LAURA A. WATT, LEIGH RAYMOND, AND MERYL L. ESCHEN

REFLECTIONS

ON PRESERVING ECOLOGICAL AND CULTURAL

landscapes

*“[The purpose of this law is] to provide a means whereby the **ecosystems** upon which endangered species and threatened species depend may be conserved.”*
Endangered Species Act of 1973, Section 2(b)

*“The historical and cultural foundations of the Nation should be preserved as a **living part** of our community life and development in order to give a sense of orientation to the American people.”* *National Historic Preservation Act of 1966, Section 1(b)(2)* (Emphasis added in both quotes.)

HISTORIC PRESERVATION and protection of endangered species are rarely discussed in the same circles. Each policy is guided by a distinct legal structure based on different laws: the Endangered Species Act (ESA) of 1973 and the National Historic Preservation Act (NHPA) of 1966. The two statutes do not seem at first glance to have much in common. The ESA addresses concerns regarding biodiversity and extinction while the NHPA seeks to protect distinctive elements of the nation’s cultural past. Preventing the extinction of the California condor, in other words, seems quite different from creating a historic district of old Victorian houses.

Despite this contrast, we argue in this essay that the ESA and the NHPA have evolved historically with some striking similarities. Both laws are morally driven preservation statutes seeking to protect rare and distinctive entities threatened by human development. Both offer protection only to a narrow list of individually registered species or historically significant buildings and sites. Yet both

originally aspired to much broader preservation goals, as the passages quoted at the beginning of this essay indicate. The ESA is fundamentally aimed at protecting ecosystems, not just single species, and the NHPA ultimately seeks to preserve dynamic systems of place and community, rather than just individual buildings or structures. Both laws initially recognized that neither zoos nor museums are sufficient answers to preservation dilemmas, and in practice they have increasingly attempted to protect resources at a landscape scale.

The two laws seek those similar goals in different ways. The ESA relies on threats of coercion to motivate private property owners to cooperate with habitat protection efforts, for example, while the NHPA primarily employs incentives for preservation. Listing remains a voluntary choice for historic building owners, while many species are listed despite significant protests by affected commercial interests. Yet neither law fully succeeded in preserving at a landscape scale. The ESA has made greater progress, primarily through the innovation of habitat conservation plans (HCPs). But both laws are criticized for numerous shortcomings, including the tendency to preserve either human or ecological resources in a fragmented manner, and to “freeze” formerly vibrant, dynamic landscapes in time. In sum, the statutes continue to fall short of their original mandates to preserve large-scale, integrated landscapes.

In this essay, we present a brief history of these parallel struggles to preserve resources at a landscape level. Through this comparative approach, we hope to stimulate new ideas on landscape preservation that might be less obvious in one setting or the other alone. Many of these ideas are sparked directly by the differences in the design and implementation of each statute. But while such contrasts are intriguing, the similarity of the struggle in two very different contexts leads us to our primary conclusion: There is a fundamental disconnect between current ideas about preservation, which rely on a broad, systems-based understanding of natural and cultural landscapes, and the narrower list-based legal mechanisms with which we have tried to achieve those preservation goals. Yet large-scale preservation remains a worthy goal.

The essay proceeds in four parts. We begin by reviewing the precursors to both laws, noting their shared historical roots in efforts to safeguard our national heritage. We then identify the basic structure and requirements of each law, documenting their differences and similarities. Building on this statutory foundation, we trace the evolutionary paths these laws have taken since their passage, moving haltingly and with difficulty toward a more landscape-focused approach, and becoming more alike in the process. We conclude by offering some thoughts on how and why the laws have struggled to achieve their goal of large-scale preservation, as well as some tentative suggestions for future reform.

BACKGROUND TO BOTH LAWS

ALTHOUGH THE NHPA focuses on the built environment, whereas the ESA conserves living organisms, both emerged from a similar impulse toward preservation of the nation’s heritage. In the late nineteenth and early twentieth

centuries, charismatic places and species were transformed into symbols of national unity and patriotism. Early preservation efforts, ranging from presidential homes and birthplaces to bison and bald eagles, emphasized the vital contributions of such resources to a sense of national community, connection, and common ground. Despite the early similarities, American ideas of nature as a realm separated from culture soon moved these protection efforts onto separate though parallel tracks, producing independent preservation policies for cultural and natural resources. Yet by the 1950s preservationists of all stripes were increasingly alarmed at the tide of development and suburbanization sweeping the nation, homogenizing the landscape in a way that threatened distinctive elements of our national heritage. Piecemeal protection efforts appeared to be failing. It is therefore not surprising that when both the ESA and NHPA were subsequently drafted and enacted, they contained at their cores a concern with preservation at a landscape scale.

THE NHPA

WITH RELATIVELY FEW exceptions, early historic preservation in the United States was undertaken by private individuals or groups rather than public entities. By the 1930s, however, the sense of responsibility for preservation, along with many other social programs, shifted from private philanthropy toward the federal government.¹ The National Park Service (NPS) greatly expanded its involvement with historic properties during this decade. Congress responded to the public interest with new legislation, starting in late 1933 with the Historic American Buildings Survey (HABS), employing many out-of-work architects and draftsmen to create a huge archive documenting historic buildings.² This was followed in 1935 with the Historic Sites Survey, intended to inventory sites that illustrated significant themes in American history.³

These early laws took a building-by-building approach, not at all concerned with historic or landscape context—a “Washington slept here” mentality. Most employees working on historic resources in the NPS at the time were trained as architectural historians or landscape architects, and their professional focus strongly influenced historic preservation efforts. HABS recorded architectural details in drawings so that the information would not be lost when the buildings themselves were demolished. The Historic Sites Survey was aimed at preserving physical structures, but only those identified as worthy by formal criteria. The NPS’s first Chief Historian Verne Chatelain wrote the initial criteria in 1936, emphasizing the importance of uniqueness, association with a famous individual or historical event, or illustration of the “large patterns of the American story.” Sites were categorized according to historical themes chosen by the NPS, fixing the location’s meaning within a specific historical period and context and excluding alternative interpretations.⁴ Sites considered culturally controversial or contested were avoided.

The NPS was not the only player in early historic preservation law. The city of Charleston, South Carolina, created the first protective zoning for a historic district in 1931, limiting the changes private owners could make to their

properties. Similar districts soon followed in New Orleans and San Antonio.⁵ These zoning laws applied stringent architectural controls to homeowners and prohibited construction of incongruous new structures. They also linked the historic preservation movement early on to local planning processes. Legal scholar Carol Rose describes this as a phase of “preservation for architectural merit,” with a focus on protecting a city’s “legibility,” usually a distinctive historic look that drew tourists.⁶ These regulations represent a nascent attempt at protecting entire neighborhoods, rather than individual buildings, but still with a material, architectural focus.

Despite these early laws and regulations, by the late 1950s a nationwide sense developed that too many important historical resources were still being lost to urban expansion and construction. The United States was in the midst of a building boom; much of this activity, such as highway construction and urban renewal projects, was federally funded, making protection of historic sites an increasingly federal concern.⁷ In addition, the preservation movement was changing from its earlier focus on individual historic elements. Instead, the movement increasingly was seeking to preserve broader and more intangible community and aesthetic values, endorsing the adaptation of historic structures to living, contemporary uses, and redefining historic preservation in terms of environmental conservation. This perspective began to push the government toward a greater recognition of historical sites in the context of their neighborhoods and communities, rather than just as stand-alone museums.

In 1960, the NPS established a Registry of National Historic Landmarks to formally recognize important sites and structures identified by the Historic Sites Survey but not directly administered by the agency. The Registry was intended to promote preservation, but had no enforcement power to stop owners from altering or demolishing landmarks. Then, in 1964, a presidential task force recommended establishing a program, already sketched out by NPS staff, to provide federal loans and matching grants to state and local governments for historic preservation as well as tax deductions for private property owners who joined in the effort. The grants would allow states to survey historic sites of regional or local significance, based on the same standards and procedures used by the Historic Sites Survey in inventorying properties of national significance. Each state then would prepare a comprehensive preservation plan drawn from the results of the survey.

