SECTION ONE

Introduction

Endangered Species Act and Private Land

The Endangered Species Act of 1973 (ESA) is the only major federal law that specifically seeks both to save all United States wildlife from extinction and to preserve the ecosystems on which it depends. With a fiscal year 1997 budget of less than $89 million designated for the ESA, the U.S. Fish and Wildlife Service (FWS) for terrestrial and freshwater species and the National Marine Fisheries Service (NMFS) for anadromous and marine species have the responsibility of implementing all aspects of the ESA — making listing determinations, developing recovery plans and providing consultation to federal agencies. Given the paltry budget for ESA implementation and the general lack of economic incentives for endangered species conservation, it is not surprising that more than a third of listed species continue to decline compared to less than ten percent whose status is improving (FWS 1994).

For most species listed as endangered or threatened under the ESA, recovery depends largely on whether habitat is conserved and properly managed. For 88 percent of listed species, habitat destruction has been a significant factor in their decline (Wilcove et al. 1996). Half of all federally listed species do not occur on federal lands (Stein et al. 1995), and more than half, including nearly 200 animal species, have at least 81 percent of their habitat on nonfederal land (U.S. General Accounting Office 1994). Given these facts, recovery of many species is unlikely to occur unless private landowners conserve habitat.

Regulation of private land is probably the most controversial aspect of the ESA. Section 9 of the ESA makes it unlawful for any person to kill listed animals or destroy habitat essential to their survival. The legal term for this is "take," and the prohibition against it covers activities that directly kill or harm listed species as well as activities that indirectly harm them through "significant habitat modification or degradation" (50 CFR §17.3). Enforcement of this prohibition can have major financial implications for landowners, and fear of land-use restrictions has prompted some landowners to destroy endan-

gered species habitat deliberately. A National Association of Home Builders report declared,

> Unfortunately, the highest level of assurance that a property owner will not face an ESA issue is to maintain the property in a condition such that protected species cannot occupy the property.... This is referred to as the "scorched earth" technique. This management practice is a perverse disincentive resulting from the ESA.... Developers should be aware of it as a means employed in several areas of the country to avoid ESA conflicts.

Some critics contend that the ESA is inflexible and unfairly penalizes private landowners who happen to own the last suitable habitat after

How the ESA Works: A Glossary

Take: As defined in the ESA, the term means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect or attempt to engage in such conduct. Harm may include significant habitat modification that actually injures a species. There are no federal prohibitions under the ESA for the taking listed plants on nonfederal lands, unless taking of those plants is in violation of state law or would accompany a project that requires federal authorization, permits or funding.

Endangered Species: Any species in danger of extinction throughout all or a significant portion of its range and listed pursuant to the provisions of the Endangered Species Act.

Threatened Species: Any species which is likely to become endangered within the foreseeable future throughout all or a significant portion of its range.

Candidate Conservation Agreement: An agreement to encourage the removal of threats to specific target species so as to avert listing them as threatened or endangered under the act. Voluntary protection measures are included in the agreement which specifies management activities necessary to prevent the species from declining to the point that full ESA protection is warranted. Agreements cover species which are most likely to be listed in the near future.

Jeopardy: As defined by ESA regulations, for a species to be placed in jeopardy is to reduce appreciably the likelihood of both survival and recovery of the species.

Section 7: Section 7 of the ESA sets forth certain requirements for all federal agencies whose activities may impact endangered or threatened species or their critical habitats. After mandatory consultation between the Secretary of the Interior and the action agency, the secretary must issue a written biological opinion with a decision as to whether an action will likely jeopardize the continued existence of the listed species.

Section 9: This ESA section delineates prohibited acts, including the "take" of any listed species without specific authorization of FWS or NMFS for species under the jurisdiction of each agency. Also prohibited is the selling, importing, exporting or removal of listed species.

Incidental Take Permit: A permit that exempts a permittee from the take prohibition of Section 9

of the ESA which is issued by the FWS or NMFS pursuant to section 10(a)(1)(B) of the ESA. They authorize a take of protected species that may be incidental to, but not the purpose of, otherwise lawful activities.

Habitat Conservation Plan: Commonly referred to as an HCP, it is a planning document that is a mandatory component of an Incidental Take Permit application, under section 10(a)(2)(A) or the ESA. An HCP must accompany an application for an Incidental Take Permit, and must ensure that the effects of the authorized incidental take will be adequately minimized and mitigated to the maximum extent practicable.

