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Endangered Species: Continuing Controversy

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Endangered Species: Continuing Controversy

SUMMARY

The Endangered Species Act of 1973 (ESA) has been one of the most controversial of all environmental laws. Undoubtedly, the controversy stems from the strict substantive provisions of this law compared to many other environmental laws which tend to be more procedurally oriented or to permit greater administrative discretion. As a result of the ESA's standards, the Act often plays a role in disputes in which all sides agree that a given species is not the center of the debate.

The authorization for spending under ESA expired on October 1, 1992. The prohibitions and requirements of the Act have remained in force, even in the absence of an authorization, and funds were appropriated to implement the administrative provisions of the Act in each subsequent fiscal year.

In the 106th Congress, most observers see only a small chance of floor action on ESA, due to a variety of factors, including first the impeachment debate and then the approaching presidential election. As a result of these and other factors, any actions to modify parts of the ESA appear likely to occur either as *ad hoc* amendments to appropriations bills or as narrow legislation addressing specific problems. It is unclear whether the House or the Senate will be more likely to initiate action.

In the 106th Congress, there are two broad approaches to amending the act. H.R. 960 is supported by a number of environmental, scientific, and religious groups. H.R. 3160, introduced by Chairman Young, is supported by property rights groups and several industries. Hearings on H.R. 3160 were held on February 2 and March 1, 2000, and more hearings are expected. One narrowly tailored approach is S. 1100, which (as reported) would among other things, move the designation of critical habitat to the time when a final recovery plan is released under most circumstances. Various bills have also been introduced to fund federal land acquisition and provide support for private landowners to conserve listed species on their land. H.R. 701, to provide permanent appropriations for various programs that would benefit listed species (among other purposes), was reported on February 16, 2000 (H.Rept. 106-499).

In April 2000, the signatories to the Convention on International Trade in Endangered Species met in Nairobi, Kenya. There was relatively little controversy over the meeting.



MOST RECENT DEVELOPMENTS

In the 106th Congress, only a few bills have been introduced to make significant changes in ESA. On February 2 and March 1, hearings were held on H.R. 3160, which would make extensive amendments in a number of provisions in current law. On July 28, 1999, the Senate Committee on Environment and Public Works reported S. 1100 (S.Rept. 106-126). The bill would change procedures for designation of critical habitat. Several bills have been introduced to provide funding from revenues from the Outer Continental Shelf oil and gas receipts to benefit land acquisition and other programs for the conservation of listed species. H.R. 701 reported by the House Resources Committee on February 16, 2000 (H.Rept. 106-499); it would provide permanent appropriations for new and certain existing programs that would benefit listed species. It was referred to the House Committees on Agriculture and Budget for a limited time. An Administration proposal to delist or downlist a number of species, including the threatened grizzly bears around Yellowstone National Park, may generate congressional oversight hearings. Proposals to revise Administration guidelines or regulations in the development of Critical Habitat, and new regulations for "no surprises" agreements and candidate conservation agreements may also spark congressional interest.

BACKGROUND AND ANALYSIS

What is the ESA? The 1973 ESA (16 U.S.C. 1531-1543; P.L. 93-205, as amended) began as a comprehensive attempt to protect all species and to consider habitat protection as an integral part of that effort. It is administered primarily by the Fish and Wildlife Service (FWS), but also by the National Marine Fisheries Service (NMFS) for certain marine species. Under the ESA, certain species of plants and animals (both vertebrate and invertebrate) are listed as either "endangered" or "threatened" according to assessments of the risk of their extinction. Once a species is listed, powerful legal tools are available to aid the recovery of the species and the protection of its habitat. As of Sept. 30, 1999, 1,775 species of animals and plants (of which 1,197 occur in the United States and its territories and the remainder only in other countries) had been listed as either endangered or threatened. Of the U.S. species, 886 were covered in 525 recovery plans. The authorization for funding under ESA expired on October 1, 1992, though Congress has appropriated funds in each succeeding fiscal year. (See the FWS website at [http://www.fws.gov/r9endspp.html].)