President Lyndon Johnson endorsed this approach in February 1965, and soon after the United States Conference of Mayors’ Special Committee on Historic Preservation released its report *With Heritage So Rich* to publicize the issue.⁸ The report called for a “new preservation” that would be integrated with, rather than isolated from, contemporary life: “If the preservation movement is to be successful, it must go beyond bricks and mortar. It must go beyond saving occasional historic houses and opening museums. ... [T]he new preservation movement must look beyond the individual building and individual landmark and concern itself with the historic and architecturally valued areas and districts which contain a special meaning for the community. ... In sum, if we wish to have

a future with greater meaning, we must concern ourselves not only with the historic highlights, but we must be concerned with the total heritage of the nation and *all that is worth preserving from our past as a living part of the present.*"⁹

This perspective emphasized community as cultural system, consisting of the interaction of historic buildings with more ordinary landscape elements that together give a place its meaning. In March 1966 Secretary of Interior Stewart Udall sent legislation to Congress based in large part on the recommendations of *With Heritage So Rich*, and in October 1966 the National Historic Preservation Act (NHPA) became law. While the law itself contained few specifics, the clear intention of the bill's supporters was to move historic protection beyond individual buildings and toward a more comprehensive, landscape-level approach.

THE ESA

LIKE THE NHPA, the Endangered Species Act was the culmination of what Brian Czech and Paul R. Krausman have called an "incremental process of legislative redefinition."¹⁰ Concern for wildlife conservation originated with the overexploitation of wild game populations at the start of the twentieth century. Early efforts at federal wildlife management were overseen by the departments of agriculture and commerce, whose interests lay primarily in conserving wildlife for commercial purposes. In this view, effective legislation targeted specific wildlife populations with significant economic or recreational value. Despite the states' traditional jurisdiction over wildlife, new federal laws, such as the Lacey Act of 1900, the Migratory Bird Treaty Act of 1918, and the Migratory Bird Conservation Act of 1929, attempted to help dwindling populations of game animals. These acts employed a narrow approach to wildlife management, focusing primarily on protection of species popular with hunters, and including habitat protection only occasionally as a means to recover a specific species.

Social and political changes in the 1950s and 1960s led to a dramatic surge of both public and political awareness of species endangerment. Rapid urbanization and a growing interest in outdoor recreation in the post-World War II era led to a burgeoning appreciation for the disappearing natural world.¹¹ In the era of Rachel Carson's *Silent Spring*, worries about the negative effects of pesticides and other new chemical products added to the growing concern over species loss. Responding to these pressures, the Department of Interior's Fish and Wildlife Service (FWS) established the Committee on Rare and Endangered Wildlife Species in 1964 and produced the first official list of endangered species, commonly known as the "Red Book." Although the list was ostensibly impartial with regard to economics and politics, it focused on mammals and birds—no plants or insects were included in the sixty-three species listed.¹²

Under pressure from both the committee and the general public, Congress passed the Endangered Species Preservation Act of 1966, the same year as the passage of the NHPA.¹³ The law specifically addressed trade-related causes of extinction, particularly of high-profile birds and mammals. It protected habitat only through a modest program of government purchase focused on small wildlife refuges managed by the FWS.¹⁴ Three years later, Congress enacted the

Endangered Species Conservation Act (ESCA). The new statute authorized the Department of Interior to establish a list of species threatened worldwide and to prohibit their importation to the United States. It also amended existing domestic laws to prohibit the sale or purchase of any endangered species.¹⁵ Although the 1969 law authorized some habitat acquisition, its emphasis on trade issues, rather than habitat loss from development intensified the single-species approach to protection.

The ESCA did, however, broaden the range of species protected to include certain invertebrates and facilitated development of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Signed by the United States in 1973, CITES produced three lists of species according to their vulnerability, providing yet another example of a species-by-species approach to protection. This international agreement also put pressure on Congress to strengthen domestic biodiversity protections, since developed countries were the primary illegal importers of endangered and rare species.

Congressional hearings on the Endangered Species Act of 1973 indicated that efforts to strengthen the ESCA continued to focus on individual species and worries about over-hunting, rather than habitat or landscapes. The record is littered with speeches about “charismatic megafauna” like bald eagles, alligators, whooping cranes, and even Australian kangaroos (endangered due to American importation of their pelts).¹⁶ Few legislators paid attention to economic and political impacts that might result from the act’s sweeping language and objectives. As former Oregon Senator Bob Packwood later recalled, “It just never occurred to us the extraordinary ramifications of the act. We were thinking projects, we were thinking site specifics. We were not thinking ecosystems.”¹⁷ With this species-specific focus intact, the Endangered Species Act of 1973 was enacted into law with nearly unanimous approval in December 1973, just a few months after the signing of the CITES agreement.

NUTS AND BOLTS OF THE LAWS

AT FIRST, both laws were built upon a list of items in need of protection: species under the ESA, historic buildings and districts under the NHPA. By establishing lists, both regulatory programs retained older, atomistic approaches to preservation without direct consideration for a larger-landscape context. Despite this similarity, the laws embody different approaches to enforcement, with the NHPA emphasizing incentives while the ESA laid down unusually stringent regulatory limitations.

THE NHPA

THE NHPA mandated the creation and maintenance of a list of significant historic buildings, structures, objects, sites, and districts, which would become known as the National Register of Historic Places.¹⁸ Responsibility for the Register was given to the NPS, along with authority to make grants to state and local governments for carrying out inventory efforts. The NPS also would administer

Figure 1. Hay Barn at Pierce Ranch, Point Reyes National Seashore, California.

Photo courtesy Laura A. Watt.

Pierce Ranch, protected as an isolated historic site, an example of a property preserved using the list-based approach, has been uninhabited for twenty-five years.

matching grants to public agencies for acquisition and preservation, a federal loan program for people wanting to acquire and rehabilitate historic properties, and tax relief measures. The 1976 Tax Reform Act added tax credits for rehabilitating historic buildings; according to Barry Mackintosh, the result was that “preservation became very much part of the economic development mainstream.”¹⁹

The National Register already existed in an embryonic form as a list of properties identified by the earlier historic sites survey and national historic landmarks programs. The NHPA formalized and expanded the Register, including designation of historic districts, and importantly, it added coverage of “properties of less-than-national significance.”²⁰ This was a key step toward preservation at a landscape scale, as it allowed protection of resources that are more “everyday” than monumental. No longer was it only the unique moments from history that deserved attention but also the more local elements, integrated with people’s daily, modern lives, that held a sense of place together.²¹

National Register properties are categorized according to physical characteristics, as designated buildings, structures, objects, sites, or districts. Buildings are defined as having been constructed principally to provide human shelter of one sort or another; structures are human-built but intended for other functions (including vehicles, roads, and dams).²² Objects are constructions that are primarily artistic in nature, usually small in scale, and designed for a specific location or place. Sites are the locations of significant events, historic occupations

or activities, or other places with inherent historic or cultural value. Finally, districts are a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development. A district's identity results from the "interrelationship of its resources, which convey a visual sense of the overall historic environment."

The rules for nominating properties to the Register were not particularly innovative. Rather than exploring alternative ways of identifying sites worthy of protection, the members of the original Conference of Mayors task force—in the words of NPS Chief Historian Robert M. Utley—"relied on criteria and procedures with which they were already familiar, principally the criteria for historical significance used in the Historic Sites Survey of the Park Service."²³ Despite the rhetoric of the act espousing protection of heritage as part of the fabric of daily life, its implementation retained the list-based approach, which focused on individual buildings and architectural details rather than the larger landscape context.

In order to qualify for listing on the National Register, a property must be evaluated to define its historic significance and assess its historic integrity. The criteria of significance still require that properties be associated with major historical events, persons, or patterns of building and design, albeit of "less-than-national" importance. In addition, the period of significance must be defined as "the span of time when a property was associated with important events, activities, persons, cultural groups, and land uses or attained important physical qualities or characteristics." Integrity is also defined by physical characteristics, as "the ability of a property to convey its significance, manifested in seven elements: location, design, setting, materials, workmanship, 'feeling,' and association."²⁴ Possible changes or threats to integrity must be identified, and the various elements within the landscape must be classified as contributing or non-contributing features, based on their own integrity and association with the area and period of significance.²⁵

While historic districts technically allow preservation at a landscape scale, they remain subject to the same standards of significance and integrity for their individual component features. Districts can include some non-contributing features, but the majority of components of the district's historic character must possess integrity, as must the district as a whole. Properties may have more than one period of significance, but "continuous land use, association, or function does not by itself justify continuing the period of significance."²⁶ In this way, the interpretation of a particular site is linked to a particular historic era; if it changes too much, it may lose its National Register eligibility. Hence even the definition of a historic district is still tied to individual elements of the landscape, often overlooking the vernacular features and cultural processes that give such places much of their functionality and meaning in people's daily lives.