4(d) Rule: This refers to the protective regulations the Secretary issues to provide for the conservation of threatened species under ESA section 4(d). Any act related to endangered species which is prohibited under ESA section 9, may also be included in regulations for threatened species protection.

Safe Harbor: Program whereby a landowner is exempted from certain aspects of the ESA in return for maintaining or improving habitat of specific listed species. The landowner receives the authority to take any additional endangered species individuals attracted to the land in the future.

Programmatic HCP: An HCP used to address a group of actions as a whole, rather than one at a time in separate HCPs. A programmatic HCP might address a single related action occurring in many different places. This type of HCP allows numerous entities to be involved in the HCP through "Certificates of Inclusion" or "Participation Certificates" which convey the take authorization of the official section 10(A)(1)(B) permit to the certificate as a whole, rather than one at a time in separate HCPs. Sufficient information availability is a central problem in preparation of programmatic HCPs. Therefore, they can only be successful when the activities being addressed are well-defined, similar in nature, and occur within a described geographical area or at similar points in time.

Habitat-Based HCP: This approach may address all species within habitat-types within the plan area, or habitat-types in conjunction with a specific list of species that will be covered by the permit. Species covered by the HCP may include proposed and candidate species. This requires the Services to analyze the effects of the proposed HCP on those species not listed to be reviewed under ESA Sections 7 and 10 as if they were listed. FWS and the applicant generally use indicator species to set management parameters for the covered habitat in the HCP. A further test must be completed to ensure that the needs of all endemic and sensitive species associated with the covered habitat types are adequately addressed in the HCPs.

others have developed their land, typically without regard to long-term ecological consequences. On the other hand, conservationists assert that the ESA is not adequately enforced, especially on private land, noting that habitat loss and species declines often continue after listing. Moreover, the ESA is designed to rescue only species on the brink of extinction, and conservationists ask whether it makes sense to focus some effort on conserving species before their numbers drop so low and their habitat shrinks so much that listing becomes necessary.

In 1994 and 1995, Defenders of Wildlife sponsored a series of roundtable discussions of the ESA among industrial and non-industrial private landowners, conservationists and government representatives. Although there were disagreements, participants agreed that some problems could be solved if the ESA was funded adequately and used to encourage more public-private conservation partnerships (Ferris 1996). Meanwhile, other experts were recommending that economic incentives be used to engage more private landowners in conservation. In this setting, conservation planning has emerged as an incentive-based approach that potentially can address both conservationist and private landowner concerns.

Advent of Conservation Planning

In 1982, Congress amended the ESA in a way that radically altered its application on non-federal land. This was by authorizing habitat conservation plans. The impetus came from a decade-long battle between developers and environmentalists over the fate of San Bruno Mountain, several thousand acres of mostly undeveloped land five miles from San Francisco. Two endangered butterfly species occurred on the mountain. In a highly unusual move, developers and environmentalists, joined by local officials, developed a plan allowing some development to occur but protecting most of the butterflies' habitat. But there was concern that the plan would violate the ESA because it allowed destruction of some occupied butterfly habitat. To remedy the problem, Congress changed the ESA to permit incidental taking of endangered species by private landowners provided they develop habitat conservation plans (HCPs) to offset the damage.

Few landowners developed HCPs until the early 1990s. Only 12 HCPs were approved between 1983 and 1992 (FWS and NMFS 1996). Since 1992, however, there has been an explosion of such approvals — 200 by the end of 1996. By September, 1997, millions of acres nationwide were covered by more than 220 HCPs. Indeed, HCPs have become one of the most prominent mechanisms employed by FWS to address the problem of threatened and endangered species on private lands.

This rapid proliferation has led in turn to widespread concern among conservationists and independent scientists that plans are not being prepared with adequate scientific guidance and, in fact, may seriously undermine species recovery (Murphy et al. 1997—see Appendix B). ESA-related conservation planning for private landowners, however, now goes beyond HCPs. Increasingly, new legal tools are being developed to address multispecies and ecosystem planning, raising some of the same concerns that are being directed toward HCPs.