What is the Impact of the ESA? While the ESA plays an important role in the protection of species, it can also become a surrogate, at times, in quarrels whose primary focus is the allocation of scarce or diminishing lands or resources. Cases in which all economic interests line up squarely against those of a vanishing species are rare. Because other laws often lack the strict substantive provisions that Congress included in the ESA (see Major Provisions sections, below) regarding taking of species, critical habitat, and avoidance of jeopardy, the ESA often becomes the battleground by implication. Like the miners' canaries, declining species tend to flag larger controversies over resource scarcities and altered ecosystems. Examples of resource debates in which species were symptoms of larger controversies include the Tellico Dam (hydropower development and construction jobs versus farmland protection and tribal graves, as well as the snail darter); northwest timber harvest (protection of logging jobs and communities versus commercial and sport fishing, recreation,

and ecosystem protection, as well as salmon and spotted owls); and the Edwards Aquifer (allocation of water among various users with differing short- and long-term interests, with a few spring-dependent species caught in the cross-fire).

In recent years, tensions over ESA have increased as species have been added to the protected list, and as the greater demands of a growing economy and human population have affected species' habitats. Both Congress and the Administration have sought to lessen these tensions by, among other things, tailoring application of the Act to special local circumstances. The Act's critics contend that the Administration's efforts do not go far enough; some feel that the same was true of the stalled efforts of the 105th Congress. The Act's defenders counter that it merely balances an inherent bias toward development in other governmental laws and policies, and that some of the current Administration's policies may go too far.

Debate, pro and con, on ESA splits largely along demographic lines. While most demographic groups support species conservation, that support is stronger among urban and suburban populations and less so in rural areas; and strong among those in the east and along the coasts and less so in central and mountain states. Sport hunters and anglers seem divided on the issue. It is also noteworthy that, while the debate often centers on jobs and biology, people on both sides claim ethical support for their positions, and some religious groups now participate in the debate. In addition, some industries (e.g., logging and land development) generally see ESA as a serious problem, while others (e.g., some commercial fishing and many recreation interests) see it as generally supporting their interests.

Has ESA Been Effective? The answer to this question depends very much on the choice of measurement. Since a major goal of the ESA is the recovery of species to the point at which the protection of the Act is no longer necessary, this seems a good starting point. If this is the only standard, the Act could be considered a failure, since only 11 species have been delisted due to recovery, as of July 31, 1997. Seven species have become extinct since their listing, and nine have been de-listed due to improved data. In the latter case, some of the nine species were originally listed to protect any last remaining few that might have been alive at the time of listing. It can be quite difficult to prove whether extraordinarily rare species are simply that, or in fact already extinct. For example, a rare shorebird thought by many to be extinct was re-discovered in a remote area of Canada a few years ago; it might just as easily have quietly gone extinct without being re-discovered. Rare species are, by definition, hard to find. In May 1998, Secretary Babbitt announced that FWS would study a number of species for delisting and downlisting. Like the pattern just noted, some would be delisted for reasons other than recovery. The announcement does not preclude the consideration of other species; the possible delisting of threatened grizzly bears around Yellowstone National Park, for example, was considered by FWS after this announcement.

Even so, since some scientific studies demonstrated that most species are listed only once they are very depleted (e.g., median population of 407 animals for endangered vertebrates according to one study), another measure of effectiveness might be the number of species that have stabilized or increased their populations, even if the species is not actually de-listed. If this is the only standard, the Act could be considered a success, since a large number (41% of listed species according to one study) have improved or stabilized their population levels. Other species (e.g., red wolves and California condors) might not exist at all without ESA protection, and this too might be considered a measure of success, even

though the species are still rare. (See CRS Report 98-32, *Endangered Species Act List Revisions: A Summary of Delisting and Downlisting.*)

Leading Causes of Extinction. Until recent decades, the focus of the extinction debate was on losses due to over-exploitation, generally through hunting, trapping, or fishing. The poster species of the debate were passenger pigeons, tigers, wolves, and other well-known animals of today's ESA debate. But in the 20th century, a shift of focus and probably of fact has occurred. The vast majority of species now protected under the ESA reached that status due to habitat loss. Even those species for which direct taking was probably an early factor in their decline are generally also at risk due to habitat loss. Habitats reduced now to a small fraction of their former extent include tall-grass prairie, fresh and salt water wetlands, old growth forests of most types, free-flowing rivers, coral reefs, undisturbed sandy beaches, and others.