In terms of regulatory control, the NHPA took a fairly weak and incentive-based approach. Under the act's Section 106, federal agencies must consider the effects of their projects on National Register properties, and allow the Advisory Council on Historic Preservation (ACHP), established by the act, to comment.²⁷ In

1976 Congress extended Section 106 to all properties *eligible* for listing on the Register, not just those already listed.²⁸ Four years later the NHPA was amended again, adding Section 110, which established a higher standard of care for federal agencies. Under Section 110(f), federal agencies must act as to minimize harm done, and solicit comments from the ACHP, prior to any undertaking that may directly and adversely affect any National Historic Landmark.²⁹

In contrast to its substantial authority over federal properties and projects, the NHPA has no direct effect on private property owners. However, the law has a reach beyond the federal government: State historic preservation officers nominate sites of local and state interest to the Register.³⁰ State standards and local ordinances for architectural preservation generally parallel criteria from the Register, as recommended by the ACHP.³¹ Tax laws provide incentives to private owners to list their properties. These inducements to individuals and state and local governments have effectively increased listings; the NHPA was fully reauthorized in 1996, and there are currently over 73,000 sites on the Register, including over 11,000 historic districts.

THE ESA

ALTHOUGH THE primary concern of the ESA's sponsors may have been the overexploitation of specific, high-profile species, they fashioned a more comprehensive approach to species protection. They did this primarily by prohibiting the "take" of endangered or threatened species on both public and private lands and by extending the law's protection to species beyond those directly threatened by hunting and trade.

Despite the broader reach and tougher tactics, the ESA followed previous wildlife preservation laws—and paralleled the NHPA—in relying on a list-based approach. The ESA created a detailed mechanism for officially categorizing species as endangered or threatened prior to giving them legal protection. In deciding what species to protect, the law states that the Secretary of the Interior must rely "solely on the basis of the best scientific and commercial data available to him."³² Listing is based on nominations by the public or the government, and is to be decided on the basis of scientific information alone—in this regard, the law varies dramatically from the National Register process under the NHPA.

The crucial difference between the 1973 ESA and the versions that preceded it was the prohibition on "take." Rather than simply acquiring habitat or banning trade in an endangered species, the law now prohibited any action that would "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" a listed species.³³ This prohibition applied to actions on both public and private lands, further extending the law's coercive reach. Much like Section 106 of the NHPA, the law also required federal agencies to consult with the FWS to ensure that their actions were unlikely to "jeopardize the continued existence of any endangered species and threatened species."³⁴ Apparently unmindful of the economic impact strict enforcement of the act could create, legislators left little leeway for exceptions. As originally written, the ESA provided only three exemptions under which "taking" a listed species would be legal: for "scientific

purposes” to enhance a species’ recovery chances, for subsistence consumption by Alaskan natives, or for very limited cases of “undue economic hardship” on a temporary basis only.³⁵

Despite its list-based approach, the ESA opened the door to large-scale preservation in several ways. The statute explicitly set as a goal preserving “the ecosystems upon which endangered species and threatened species depend.”³⁶ It requires the FWS to designate “critical habitat” for all listed species (although this requirement has been substantially disregarded in practice).³⁷ More directly, the law prohibited federal actions that would “result in the destruction or modification of habitat” of listed species—the only explicit prohibition of habitat destruction in the act.³⁸ Although the ESA did not specify habitat loss as an example of illegal “take,” it did identify harm to habitat as a cause of extinction.³⁹

Another important mandate with respect to habitat conservation is found under Section 9, which establishes a list of prohibited acts. Among other things, it is unlawful to import, export, take, sell, distribute, or offer for sale any endangered species.⁴⁰ While most of the actions on this list are quite clear, one term leaves significant room for interpretation. One definition of “take” from Section 3 is to “harm” a listed species. The meaning of this term became crucial in controversies over whether habitat alteration on private lands would constitute a “harm” to a listed species and therefore a prohibited form of “take.” In the shift toward preservation of multiple species across habitats and land ownership regimes, Section 9 plays a crucial role.

The ESA thus combines large-scale ecosystem preservation goals with a narrowly defined system of species protection. Despite its stated goal of conserving “ecosystems,” the act initially identified no clear way of doing so.⁴¹ Indeed, the word “ecosystem” is only mentioned one other time, and the act did not initially apply to plant species.⁴² Although the law acknowledged habitat destruction to be a cause of species endangerment and even prohibits it for federal projects, habitat destruction was not explicitly listed under the definition of “take” in Section 3. As a result, the ability of the act to preserve at a landscape level only emerged through future court decisions and regulatory innovations.

EXPANDING TO A LANDSCAPE LEVEL

SINCE PASSAGE of the NHPA and ESA, both laws have been expanded by amendments, agency regulations, and judicial opinions in efforts to preserve ever-larger landscape systems in practice rather than simply in theory. The shift has not come easily or smoothly, particularly because both laws remain driven by lists that protect individual species and sites rather than the broader landscape. Because the ESA has moved further along this evolutionary path, we detail its history first and then compare it to the NHPA.

THE ESA

UNLIKE THE harmonious passage of the law, the story of the ESA’s implementation is one of struggle and conflict. Much of this controversy has

revolved around attempts to expand the law's focus beyond a "species-by-species" approach as a way of reconciling economic and environmental interests. Although the story merits (and has received) more detailed treatment,⁴³ we focus on the 1982 amendments creating the Habitat Conservation Plan option and significant regulatory changes made in 1994 and 1995.⁴⁴ These legislative and regulatory actions affected both how the act was enforced as well as the scale on which it operated.

The ESA's transition began with found in two significant court cases of the late 1970s. In *TVA v. Hill*, the Supreme Court ruled that further construction of the nearly complete multimillion-dollar Tellico Dam on the Little Tennessee River violated the act by jeopardizing the only known habitat of an endangered three-inch fish, the snail darter.⁴⁴ Besides confirming the act's disregard for economic costs, the case reaffirmed the biologically important relationship between a species and its habitat; "take" in this case was not a direct harm to the snail darter itself, but rather the elimination of its critical habitat. *Palila v. Hawaii Department of Land and Natural Resources* went further on the habitat issue, with the court ruling that the destruction by livestock of nesting sites for an endangered Hawaiian bird was also a "take" in violation of Section 9.⁴⁵ As a result of the *Palila* decision, the FWS extended its own regulatory definition of "take" to include "significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns including breeding, feeding, or sheltering."⁴⁶

Both decisions were highly controversial, expanding the scope of the law to large-scale habitat protection. In the future, housing developers and the Army Corps of Engineers would join ivory poachers and dealers of exotic animal products as ESA targets. As a result of this larger (and more politically powerful) roster of affected parties, as well as the anti-regulatory stance of the administration of the newly elected Ronald Reagan, pressure mounted to make the law more flexible and less absolute upon its reauthorization in 1982.

In response, an alternative emerged from a development conflict in San Mateo County, California. Construction of a new multimillion-dollar housing project on the local San Bruno Mountain had been delayed by the discovery of a population of the endangered Mission blue butterfly. Seeking a compromise, a committee of relevant parties retained an environmental consulting firm, Thomas Reid Associates, to help craft a biologically sound alternative. While the landowner's attorneys suggested captive rearing of the butterflies in greenhouses in the nearby industrial park, Reid's group demurred. Instead of a zoo-like solution, Reid argued that the committee should design a plan that would protect all of San Bruno Mountain, even though only 60 percent of it was habitat for the listed butterflies.⁴⁷

The result of this collaboration was the first Habitat Conservation Plan (HCP).⁴⁸ The San Bruno plan put habitat protection first, designating only 368 acres of the mountain (11 percent) for development while preserving 87 percent of the Mission blue's habitat as well as 93 percent of the habitat for another endangered butterfly, the Callippe silverspot. To further mitigate the impact of

Figures 2 and 3. Endangered Butterfly and Its Habitat.

Photos courtesy Thomas Reid Associates.