Types of ESA-Related Conservation Plans

Landowners can develop several different types of ESA-related conservation plans. The HCP is the most widely used. Because it is available only for landowners with listed species on their property, the Clinton administration has established "safe harbor" agreements that encourage landowners to maintain suitable habitat not occupied by endangered species. The administra-

The "No Surprises" Policy

Much of the recent explosion in HCPs can be attributed to the Clinton administration's "No Surprises" policy, adopted in 1994. This policy provides that once a landowner enters into an HCP, FWS nor NMFS will thereafter impose additional land-use restrictions or require that additional land or money be set aside by the landowner to provide for the conservation of species covered under the HCP. This policy has changed the nature of conservation planning by giving landowners significant incentives to develop plans that insulate them from future listings and other protective measures, and by shifting all financial responsibility for necessary changes down the line onto the federal government.

As plans are implemented, it is likely that species' populations will fluctuate, large-scale disturbances like fire and storms will occur, and scientific information will change. The "No Surprises" policy is of great concern for conservationists because these surprises are sure to arise during plan implementation, and there probably will not be enough federal money or land to make up for detrimental impacts on species. This difficulty was brought to the Interior Secretary's attention in 1996 through a letter from conservation biologist Gary Meffe signed by 167 scientists. For example, many plans are 50 to 100 years in duration. It is hard to imagine that a plan designed in 1940 would be adequate today, given new information on preserve design and management techniques.

The "No Surprises" policy is highly favorable to landowners because it provides corporate landowners with more certainty for endangered species than any other business entity receives for its line of work. Businesses do not receive assurances that interest rates will not change or that timber prices will not vary, especially over the long time periods that apply to some HCPs. In addition, landowners are not required to bear any of the risk that changes may be needed in the future because of unforeseen factors. Businesses have insurance against fire and flood for their offices, but there is no requirement that they ensure for emergency measures if conservation plans are inadequate or environmental conditions change. Instead, the federal government, the American public and the species themselves bear the risk of future emergencies.

Nevertheless, assurances like the "No Surprises" policy are extremely important incentives for landowners to undertake the sometimes long and costly process of conservation planning. In this report, we explore the implications of "No Surprises" for various conservation agreements, techniques that have been used to allow future changes to plans within the context of "No Surprises" and methods of giving landowners reasonable regulatory assurances that are less risky to species.

tion also is promoting ecosystem plans for landowners in particular regions and pre-listing agreements for landowners with unlisted species of concern.

Habitat Conservation Plans (HCPs)

HCPs and the incidental-take permits that accompany them are authorized under Section 10(a) of the ESA (16 U.S.C. §1539(a)). *The*

Habitat Conservation Planning Handbook (FWS and NMFS 1996) governs HCP development and implementation as well as the processing of Section 10(a) incidental-take permit applications. The handbook is intended to ensure that HCPs nationwide are developed and implemented in a consistent manner. To accomplish that, the handbook gives guidelines on issuance criteria, processing procedures, permit suspension and revocation and related issues.

In the HCP, the landowner must specify the impact that will result from the taking; what steps are being taken to monitor, minimize and mitigate the taking; what alternatives were considered; and why they were not implemented. FWS (NMFS for incidental take of listed salmon) is responsible for ultimately approving or rejecting the HCP. The landowner is responsible for developing the HCP, although FWS often works with the landowner from the beginning to develop a plan that will be acceptable. Typically, the landowner minimizes harm by limiting the geographic extent of harmful activities or limiting the seasons those activities are allowed (e.g., limiting timber harvest during the nesting season). Mitigation often involves setting aside (through purchase or conservation easements) habitat elsewhere to replace habitat lost through development. Any nonfederal landowner, whether a private citizen, corporation, county or state, can initiate an HCP.

FWS (or NMFS) approval of HCPs is based on whether (1) the taking will be incidental to an otherwise lawful activity, (2) the impacts of the taking will be minimized and mitigated to the maximum extent practicable, (3) there will be adequate funding to carry out the HCP and the landowner has established procedures for addressing unforeseen circumstances, (4) the taking will not appreciably reduce the likelihood of survival and recovery of the species in the wild and (5) the landowner agrees to include other measures that FWS (or NMFS) may require. Again, FWS typically works with the applicant and provides guidance as to what is or is not acceptable with respect to the above requirements.

The approval of incidental-take permits is subject to the National Environmental Policy Act (NEPA), requiring that an environmental assessment (EA) or environmental impact statement (EIS) be prepared. FWS and NMFS, however, categorically exclude from environmental analysis HCPs that they determine will have minor or negligible effects ("low effect" HCPs — FWS and NMFS 1996). To date, nearly all HCPs have been accompanied by either an EA or an EIS (for large-scale or multiple-landowner HCPs) discussing how mitigation reduces the significant impacts of the landowner activity.

