policy agenda.

[14] Figure from U.S. Fish and Wildlife Service website, at http://endangered.fws.gov/hcp/index.html.

ACKNOWLEDGEMENTS

This work was supported by doctoral dissertation fellowship from the Morris K. Udall Foundation and a doctoral dissertation improvement grant from the National Science Foundation to Goldstein (SDEST-9987683).

Bibliography

Aegnst, Peter and others. 1997. Introduction to habitat conservation planning. Endangered Species Update 14, no. 7-8: 5-9.

Aegnst, Peter and others. 1998. Balancing public trust and private interest: an investigation of public participation in habitat conservation planning. University of Michigan School of Natural Resources.

Baur, Donald C. 1997. The no surprises policy: Stepping away from soundbites and getting down to business. Endangered Species Update 14, no. 7-8: 63-4.

Beatley, Timothy. 1994. Habitat conservation planning: endangered species and urban growth. Austin, TX: University of Texas Press.

Cheever, Frederico. 1996. The road to recovery: a new way of thinking about the endangered species act. Ecology Law Quarterly 23, no. 1: 1-78.

Clark, Tim W., Richard P. Reading, and Alice L. Clarke. 1994. Endangered Species Recovery: Finding the Lessons, Improving the Process. Washington, D.C.: Island Press.

Connick, Sarah. 2003. The Use of Collaborative Processes in the Making of California Water Policy: The San Francisco Estuary Project, the CALFED Bay-Delta Program, and the Sacramento Area Water Forum. Department of Environmental Science, Policy, and Management, University of California, Berkeley.

Cullinan, Tim. 1997. Habitat conservation plans in industrial forests of the Pacific Northwest: mitigation and public participation. Endangered Species Update 14, no. 7-8: 29-31.

Czech, B., P. R Kausman, and R. Borkhataria. 1998. Social construction, political power, and the allocation of benefits to endangered species. Conservation Biology 12, no. 5: 1103-12.

Dohner, Cynthia K. and E. LaVerne Smith. 1997. Habitat conservation plans and the incidental take permitting process: The U.S. Fish and Wildlife Service perspective. Endangered Species Update 14, no. 7-8: 10-1.

Dryzek, John S. 1987. Rational Ecology: Environment and Political Ecology.

Echeverria, J. D. and R. D. Eby. 1995. Let the People Judge: Wise Use and the Private Property Rights Movement. Washington, D.C.: Island Press.

Ehrlich, Paul. R. and Anne H. Ehrlich. 1996. Betrayal of Science and Reason: How Anti-environmental Rhetoric Threatens Our Future. Washington, D.C. Island Press.

Forester, John. 1999. The Deliberative Planning Practitioner: Encouraging Participatory Planning Processes. Cambridge, MA.: MIT Press.

Goldstein, Bruce Evan. 1992. Can ecosystem management turn an administrative patchwork into

a Greater Yellowstone Ecosystem. The Northwest Environmental Journal 8, no. 4: 285-324.

Hicks, Lorin L. 1997. Plum Creek's Cascades habitat conservation plan: A corporate approach to ecosystem management. Endangered Species Update 14, no. 7-8: 35-9.

Hoffman, Andrew J., Max H. Bazerman, and Steven L. Yaffee. 1997. Balancing business interests and endangered species protection. Sloan Management Review Fall: 59-73.

Holling, C. S. 1978. Adaptive environmental assessment and management. New York: John Wiley and Sons.

Hood, Laura. 1998. Washington, D.C.: Defenders of Wildlife.

Innes, Judith. 1994. Coordinating growth and environmental management through consensus-building. Sacramento, CA: California Policy Seminar.

Jackson, Jerome A. 1997. Niche concepts and habitat conservation planning. Endangered Species Update 14, no. 7-8: 48-50.

Kaiser, Jocelyn. 13 June 1997. When a habitat is not a home. Science 276: 1636-7.

Kareiva, Peter and others. 1999. Using science in habitat conservation plans. Santa Barbara, CA: National Center for Ecological Analysis and Synthesis (NCEAS) and the American Institute of Biological Sciences (AIBS).

Karkkainen, Bradley C. 2003. Toward ecologically sustainable democracy? In Deepening Democracy: Institutional Innovations in Empowered Participatory Governance, Fung, Archon; Wright, Eric Olin, 216-32Verso Books.

Kloor, Keith. 1999. Vanishing act: Is the law that protects endangered species itself endangered? The Sciences September/October: 14-7.

Lee, Kai. 1993. Compass and gyroscope. Washington, D.C.: Island Press.

Metrick, Andrew and Martin L. Weitzman. 1996. Patterns of behavior in endangered species preservation. Land Economics 72, no. 1: 1-16.

Monroe, Jud. 1998. CA: Metropolitan Water District of Southern California.

National Center for Public Policy Research. The Relief Report. [http://www.nationalcenter.org/RR63.html]. 3 March 2003.

Noss, Reed F. and Allen Y. Cooperrider. 1994. Saving nature's legacy. Washington D.C.: Island Press.

Noss, Reed F., Michael A. O'Connell, and Dennis D. Murphy. 1997. The science of conservation planning. Washington, D.C.: Island Press.

O'Connell, Michael A. 1997. Improving habitat conservation plans through a regional ecosystem-based approach. Endangered Species Update 14, no. 7-8: 18-21.

Ostermeier, David. Habitat Conservation Plan Case Studies. 1999. [http://www.ncedr.org/casestudies/summaries.htm]. 10 October 2000.

Ostrom, Elinor. 1990. Governing the commons: the evolution of institutions for collective action. UK: Cambridge University Press.

Phillips, Cassie. 1997. Effective outside participation in the HCP process: lessons from watershed analysis. Endangered Species Update 14, no. 7-8: 56-9.

Scott, J. M. 1994. Gap analysis: a geographic approach to protection of biological diversity. Wildlife Monographs 123: 1-41.

Susskind, Lawrence and Jeffrey Cruikshank. 1987. Breaking the impasse: consensual approaches to resolving public disputes. NY: Basic Books.

Tear, T. H. and others. 1993. Status and prospects for success of the endangered species act: A look at recovery plans. Science 262: 976-7.

The Stanford Environmental Law Society. 2001. The Endangered Species Act. Stanford, CA: Stanford University Press.

Thornton, Robert D. 1997. The no surprises policy is essential to attract private dollars for the protection of biodiversity. Endangered Species Update 14, no. 7 and 8: 65-6.

U.S. Department of the Interior. 1996. Washington, D.C.: GPO, I 49.6/2 H 11/2.

Vogel, William and Lorin Hicks. 2001. Multi-species HCPs; Experiments with the ecosystem approach. Endangered Species Update 18, no. 5: 20-3.

Walley, Kimberley K. 1996. Surprises inherent in the no surprises policy. Endangered Species Update 13, no. 10 and 11: 8-14.

Weber, Edward P. 1998. Pluralism by the rules" Conflict and Cooperation in Environmental Regulation. Washington, DC: Georgetown University Press.

Wilcove, David S., Bean, Michael J., Bonnie, Robert, and McMillan, Margaret. Rebuilding the ark: toward a more effective Endangered Species Act for private land. December 1996. [http://www.edf.org/pubs/Reports/help-esa/index.html].