The summit of San Bruno Mountain, California, above, is protected as the habitat of the Mission blue butterfly, left. The mountain is preserved in a prototype Habitat Conservation Plan that was the first landscape-scale protection under the Endangered Species Act.

development, the HCP required the transfer of eight hundred acres of private land to the county for additional habitat, and also created a funding source to manage the San Bruno Mountain reserve permanently.⁴⁹ There was only one catch to this apparent win-win solution: Under the terms of the ESA, the San Bruno HCP was illegal. The law had no provision for the permitted loss of habitat in violation of the “no take” regulations issued after *Palila*.⁵⁰

After being finalized by the local negotiators, the plan therefore was presented to Congress as the basis of an amendment that would save the ESA from the threat of expiration or legislative evisceration. Congress went along, amending the ESA to include an “incidental take permit” (ITP) as a new exception to the no take rule in cases where mitigating factors arise and the ITP will not “appreciably reduce the likelihood of the survival and recovery of the species in the wild.”⁵¹ Although

the statute itself does not mention HCPs, it seems clear that Congress hoped that HCPs would be a step toward species preservation that would be broader in scale and scope by providing a mechanism for integrated preservation of multiple species across property boundaries.⁵² Indeed, the HCP handbook subsequently issued by the FWS explicitly encourages such large-scale, multi-species plans.⁵³

Despite these high hopes, HCPs got off to a slow start—only fourteen were approved during in the first ten years of the program.⁵⁴ Furthermore, most of these early plans were modest, addressing areas of less than one thousand acres and only a single species.⁵⁵ Among the reasons offered for this initial lack of enthusiasm were uncertain guidelines for producing HCPs (no formal handbook was published by FWS until 1990), the large amount of time and money necessary to design and receive approval for a plan, and the inherent uncertainties that accompanied all endangered species protection.⁵⁶ Legal scholar Dan Tarlock describes the plans that emerged in this period as “first generation” HCPs providing “quick fixes to the belated discovery of a listed species in the path of a large development.”⁵⁷ “Second generation” HCPs, on the other hand, emerged in the early 1990s and tended to operate on a regional scale and incorporate several involved parties under one administrative committee.⁵⁸ In other words, the movement toward second generation HCPs indicated that a shift toward greater landscape-level preservation was occurring in earnest.

The growing popularity and larger scale of HCPs in the 1990s owes much to the avid promotion of the administration of Bill Clinton.⁵⁹ Soon after the 1992 election, the new president faced another ESA reauthorization battle. As in 1982, pressure for change was strong political, especially in light of the high-profile “train wreck” between spotted owl conservation and economic development in the Pacific Northwest.⁶⁰ Barring a way of appeasing the polarized interests involved, a real possibility existed that the act could be rendered toothless by amendment.⁶¹ HCPs seemed like a promising way to lower the level of conflict, but developers were not taking full advantage of them. So instead of trying to amend the ESA (for fear that introducing any ESA legislation during the 104th Congress would prove disastrous for environmentalists), Clinton turned to administrative fixes.

Besides promoting HCPs more actively, the administration rolled out new regulations that provided HCP applicants with greater security. A “No Surprises” rule stipulated that landowners no longer would have to change their approved HCPs if “unforeseen circumstances” were to occur in the future.⁶² It also stipulated that in the case of an “extraordinary circumstance” whereby further mitigation steps were required, the additional financial responsibility would fall not on the landowner but on the “federal government, other governmental agencies, private conservation organizations, or other private landowners who have not yet developed an HCP.”⁶³ Soon thereafter, a related “safe harbor” policy emerged based on ideas from the advocacy group Environmental Defense.⁶⁴ This initiative discouraged a “scorched earth” approach to development to avoid future ESA problems by stipulating that if landowners voluntarily agreed to maintain or create more attractive habitat for endangered species on their land (thus providing

a “safe harbor”), they could preserve the right to return the land at any time to its baseline condition without penalty.

The Clinton regulatory reforms seemed to provide landowners and developers with the incentives and assurances they required. By the end of 2003, there were roughly 440 approved HCPs (some with multiple Incidental Take Permits) covering more than 39 million acres of land and protecting more than five hundred endangered and threatened species.⁶⁵ The popularity of HCPs shows little sign of abating even with the change in presidential administration starting in 2001: forty plans were approved in both 2001 and 2002, down only modestly from a high of sixty-four approvals in 1999. Concentrated in a few states with major ESA conflicts, especially Texas, Florida, and California, HCPs are nonetheless now in operation in every Fish and Wildlife Region except Alaska.

In addition to becoming more popular, HCPs also have become more complex and sophisticated. Indeed, the FWS itself proclaims that HCPs now serve as a vehicle for “broad-based, landscape-level planning, utilized to achieve long-term biological and regulatory goals.”⁶⁶ Some HCPs from the late 1990s are indeed breathtaking in their scale and scope. Several attempt to manage millions of acres of habitat, sometimes based on management plans and ITPs that extend for fifty years or longer. Some also attempt to integrate protection of multiple species, both listed and not, to create a more sophisticated preservation approach and prevent future conflicts down the road. Here is a true case at last, it would seem, of preservation at a landscape scale.

One of the most far-reaching examples of ecosystem-based conservation planning is the Natural Communities Conservation Planning (NCCP) program initiated in California in 1991. The program aims to preserve intact ecosystems across an entire region, with a more streamlined and predictable regulatory process for landowners and a more effective, comprehensive ecosystem conservation strategy.⁶⁷ It was inspired when a controversial HCP process for the federally listed Stephens’ kangaroo rat in the 1980s was followed in 1991 by concerns about the possible listing of the California gnatcatcher. Both species relied on coastal sage scrub habitat that was heavily fragmented and scattered over more than 4,000 acres and four counties in southern California—over three-quarters of which was privately owned.⁶⁸ Rather than repeat the arduous HCP process for yet another species and risk confrontation between economic and conservation interests on the scale of the spotted owl controversy, the state passed the NCCP Act of 1991. The law was a new approach to species protection, one designed to be flexible, multi-species, and voluntary for the relevant stakeholders.⁶⁹ In an effort to ensure that the NCCP program was not stalled, Secretary of Interior Bruce Babbitt listed the gnatcatcher in 1993 as “threatened,” giving the FWS greater latitude and flexibility in implementation under Section 4(d) of the federal ESA, and thus allowing the listing to mesh with the NCCP program.⁷⁰

The pilot NCCP program in southern California currently encompasses six thousand square miles of coastal sage scrub habitat, and protects approximately one hundred potentially threatened or endangered species.⁷¹ Fragmented habitat

patches are managed as part of a holistic plan rather than individually. The program is far more inclusive than most HCPs, with multiple jurisdictions and landowners in a single planning structure, and focuses on the long-term stability of coastal sage scrub habitat, which supports many unlisted plants and animals as well as the listed species. The NCCP program has two main advantages over the conventional HCP process. First, it provides local control over habitat conservation by allowing local governments to integrate habitat protection into land use planning and regulations. Second, it spreads the cost of implementing the NCCP program across all program participants.⁷² This is different from most HCPs where the cost of implementation is absorbed by a single landowner.

Despite the impressive achievements of the NCCP and the HCP program in general, however, many remain skeptical that this policy innovation will solve the ESA's woes. Advocates and scholars have criticized HCPs in several ways, arguing that they are over-solicitous of the needs of private landowners, exclude adequate public comment, function only as a "last-ditch" conservation effort, and have largely failed at an integrative approach—with apparently successful arrangements like the NCCP being the exception rather than the rule.⁷³ Nor is it obvious that the large-scale HCP represents the wave of the future: Recent data indicate that the median size and scale of HCPs has gone down since the late 1990s, rather than up. Commentators remain perplexed about the "appropriate" scale of these land management schemes, with some openly suggesting a less large-scale approach in at least some contexts.⁷⁴ That the HCP program represents a major attempt to move toward landscape-level preservation in the 1990s is clear. That the attempt has been successful, or even that it is likely to continue unabated in the early twenty-first century, is far less certain.

THE NHPA

AN INDIVIDUAL building-based list has also been inadequate for preserving historic and cultural resources. As early as 1967, the director of the National Register organized regional conferences of historical society members to educate them on the importance of integrating historic preservation with living communities.⁷⁵ Ten years later, a National Heritage Task Force recommended expanding the scope of the Register to include neighborhoods, cultural landscapes, and networks, in addition to districts.⁷⁶ Despite these promising intentions, an article published in *Landscape Architecture* in 1987 lamented that "widespread concern for the conservation or restoration of significant landscapes for too long [has] lagged far behind the interest in historic buildings."⁷⁷ Stating an interest in protecting the living context of historical resources is one thing, but finding a practical way to accomplish it has been difficult.

While there is now a fairly common understanding of the vital link between endangered species and their environment, the same is not true for historic resources. Few people immediately draw the connections between individual buildings and the history of the surrounding neighborhood or the attitudes, beliefs, and life patterns of the people who live there. In fact, as originally defined

Figure. 4 Kehoe (J) Ranch, Point Reyes National Seashore, California.