Concerns About HCPs

Conservation advocates and scientists have identified a number of major problems with HCPs as currently implemented. First, the "no surprises" policy is problematic because it exempts landowners from paying for changes in approved plans that may be necessary to halt species declines, and the federal government is unlikely to be able to cover the shortfall. These assurances to landowners are particularly unacceptable when plans do not have adequate biological goals, monitoring and adaptive management (Murphy et al.

1997—see Appendix B). Second, the process of developing HCPs has been criticized. The problems lie mainly in inadequate public participation (Kostyack, 1997) and insufficient biological information or scientific review (Murphy et al. 1997, Hosack et al. 1997, Kaiser 1997). Third, nearly all conservationists agree that standards for HCP approval are too low, and because FWS and NMFS do not require HCPs to advance recovery, the plans may actually undermine it (Shilling 1997, National Audubon Society 1997). Finally, some conservationists believe that regional planning would be more effective than the piecemeal protection that results from having many small, single-landowner HCPs strewn across the landscape. This can lead to greater habitat fragmentation and insufficient protection of unoccupied habitat or unlisted species (O'Connell and Johnson 1997). The Clinton administration is promoting large-scale HCPs, but most are small-scale. Because HCPs are landowner-initiated, the government has little control over their scope.

Examples in This Report:

Washington Department of Natural Resources
Plum Creek (Central Cascades)
Weyerhaeuser Company — Willamette Timberlands
San Bruno Mountain
Metropolitan Bakersfield
Teichert, Inc. Vernalis Project
Black Hawk PG & E
Clark County Government
Balcones Canyonlands
Fel-Kran Plumbing
Sarah N. Bradley
Georgia Statewide
Brandon Capitol Corporation
Gross/Snow Construction
Volusia County Government
Ben Cone
Massachusetts Division of Fisheries and Wildlife
Coleman Company
Fort Morgan Paradise Joint Venture

Safe-Harbor Agreements

Unlike HCPs, safe-harbor agreements are for landowners who want to maintain or enhance habitat without fear of land-use restrictions if their actions subsequently attract endangered species to their property. Safe-harbor agreements provide a "carrot" for landowners by exempting them from future regulation if they manage their land in ways that benefit listed species.

When a landowner enters into a safe-harbor agreement, he/she agrees to maintain or improve endangered species habitat, thereby producing a "net conservation benefit" for the species. In exchange, the landowner is permitted to take endangered species attracted to the land in the future. Typically, a survey is conducted to determine the "baseline" number of animals for which habitat must be maintained. In addition to the baseline, which can be zero, the landowner voluntarily agrees to improve additional habitat. FWS does the compliance monitoring. From a legal perspective, safe-harbor agreements function as modified HCP arrangements (under Section 10) in which mitigation occurs first and incidental take occurs sometime in the future.

Safe-harbor agreements seek to solve two major problems of ESA implementation. First, the Section 9 take prohibition generally mandates protection only for currently occupied habitat and

does not apply to potentially suitable unoccupied habitat. As a consequence, landowners with such habitat may be so afraid of restrictions that a "take" prohibition would impose that they do not improve habitat. In fact, they have an incentive to destroy it in order to keep endangered species away (National Association of Home Builders 1996). Second, endangered species habitat often requires active management, such as periodic burning or removal of exotic species, to remain suitable. Because the ESA does not explicitly require landowners to maintain habitat, the habitat can undergo steady degradation over time.

The first three safe-harbor agreements — for the Attwater's prairie chicken *(Tympanuchus cupido attwateri)* in Texas, for the restoration of the aplomado falcon *(Falco femoralis)* in Texas and for the red-cockaded woodpecker *(Picoides borealis)* in the Sandhills region of North Carolina — have received considerable attention. They are the models for the Clinton administration's draft policy on safe harbor, announced in June, 1997. Through this policy, the administration seeks to involve more private landowners in safe-harbor agreements, covering more species and habitat types.