Photo courtesy Laura A. Watt.

Kehoe (J) Ranch is a working dairy that contributes to the living cultural landscape of the Point Reyes peninsula.

in the NHPA, historic districts are something like first-generation HCPs. They included multiple properties and larger areas, but usually represented a single architectural style or period. This quality has been criticized as creating static, frozen-in-time neighborhoods, as well as allowing too much new development by requiring compliance only with basic stylistic guidelines.⁷⁸ Preservation insulated districts from processes of change, thereby creating a façade of historical purity, but did little to sustain the cultural dynamics that gave such places life and meaning. Yet the NHPA aspires to protect that many-threaded community fabric, the “sense of place” that includes both historic buildings and the landscape in which those buildings have meaning.

The situation is beginning to change, albeit even more slowly than in the case of the ESA. In 1991, a conference of historic preservation professionals met in San Francisco to celebrate the twenty-fifth anniversary of the NHPA and discuss major challenges for historic preservation in the future. In the foreword to the resulting collection of papers, Robert Bass noted a “broadening commitment of preservationists to think beyond the single historic building or house to the historic neighborhood, community, and surrounding landscape.”⁷⁹ One of the major proposals of the conference was to integrate preservation into comprehensive land use planning and zoning ordinances rather than maintain the traditional emphasis on landmark and historic district designation processes: “We should go beyond single structures and traditional districts to whole communities, the countryside, and heritage corridors.”⁸⁰

Historic districts notwithstanding, the NHPA still has no true counterpart to the HCP. However, over the past decade the NPS has made an increasing effort to develop cultural landscape inventories and reports, which are suggestive of second-generation HCPs in that they consider multiple resources as an integrated whole. Cultural landscape *inventories* compile baseline information, determining historical significance and identifying the landscape features and characteristics that contribute to that significance, as well as documenting their condition.⁸¹ Every inventory includes the status of any existing National Register documentation and makes recommendations for revisions as needed, which are confirmed by the appropriate State Historic Preservation Officer(s). Once found to be eligible, landscapes are listed as either sites or a district, because the Register still does not legally recognize “landscape” as a valid category.

Cultural landscape *reports* then provide a level of research, documentation, analysis, and evaluation that greatly exceeds the National Register nomination process. They consider multiple types of resources—not just buildings but also landscape features such as vegetation, transportation networks, visual character, and land use. They also describe the significance and integrity of the landscape itself, and include resources not individually eligible for listing but “contributing” to the overall meaning and appearance of the landscape. These documents serve as a primary reference for decision-making about future treatment and often are referred to in the process of Section 106 compliance.⁸² The NPS retains the lead in documenting and nominating cultural landscapes, but other actors are getting involved as well, including a number of foundations and municipal governments funding similar kinds of studies.

While cultural landscape inventories and reports represent a significant step toward a more holistic approach to landscape-level protection, they still rely on the old criteria for historic significance and integrity, which remain rooted in historic preservation’s building-by-building beginnings. The language and protection mechanisms for landscapes are thus burdened with a particular set of assumptions and values that prioritize static elements of the landscape and focus on physical remains and the design principles they may represent, rather than local adaptations of those forms or the cultural meanings reflected in them. This tends, as Arnold Alanen and Robert Melnick suggest, to “simplify rather than clarify the values inherent in cultural landscapes and, correspondingly, to simplify responses to those values.”⁸³ The results may overlook the priorities of current-day residents or users of protected landscapes, although they are often the primary forces of change in continuously evolving places. Preservation efforts all too often lack any mechanism for the participants of landscape change to have input into the planning and implementation of protections other than opportunities for general public comment. These out-of-date criteria may need to be revised before cultural protection planning can really meet the NHPA’s original goal of protecting living heritage rather than museum specimens.

The 1992 amendments to the NHPA put this conflict in starker terms. The statutory changes made traditional Native American and cultural properties eligible for inclusion on the National Register and required federal agencies to

consult with tribal representatives when considering such properties as part of the Section 106 review process. Attempts to preserve these “ethnographic landscapes,” however, are severely limited by the hoary National Register criteria, as an NPS bulletin on the topic clearly indicates: “This Bulletin does not address cultural resources that are purely ‘intangible’—i.e., those that have no property referents—except by exclusion. ... [T]he National Register is not the appropriate vehicle for recognizing cultural values that are purely intangible, *nor is there legal authority* to address them under Section 106 unless they are somehow related to a [listed] historic property.”⁸⁴

CONCLUSIONS

HISTORY LEAVES us, then, at a rather ambiguous and uncertain moment regarding the preservation of landscapes. While progress has been made, particularly under the ESA in the 1990s, neither HCPs nor cultural landscape inventories truly achieve the statutes’ original goals. Rather, they are better seen as partial and imperfect solutions that remain bedeviled by the difficulties inherent in large-scale landscape preservation. This concluding section will offer some suggestions as to how and why the stated goal of landscape preservation has proved so elusive for both laws, and whether alternative approaches might emerge from their struggles.

Our first, overriding conclusion is this: Landscape preservation is a unique and difficult challenge. All preservation efforts can be politically and practically complicated, as any leader of a local heritage society or Nature Conservancy chapter will tell you. But preserving entire landscapes poses an additional set of challenges, starting with one of definition. Unlike a building or (usually) a species, even identifying what a landscape *is* remains controversial. The specification of critical habitat for endangered species is a constant struggle under the ESA, and ecologists continue to argue the meaning of the basic term “ecosystem.” In the area of historic preservation, the definitional problem is even more acute, as few can agree on just what factors or boundaries constitute a cultural landscape that is worth preserving. Landscapes have the same intuitive quality of many other hard-to-define terms: It is tempting to follow Justice Potter Stewart by claiming simply, “we know it when we see it.”⁸⁵ Nevertheless, such general intuitions provide surprisingly little guidance when it comes to the necessities of legal preservation.

The definitional problem is exacerbated by the list-based nature of both statutes. The listing process accounts for the “tail wagging the dog” aspects of landscape preservation, where historic districts or habitat are protected by the listing of a particular building, site, or species. This distorts decisions about protection of large systems like ecosystems or cultural landscapes. We see this most vividly under the NHPA, where architecture-based criteria continue to dominate the process for selecting and defining historic districts and cultural landscapes. Such criteria were deemed inadequate in 1976 and remain so today.⁸⁶ Similar problems affect the HCP program, where boundaries of protected ecosystems and habitat are drawn with regard to the specific species in question.

While some HCPs seek to protect entire ecosystems by considering the habitat needs of multiple species, most do not.⁸⁷

The two approaches to landscape protection also are burdened by problems of enforcement. The NHPA relies almost entirely on incentives to list and protect endangered resources, making it a relatively weak statute. As one moves to a broader scale of protection, where a handful of non-complying structures or sites can substantially affect the entire landscape, the problem of holdouts and non-cooperative property owners becomes more severe. In such cases, more coercive power may be essential, yet the NHPA offers no such authority. On the other hand, the ESA experience shows how too much coercion can quickly become counterproductive. Time and again, support for the ESA has been weakened by anecdotal accounts of federal regulations burdening private property owners. While the ESA's "hammer" is rarely used in practice on private lands, the potential threat combined with a few prominent horror stories have reduced public support for the law.⁸⁸

In addition, both laws historically have struggled with the issue of public participation in shaping and implementing landscape protection efforts. NHPA preservation efforts frequently are hampered by citizen conflict over the appropriate uses of a protected area, and the law provides no formalized process for resolving such debates. Residents sometimes fear being "museumified" or having their community converted to a tourism-based economy.⁸⁹ Where they take those concerns, and to what degree their worries are heeded, remains ambiguous. Similarly, one of the strongest and most common complaints about HCPs, at least among environmentalists, is that they leave the public out of the process almost entirely. These concerns have only increased as preservation efforts have expanded to a larger scale under both laws, and it seems clear that public participation is a key element to landscape-scale resource protection that must be better accommodated.

Thus the shortcomings of both laws in approaching landscape preservation are evident from this brief discussion of their parallel histories. But if it is relatively easy to see why both laws have struggled, it is harder to see why they were essentially set up to do so from the start. Given the stated objective of both statutes to preserve entire landscapes, some of the specific policy choices are puzzling. Why a list-based approach? Why "too much" coercion under the ESA and "not enough" under the NHPA? Why two separate laws at all, rather than a single "landscape preservation" statute? We do not pretend to answer these questions here fully. But several thoughts stand out.

The mis-fit of the list-based approach only became obvious when changes in scientific understanding of conservation biology and cultural landscape theory during the 1980s and 1990s, well after the passage of both laws.⁹⁰ Each academic literature increasingly emphasized the systemic nature, as well as the interconnectedness, of ecological and cultural resources. Species and historic structures are no longer necessarily considered in isolation, but as indicators of the underlying landscape-level dynamics that drive the health and sustainability of whole systems. Yet the laws and regulations protecting these resources were

drafted decades before these scholarly advances, at a time when it was much easier to believe that protecting individual units of scarcity would achieve the larger preservation objective, the whole being no more than the sum of its parts.

At the same time, a certain “path dependence” shaped both laws. The writers of the NHPA aimed toward a style of historic preservation more integrated with daily life, yet the implementers of the act, under pressure to develop criteria quickly, simply adopted the familiar 1930s architecture-based approach instead of crafting something genuinely new. Similarly, the creators of the ESA drew on list-based precedents like the 1964 Red Book in determining ways to identify species in need of protection. Policy makers are well known for their ability to take a successful policy instrument from one context and apply it widely to other settings, even when the replication risks putting a square peg in the proverbial round hole. In the case of landscape preservation, the easy turn to list-based approaches from the past seems to be a good example of this phenomenon.

The over- or under-reliance on coercion of the two statutes also may be partly due to differences in the perceived costs of the two types of preservation for private property owners. It is plausible that the potential for impacts on individual property owners was clear at the start in historic preservation law and hence avoided. No one relished the idea of subjective judgments about the historical merit of a given property resulting in lower property values or the possibility of a parcel being forcibly taken away from its owner. In contrast, it was not clear to those drafting and voting on the ESA that the law would affect private owners much at all. The focus was primarily on charismatic megafauna and international trade, so taking a strong coercive approach seemed “safe” politically. At a more basic level, coercively protecting living species threatened with extinction may be more inherently acceptable to the public than maintaining privately owned historic buildings with similar mechanisms. Yet ironically, the power of the ESA over private property has been limited in practice while serving as a flash point of protest against the law’s continued existence.

Finally, why two laws instead of one? Given that many threatened landscapes include both ecological *and* cultural elements at risk, why not create a law that preserves threatened resources of all types, full stop? The answer again, we believe, is probably a mixture of path dependence and distinctive environmental values in the United States. On the one hand, by the 1960s the mission of historic/cultural preservation was fully vested with the NPS, while the program of species protection was well-entrenched at the FWS. Administrative history tells us that once two agencies get a toehold in a particular policy area, the chances of their merging or otherwise rearranging those responsibilities are slim. At the same time, the intellectual roots of the two preservation movements are quite distinct, despite their overlapping motivations regarding national heritage. Ecological preservation in the United States is substantially based in the ideas of John Muir and other romantics, including the idea of a “sublime” wilderness and the need to exclude people from pristine nature. Historic preservation, with its efforts to protect human history and culture, directly conflicts with this line of thought about ecological protection. Thus it seems unlikely that a single statute could

have been conceived of, much less agreed upon, by advocates working on the two preservation issues.

The many plausible explanations for our two-pronged approach to landscape preservation looks this way does not, however, make it any more satisfying. Indeed, it seems to us that both statutes got the goals exactly right—protecting landscapes—and yet got the mechanisms largely wrong. In doing so, both laws largely failed to answer the question we find most vital in approaching landscape preservation: How can society peacefully coexist with endangered parts of our environment, both cultural and ecological? We agree that isolating precious and threatened resources in museums and zoos is not an effective answer. But what do we do instead?

In formulating cultural landscape inventories and habitat conservation plans, both the NHPA and the ESA seemingly are struggling with exactly this question of maintaining the functionality of entire systems, rather than setting aside a few rare gems. Yet neither group has come up with good answers, at least not so far. Is there another, more integrated model that might apply? Perhaps we could learn something useful from many European countries' approach to preservation efforts, which tend to mix natural and cultural preservation rather than considering them separate enterprises, and which also regard private property ownership as less of an obstacle to the public protection of resources. The United Kingdom's National Trust, for instance, protects both historic buildings and wild rural landscapes, where hikers can ramble along publicly protected paths across private property. Similarly, international parks and protected areas increasingly emphasize networks of green corridors and buffer area around strictly protected cores, balancing social and economic objectives with scientific ones through strategies like comanagement with local people.⁹¹

A small but growing group of people in the United States has expressed interest in a similar approach to conservation that blends cultural and natural, public and private—yet few of these advocates or practitioners have called for modification of the preservation laws themselves.⁹² This essay suggests that such an approach, perhaps including a new “landscape protection act,” might be needed to overcome the legacy of the older list-based approaches, and to better align our legal structures with the more systemic, holistic approach to landscapes that has developed since their passage. In addition, advocates of endangered species protection might do well to interact more with historic preservationists, and vice-versa; the similarities of the laws and their historic evolution clearly offer lessons that can be mutually beneficial.

The concept of preservation does not deal well with change—the impulse is to prevent it, to hold things constant through time.⁹³ Such an approach is counterproductive when protecting dynamic systems. Protection of landscapes needs enough flexibility to accommodate stochasticity, such as unpredictable changes in environmental conditions or shifting cultural meanings and uses. Preservation law must acknowledge that we cannot control everything while still protecting the contexts in which rare entities occur and working to integrate preservation efforts where possible. Systems must be able to adapt and evolve if

the elements that we value (species and historic buildings) are to function and thrive in any meaningful way. The historical development of both endangered species and historic resource protection has stretched these two similar laws in attempts to meet their more landscape-oriented goals. However, their early roots in heritage preservation, with its emphasis on static permanence, and their list-based approaches have not allowed them to fully meet that challenge. Modifying the laws or drafting a new one to take more of a landscape approach to natural and cultural preservation might allow us to live *with* rare and precious resources, rather than set them aside as something separate and distinct from our daily lives.

Laura A. Watt received her doctorate in environmental policy and history from U.C. Berkeley in 2001. She works for EDAW, Inc. in San Francisco as a landscape historian and resource management planner, and is revising her dissertation, *Managing Cultural Landscapes: Reconciling Local Preservation and Institutional Ideology in the National Park Service*, for publication. **Leigh Raymond** received his doctorate from U.C. Berkeley in 2000 and is an assistant professor of political science at Purdue University, specializing in environmental policy. He is the author of *Private Rights in Public Resources* (Washington, D.C.: Resources for the Future Press, 2003), a study of the role of ethical norms in market-based environmental policies. **Meryl L. Eschen** is a first-year law student at American University Washington College of Law. She completed her masters project, "A Market-Based Alternative to Current Policy Under the Endangered Species Act: A No Surprises Insurance Program," at Duke University's Nicholas School of the Environment in 2003.

NOTES

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1. Changes in the American landscape stemming from industrialization, urbanization, and the increasing popularity of automobiles suggested to some that all traces of the historical past soon would be paved over and resulted in calls for protection of some representative pieces of preindustrial America. In addition, history served to shape a kind of patriotic nationalism, as a way of both educating new immigrants to accept an idealized collective "American" past and emphasizing national loyalty during times of war and economic troubles. See C. B. Hosmer, Jr., *Preservation Comes of Age: From*

Williamsburg to the National Trust, 1926-1947 (Charlottesville: University Press of Virginia, 1981).