Concerns About Safe-Harbor Agreements

Conservation advocates have voiced several concerns about safe-harbor agreements. First and perhaps most important is concern about how the landowner's baseline responsibility is determined. This can be complicated and may involve land surveys, population estimates and quantification of occupied habitat. There is some uncertainty associated with all of these factors, and to the extent that the baseline is negotiable, there is a risk that it will be influenced more by the landowner's desire for an economic return on the property than by the biological needs of the species. Second, landowners may be tempted to degrade habitat deliberately prior to entering into a safe-harbor agreement in order to lower the baseline.

Third, safe-harbor may not always be appropriate. For example, depending on the species and habitat type, some animals may move from protected habitat to nearby habitat that has been enhanced under a safe-harbor agreement. Because the protected habitat could be destroyed after the animals abandon it and the enhanced habitat also could be destroyed, the species could be worse off than without an agreement. Nevertheless, many scientists believe that the benefits of maintaining and expanding habitat through safe-harbor agreements outweigh this concern. They contend, however, that sound monitoring programs must accompany the agreements. The Clinton administration's draft safe-harbor policy calls for rejecting safe-harbor agreements that could backfire. Safe harbors have not yet been widely tested. How well they will work remains to be seen.

Examples in This Report:

Sandhills Agreement
Georgia Statewide Plan

Prelisting Agreements

In a typical prelisting agreement, any federal, state or private entity can negotiate an ESA-

related conservation plan to arrest the decline of a species. Ideally, this occurs before the species warrants listing under the ESA. These agreements may satisfy both conservationists calling for more proactive conservation measures and landowners seeking to avert land-use restrictions.

The Clinton administration has announced a draft candidate conservation agreement policy for proposed, candidate and other unlisted species. For candidate species, FWS or NMFS will assist landowners in developing programs or plans that, if undertaken on a broad scale, would "remove the threat(s)" to the species and thus preclude the need to list it. The landowner will receive an "enhancement of survival permit" at the time of entering into the agreement. It will assure the landowner of having no further obligations if the species is listed, regardless of new information or changed circumstances.

Concerns About Prelisting Agreements

Pre-listing agreements often are not legally enforceable, and many of them are developed to avert listing and subsequent regulations, even though scientific information indicates that the species should be listed. This has occurred with many species, including the Barton Springs salamander *(Eurycea sosorum),* the jaguar *(Felis onca)* and the coho salmon *(Oncorhynchus kisutch).* Moreover, biological goals and standards are absent or unacceptably vague for many pre-listing agreements. As for the draft policy for candidate conservation agreements, conservation advocates are most concerned about the level of assurances that are granted to participating landowners. First, the draft policy states that some agreements may "remove the need to list" the species. This is inconsistent with Section 4 of the ESA, which requires that listing determinations be based solely on science. Second, if the species is listed, then landowners who fulfill their obligations under the agreement have no additional responsibilities and will receive incidental-take permits, regardless of whether they intend to use their property in ways that may jeopardize species survival.

Examples in This Report:

Maine's Atlantic Salmon Conservation Plan

Ecosystem Planning

We define ecosystem planning as any attempt at ecosystem-scale planning and management (including development and natural resources extraction and natural resources preservation) that includes all endangered species within the planning area.

Some conservationists have decried ecosystem planning because it allows incidental take on a broad scale. Some developers and property rights advocates, on the other hand, have criticized it because it restricts development over large areas. Large-scale ecosystem planning, however, has given landowners and governmental jurisdictions the flexibility to apply principles of preserve design to large areas and enabled them to avoid the piecemeal approach to conservation that can lead to habitat fragmentation. Such plans hold promise if they incorporate sufficient scientific information and if they provide safety nets for imperiled species.

The Natural Community Conservation

Planning program (NCCP) in California seeks to address conservation and development needs across jurisdictional boundaries at an ecosystem level. This program has been touted as a model for future planning under the ESA. The NCCP was established by state law in 1991 in response to the extreme situation in California of high population growth, massive development pressure and high concentrations of rare, endemic and endangered species. The NCCP also was an attempt to prevent federal listing of the coastal California gnatcatcher for protection under the ESA. After the federal government listed the gnatcatcher as threatened, the NCCP became the basis of a 4(d) rule that regulates activities associated with its habitat (see The Importance of Listing box). Governor Pete Wilson declared: "We will bring together developers, environmentalists and public officials to create a plan to protect the endangered wildlife and allow needed development."