2. The primary rationale for this kind of program was that the buildings themselves were not, for the most part, high priorities for preservation; because they were not worth physically saving, HABS recorded their particulars on paper, thus clearing the way for their eventual removal. Hosmer, *Preservation Comes of Age*, 549-56. HABS was made into a permanent program in July 1934, with headquarters and organizing staff housed within the NPS, and the American Institute of Architects (AIA) providing field organization.
3. Note Harold Ickes' testimony for the Historic Sites Act, given in April 1935: He argued, among other things, for "the building up of a unified and integrated system of national historical parks and monuments which, taken in their entirety, would present to the American people graphic illustration of the Nation's history." House Committee on Public Lands, Hearings on H.R. 6670 and H.R. 6734, 74th Cong., 1st sess., 1, 2, and 5 April 1935, 5.
4. Barry Mackintosh, *The Historic Sites Survey and National Historic Landmarks Program: A History* (Washington, D.C.: National Park Service, 1984), 9, 14. Surveyed sites also were classified as having national or non-national significance, but the classifications were kept confidential, reflecting concerns that property owners would indulge in "tendencies to commercialism and increased asking price." Since the purpose of the survey was in part to identify sites for eventual acquisition by the NPS, this second concern was a pragmatic one for the agency.
5. See Hosmer, *Preservation Comes of Age*, 231.
6. Carol Rose, "Preservation and Community: New Directions in the Law of Historic Preservation," *Stanford Law Review* 33 (1981): 473-534; esp. 484-86, 506.
7. Three main federal agencies in particular caused the trouble. The Bureau of Public Roads began working on the Interstate highway system approved in 1956, and the "impact of the expenditures on the physical fabric of cities was felt almost immediately, and local citizens soon voiced concern over the destruction by highway projects of the scenic and historic character of many communities." In the same year, the Housing and Home Finance Agency received congressional authorization to provide grants to local redevelopment authorities for clearance of municipal slums, often demolishing large numbers of urban landmarks in the process. Finally, the General Services Administration, which provided buildings for federal agencies, began a pattern after World War II of abandoning older buildings and replacing them with new ones. See James A. Glass, *The Beginnings of a New National Historic Preservation Program, 1957 to 1969* (Nashville, Tenn.: American Association for State and Local History, 1990), 3-4.
8. The committee was funded by the Ford Foundation to "visit Europe to examine preservation activities abroad and produce a report presenting the need for preservation in the United States." In late October and early November 1965, committee members visited eight European countries with notable records in preservation. "It soon became clear that the national governments in Europe had assumed the principle responsibility for preserving and restoring their physical heritage." The committee was convinced that "[p]rivate enterprise alone could not afford to preserve the historic features of American cities." See Glass, *Beginnings*, 10.
9. U.S. Conference of Mayors, Special Commission on Historic Preservation, *With Heritage So Rich* (New York: Random House, 1966), 207-8, emphasis is ours.
10. Stephen Yaffee, *Prohibitive Policy: Implementing the Federal Endangered Species Act* (Cambridge: MIT Press, 1982), 42. Also note an excellent legislative history by Shannon Petersen, *Acting for Endangered Species: The Statutory Ark* (Lawrence: University Press of Kansas, 2002).

11. See generally, Samuel P. Hays, *Beauty, Health, and Permanence: Environmental Politics in the United States, 1955-1985* (Cambridge: Cambridge University Press, 1987); Adam Rome, *The Bulldozer in the Countryside: Suburban Sprawl and the Rise of American Environmentalism* (New York: Cambridge University Press, 2001); and Robert Gottlieb, *Forcing the Spring: The Transformation of the American Environmental Movement* (Washington, D.C.: Island Press, 1993) especially Chap. 3.
12. Brian Czech and Paul R. Krausman, *The Endangered Species Act: History, Conservation Biology and Public Policy* (Baltimore: Johns Hopkins University Press, 2001), 21.
13. U.S. Congress, Senate Committee on Commerce, Fish and Wildlife Conservation, *Legislative History of the Endangered Species Preservation Act of 1966*, 89th Cong., 2nd sess., Senate Report No. 1463, 3343.
14. Yaffee, *Prohibitive Policy*, 41.
15. Shannon Petersen, "Congress and Charismatic Megafauna: A Legislative History of the Endangered Species Act," *Environmental Law* 29 (1999): 472.
16. U.S. Congress, Senate Committee on Commerce, Science, and Transportation, Congressional Hearings on the Endangered Species Act of 1972, 92nd Cong., 2nd sess., 10 August 1972: 177-215, esp. Testimony No. 4 (73-S261-3), 179-81.
17. Peter Korn, "The Case for Preservation," *The Nation* 254 (30 March 1992), 414-17.
18. The name was not officially mandated by the statute itself; the NPS began referring to the register by this name in mid-1968 and Congress made it the legal name in the 1980 amendments to the Act.
19. Barry Mackintosh, *The National Historic Preservation Act and the National Park Service: A History* (Washington, D.C.: National Park Service, 1986), 74.
20. Mackintosh, *Historic Sites Survey*, 21. Note that nationally significant properties already were covered by the 1935 Act.
21. It was the destruction of locally significant resources during urban renewal projects that had really gotten people upset, so including these locally significant places to the Register was a key change. Note, however, that the NPS did not follow the suggestion of the Rains Committee to categorize listings by type of significance (i.e. national, regional, or local) for fear that properties without high local ratings would be targeted for redevelopment. Prior to passage of the NHPA, the NPS consistently had resisted any involvement with sites of non-national significance. See Glass, *Beginnings*, 6.
22. Both buildings and structures must retain their basic structural elements, historic configuration, or pattern of organization; otherwise they are considered "ruins" and are categorized as sites. See National Park Service, *How To Apply the National Register Criteria for Evaluation*, National Register Bulletin #15 (Washington, D.C.: National Park Service, 1991), part IV.
23. In preparation for Senate hearings on the proposed NHPA, NPS Chief Historian Robert M. Utley prepared a report describing how NPS would administer the preservation program. "As a suggestion of the kind of criteria that could be used in such a program, Utley attached to the prospectus a copy of the twelve conditions used by the Park Service's Historic Sites Survey to evaluate national historic significance." After the Act was signed, the NPS formed a Historic Preservation Task Force to define the register; this Task Force agreed to follow Utley's idea. See Glass, *Beginnings*, 18, 24-25.
24. National Park Service, *How To Apply the National Register Criteria*.
25. Linda Flint McClelland et al., *Guidelines for Evaluating and Documenting Rural Historic Landscapes*, National Register Bulletin #30 (Washington, D.C.: National Park Service, 1987), 22-24.
26. *Ibid.*, 20-21.
27. Note that the council can only comment, not enjoin or regulate other agencies' activities. The 1976 amendments made it into an independent federal agency rather than one staffed and supported through the NPS.

28. Nixon's Executive Order #11593 (13 May 1971), "Protection and Enhancement of Cultural Environment," directed all federal agencies to list properties under their jurisdiction and encouraged them to look at properties eligible for listing. Yet all the agencies, including the NPS, were slow to start (and often lacked appropriate staff) and missed the original 1973 deadline. Strengthening of Section 106 requirements reflected this sluggish response; the requirement was repeated in 1980 amendments as an open-ended mandate to find and list eligible properties. See Mackintosh, *National Historic Preservation Act*, 38-40.
29. The 1992 amendments clarified that ACHP is authorized to issue all regulations pertaining to Section 106. Section 110 was expanded to require each federal agency to establish a historic preservation program, and encouraged agencies to sign Memoranda of Agreement in Section 106 processes.
30. Note that the 1980 amendments better articulated the duties of state historic preservation officers and certification of local government preservation programs, and also required owner consent for nomination of private sites.
31. See Rose, "Preservation and Community," 495-96.
32. ESA, Section 4(b).
33. *Ibid.*, Section 3(14).
34. *Ibid.*, Section 7(a)(2).
35. *Ibid.*, Section 10(a) and (b).
36. *Ibid.*, Section 2(b).
37. *Ibid.*, Section 4(a)(3)(A). See also Holly Doremus, "Adaptive Management, the Endangered Species Act, and the Institutional Challenges of 'New Age' Environmental Protection," 41 *Washburn Law Journal* (2001): 58-59.
38. ESA, Section 7.
39. ESA, Section 4, acknowledges many factors that could endanger the existence of a species, including the "destruction, modification, or curtailment of its habitat or range."
40. ESA, Section 9(a).
41. Karin P. Sheldon, "Habitat Conservation Planning: Addressing the Achilles Heel of the Endangered Species Act," *NYU Environmental Law Journal* 6 (1998): 279-340.
42. "Ecosystem" appears again in the definitions of "conservation" in Section 3. Plants eventually were added under Section 12.
43. See Petersen, *Acting for Endangered Species*; Sheldon, "Habitat Conservation Planning"; and Stanford Environmental Law Society, *The Endangered Species Act* (Stanford, Calif.: Stanford University Press, 2001).
44. *TVA v. Hill*, 437 U.S. 153 (1978). For a much more extensive discussion of the history of this case and others, see Zygmunt Plater, "The Embattled Social Utilities of the Endangered Species Act—A Noah Presumption and Caution Against Putting Gasmasks on the Canaries in the Coal Mine," *Environmental Law* 27 (1997): 845-76.
45. *Palila v. Hawaii Dept. of Land and Natural Resources*, 471 F. Supp. 985 (D. Haw. 1979) *aff'd*, 639 F. 2d 495 (9th Cir. 1981).
46. 50 CFR 17.3, Amended Version.
47. Thomas Reid, interview with Meryl Eschen, 11 July 2001.
48. This plan was originally referred to as a "Habitat Management Plan," but the landowner's attorneys thought that "Habitat Conservation Plan" sounded more positive. Also, environmentalists wanted the plan to stress conservation of land rather than manipulation, as the word "management" seemed to imply. Reid interview.
49. Funding came from annual fees for residential and commercial development, managed by San Mateo County. See Timothy Beatley, *Habitat Conservation Planning* (Austin: University of Texas Press, 1994), 59-60.

50. Craig W. Thomas, "Habitat Conservation Planning: Certainly Empowered, Somewhat Deliberative, Questionably Democratic," *Politics and Society* 29 (2001): 105-130.
51. ESA, Section 10(a)(2)(B)(iv).
52. Sheldon, "Habitat Conservation Planning," 295-99.
53. U.S. Fish and Wildlife Service and National Marine Fisheries Service, *Habitat Conservation Planning Handbook* (Washington, D.C., U.S. Dept. of Interior, 1996), 1-15.
54. Marj Nelson, "Habitat Conservation Planning," *Endangered Species Bulletin* 24 (November/December 1999): 12-13.
55. U.S. Fish and Wildlife Service, "Habitat Conservation Plans: Section 10 of the Endangered Species Act," http://endangered.fws.gov/hcp/HCP_Incidental_Take.pdf (accessed February 2002).
56. Thomas, "Habitat Conservation Planning," 109.
57. Dan Tarlock, "Local Government Protection of Biodiversity: What Is Its Niche?" *University of Chicago Law Review* 60 (1993): 555-613, quote on 606.
58. Tarlock, "Local Government Protection of Biodiversity," 606-12.
59. Thomas, "Habitat Conservation Planning," 109; Doremus, "Adaptive Management," 68.
60. See Petersen, *Acting for Endangered Species*, Chaps. 5 and 6.
61. Doremus, "Adaptive Management," 60; Joseph Sax, "The Ecosystem Approach: New Departures for Land and Water, Closing Remarks," *Ecology Law Quarterly* 24 (1997): 883-86.
62. Hansen, Craig, "The Nation's First Multi-Species HCP for a Forested Landscape," Reprinted from *The Endangered Species Bulletin*, Volume XX, No. 6; also Sheldon, "Habitat Conservation Planning," 315.
63. U.S. Fish and Wildlife Service and National Marine Fisheries Service, *Habitat Conservation Planning Handbook*, 3-30.
64. *Ibid.*, 3-41. See also Michael J. Bean, "Overcoming Unintended Consequences of Endangered Species Regulation," *Idaho Law Review* 38 (2002): 409-20; and Michael J. Bean, "Sustainability and the Law: An Assessment of the Endangered Species Act," in *Nature and Human Society*, ed. Peter Raven (Washington, D.C.: National Research Council 1997), 493-99.
65. Leigh Raymond, "Habitat Conservation Plans: Bigger and Better Than Ever?" (paper presented at the Annual Meeting of the Western Political Science Association, Portland Oregon, March 2004); figures for acres and species from U.S. Fish and Wildlife Service, *Habitat Conservation Plans*, <http://endangered.fws.gov/hcp/> (accessed July 2003).
66. U.S. Fish and Wildlife Service, *Habitat Conservation Plans*.
67. Daniel Pollak, "Natural Community Conservation Planning (NCCP): The Origins of an Ambitious Experiment to Protect Ecosystems," prepared at the request of Senator Byron D. Sher (CRB-01-002, 2001), Sacramento, Calif., 1.
68. U.S. Fish and Wildlife Service, "Determination of Threatened Status for the Coastal California Gnatcatcher," 58 FR 16742-16757, 30 March 1993, 1-3.
69. Pollak, "Natural Community Conservation Planning," 11.
70. *Ibid.*, 24.
71. NCCP webpage, <http://www.dfg.ca.gov/nccp/index.html> (accessed April 2004).
72. California Resources Agency, "Natural Community Conservation Planning, Innovation to Multi-species Protection in the Coastal Sage Scrub Habitat of Southern California," Report to the Legislature 7 (August 1995), as cited in DeAnne Parker, "Natural Community Conservation Planning: California's Emerging Ecosystem Management Alternative," *University of Baltimore Journal of Environmental Law* 6 (Fall 1997): 124.
73. For a sampling of these criticisms, see generally Sheldon, "Habitat Conservation Planning"; Thomas, "Habitat Conservation Planning"; Doremus, "Adaptive Management"; and Plater, "Embattled Social Utilities."

74. See, for example, Joseph Sax, "The New Age of Environmental Restoration," *Washburn Law Journal* 41 (2001): 1.
75. William Murtaugh, the first keeper of the National Register, planned a series of regional conferences (held between November 1967 and May 1968) to stress "New Preservation": "Although interest in environmental conservation and aesthetics was common among architects interested in preservation, urban design critics, and neighborhood advocates, it was still rare among the state and local historical societies that made up much of the preservation movement. For many such societies and the public at large, historic preservation still denoted the commemoration of famous events and personages through operation of museums in historic structures." Instead, he hoped to instill more of a sense of historic preservation as part of living communities. See Glass, *Beginnings*, 31.
76. Mackintosh, *National Historic Preservation Act*, 41-42. These recommendations were included in the proposed 1979 National Historic Policy Act, but the legislation was not adopted.
77. Catherine Howett, "Second Thoughts," *Landscape Architecture* 77 (1987): 52-55.
78. Carol Rose, was concerned that they would freeze the character of a neighborhood, creating an "overplanned quality and an impervious suppression of variety" that defeats the purpose of the Act. See ("Preservation and Community," 509).
79. Robert M. Bass, *Past Meets Future: Saving American's Historic Environments* (Washington, D.C.: Preservation Press, 1992), 10.
80. *Ibid.*, 19.
81. Cathy Gilbert, NPS Seattle office, correspondence with Laura Watt, 15 September 2003.
82. Bob Page, NPS Olmsted Center for Landscape Preservation, correspondence with Laura Watt, 12 September 2003.
83. Arnold Alanen and Robert Melnick, "Introduction," in *Preserving Cultural Landscapes in America*, ed. Arnold Alanen and Robert Melnick (Baltimore: Johns Hopkins University Press, 2000), 17.
84. Patricia L. Parker and Thomas F. King, *Guidelines for Evaluating and Documenting Traditional Cultural Properties*, National Register Bulletin 38 (Washington, D.C.: National Park Service, 1990), 3, emphasis is ours.
85. The justice was famously referring, of course, to pornography rather than ecosystems or landscapes. See *Jacobellis v. Ohio*, 378 US 184 (1964).
86. Catherine Howett, "Integrity as a Value in Cultural Landscape Preservation," in Alanen and Melnick, *Preserving Cultural Landscapes*, 190, citing a 1976 essay by James Marston Fitch.
87. Raymond, "Habitat Conservation Plans."
88. Over time, however, the two laws seem to be converging at some middle-ground balance of incentive and coercion, suggesting that neither approach is sufficient alone to protect landscape-scale resources.
89. Arnold Alanen, "Considering the Ordinary," in Alanen and Melnick, *Preserving Cultural Landscapes*, 135.
90. See Gary K. Meffe and C. Ronald Carroll, eds., *Principles of Conservation Biology* (Sunderland, Mass.: Sinauer, 1997); Michael Soule, "What is Conservation Biology?" *Bioscience* 35(1985): 727-34; and Alanen and Melnick, eds. *Preserving Cultural Landscapes*, for good introductions to these literatures.
91. Adrian Phillips, "Stewardship Partnerships: An International Perspective," (paper given at the federal *Joint Ventures: Partners in Stewardship* conference, Los Angeles, Calif., 2003).
92. An excellent compendium of these ideas is *Speaking of the Future: A Dialogue on Conservation*, "A Report on a National Symposium, November 2-6, 2001:

Reconstructing Conservation: History, Values, and Practice,” Conservation and Stewardship Publication No. 4 (Washington, D.C.: National Park Service, 2003).

93. The classic on this topic is David Lowenthal, *The Past is a Foreign Country* (Cambridge: Cambridge University Press, 1985). Also relevant is Joseph L. Sax’s discussion of Las Trampas, New Mexico, where locals resisted efforts by the NPS to preserve their town as a park in the late 1960s; Sax found that by remaining under local control, and cared for by people who “belonged” to that place in a personal way, the distinctive cultural and historic characteristics of this town were better protected than they would have been under preservation management by the NPS. See Joseph L. Sax, “The Trampas File,” *Michigan Law Review* 84 (1986): 1388-1414.