Under the NCCP, FWS responsibility for enforcing the ESA is largely delegated to local and state government. That is, local governments, FWS and the California Department of Fish and Game (DFG) jointly develop regional

California Coastal Sage Scrub Ecosystem

The California coastal sage scrub ecosystem, a unique mix of drought-resistant shrubs that includes California sagebrush, buckwheat and several herbaceous sage species, once covered much of the lowlands of southern coastal California from Ventura County to San Diego County.

Widespread urban development, livestock grazing and intensive agriculture have reduced this ecosystem to approximately ten percent of its original extent (Murphy et al. 1992; McCaull 1994, Natural Resources Defense Council 1997). Species dependent on coastal sage scrub also have declined, and some have been listed as threatened or endangered under the Endangered Species Act, including the coastal California gnatcatcher, orange-throated whiptail lizard, Hermes copper butterfly, Pacific pocket mouse, Orange County mariposa lily and San Diego barrel cactus (Noss and Peters 1995, Dobson et al. 1997).

The decimation of the coastal sage scrub ecosystem and consequent increase in the number of listed species in rapidly growing parts of southern California has sparked considerable controversy. The region's population is expected to double in some areas by 2010. Nearly all of the remaining coastal sage scrub is on privately owned land worth billions of dollars. Even the pockets of coastal sage scrub not threatened by imminent development may be destroyed by irresponsible recreational use, spread of invasive exotic species or fragmentation. Establishing effective conservation programs to address these threats is essential to ensure quality of life for southern Californians and the survival of increasingly rare coastal sage scrub species.

COASTAL CALIFORNIA GNATCATCHER. B. MOOSE PETERSON/WRP

conservation plans that the wildlife agencies (DFG and FWS) deem adequate for issuance of incidental-take permits. The NCCP is intended to take a multispecies, multi-habitat approach. Planning areas are delineated by ecosystem boundaries rather than landowner or county boundaries. This approach relieves FWS of having to help develop and approve HCPs project by project and species by species and seeks to give local governments and the state wildlife agency (DFG) an official role in ESA-related conservation planning.

Currently the NCCP is limited to a pilot program in southern California that embraces five counties: San Diego, Orange, Riverside, Los Angeles and San Bernardino. The program can be visualized as a giant jigsaw puzzle, in which the entire planning area encompasses the remaining coastal sage scrub habitat — 6,000 square miles stretching from Los Angeles and San Bernardino Counties to the Mexican border. This puzzle is broken into 11 pieces labeled subregions, each with its own Natural Communities Conservation Plan. The Multiple Species Conservation Program (MSCP) for southwestern San Diego County, assessed in this report, is one of those 11 pieces. Each subregion (including the MSCP) is divided into smaller subareas to facilitate planning.

The NCCP is a habitat-based approach to conservation planning. *The Habitat Conservation Planning Handbook* (p 3-38) declares: "The rationale for a habitat-based approach is that if certain habitat-types are scientifically selected and assessed, and adequately protected under the terms of the HCP, the HCP could protect a broader range of species than the few 'target' species that might otherwise be addressed by a conventional HCP."

Other ESA-related programs also seek to use large-scale planning to address ecosystem-level concerns. For example, for the Louisiana black bear *(Ursus americanus luteolus),* landowners, wildlife biologists and conservationists have developed recovery strategies and priorities focused on identifying remaining bottomland hardwood forests and employing management techniques to enhance habitat and develop corridors for bear movement.

Concerns About Ecosystem Planning

The ecosystem-based approach to conservation gives momentum to fulfilling the ESA's original purpose — to protect ecosystems and recover imperiled species that depend on those ecosystems (Patlis 1996). The ecosystem approach addresses potential cumulative effects, habitat fragmentation and multiple species. Many hold the NCCP up as the model for endangered species management, but it has potential flaws. For the NCCP, funding may be insufficient for plan implementation and preserve acquisition, and some individual plans have been developed with insufficient independent scientific oversight (NRDC 1997). In addition, such plans are used frequently as an excuse not to list species that become imperiled despite NCCP implementation.

Examples in This Report:

Multiple Species Conservation Program (MSCP)
Swan Valley Agreement
Louisiana Black Bear Plan

ESA-related conservation planning can either further species recovery or hasten ecosystem degradation and species extinctions. The no-surprises policy of freeing landowners from future liability makes development of high-quality, information-rich HCPs an absolute necessity. HCPs approved now may predetermine the fate of some endangered species. If we are not careful, conservation planning will result not in endangered species recovery but in accelerated erosion of landowner responsibilities toward imperiled species and biodiversity.