Another very high-ranking factor in the demise of many species is the introduction of non-native species. The non-natives can be diseases or parasites (e.g., avian malaria in Hawaii, or Asian long-horned beetles in North America), predators (brown tree snakes in Guam and Hawaii), or competitors (e.g., barred owls in the Pacific Northwest). The gradual homogenization of the world's flora and fauna has led to a demise of affected species. (See CRS Report RL30123, *Harmful Non-Native Species: Issues for Congress.*)

Is Extinction Normal? If extinction is normal, then one could argue that there is no need for government to intervene in a natural process. The vast majority of species that have ever lived on Earth are now extinct — an observation uncontested by paleontologists. But is the current rate of extinction different from background ("normal") extinction rates over time, and if so, by how much? Calculating current rates of extinction, much less making comparisons with the geologic past, is extremely difficult. Those who make the attempt generally base each step in their calculation on what they believe to be conservative assumptions, thus generating extinction rates that they consider low estimates. The estimates of numbers of species becoming extinct per year (17,000 species per year being a typical estimate) seem astonishingly large in part because laymen are generally unaware of the huge number of species in groups people pay little or no attention to (e.g., beetles, marine invertebrates, fish, etc.), and the large number of species estimated on Earth. Current estimates of total species range from 5 million to 100 million, with 10-30 million being commonly accepted numbers. If scientists are unsure of how many species exist, it is naturally difficult to estimate how fast they are going extinct.

Widely diverse methods all suggest that current rates of extinction exceed background rates, which are thought to be from one to ten species per 10 million per year. (That is, if there are 20 million species now, background levels would be about 2 to 20 species extinctions per year.) Common estimates of current extinction rates range from 100 to 10,000 times background rates — roughly comparable to the five great episodes of extinction in the geologic past. Critics most frequently question these calculations by stressing uncertainties, rather than citing specific factual errors. This criticism is not surprising, since no single step in these calculations can be 100% certain (e.g., estimating the number of existing species). A well-known critic, the late Julian Simon (Professor of Business Administration at the University of Maryland), called the calculations "statistical flummery." Most biologists counter by noting that similar numbers are generated in studies of widely different groups by scientists using not only different methods, but conservative assumptions.

Robust results (i.e., similar results from the testing of a hypothesis in a variety of ways) are usually considered scientifically sound.

Evolution continues, even in the face of high extinction rates, so perhaps new species will evolve that are better adapted to new conditions. If so, how long would evolutionary recovery (to an equal number albeit different species) take? Examining the geologic record after major extinction episodes, some scientists estimate that recovery to approximately equal numbers of species took up to 25 million years for the most severe extinction crises. Thus, if the current extinction rate and recovery rate are comparable, the return to species numbers of the pre-historic era would take several million years.

Issues in the 106th Congress

Some landowners fear that the presence of a listed species or the designation of their land as critical habitat will result in loss of some or all of their property rights. ("This is nothing but confiscation.... The government is stealing the property of citizens...," said John Silber, Chancellor of Boston University, regarding an ESA controversy near his property in Texas.) A more widespread concern is that there may be restrictions on new or current activities, thereby causing economic losses or reducing land values. At the other end of the spectrum, there are those who view the presence of a rare flower or frog on their land as an honor. The FWS claims that this attitude is common, particularly in the Northeast and Midwest, though rarely mentioned in the press.

Under the Constitution, no person's property can be taken without "just compensation," whether the taking occurs under ESA or any other federal law or whether the taking is done by FWS or any other agency. But "taking" has been interpreted strictly by the courts in the past and, according to current interpretations by the Supreme Court, does not include restrictions on permitted uses or a decrease in the value of the land unless the constraints are very severe, and the prohibited uses could not have been barred at the time the property was acquired.

Some critics of ESA have argued that the current standard is too strict when applied to ESA controversies, and would like to see the ESA amended to provide compensation in a broader range of circumstances than those required under the Constitution. (In general, such proposals target ESA, and sometimes the Clean Water Act; they do not typically change the threshold under the Constitution for compensation for taking of land by other agencies under other laws or for other purposes.) These critics generally propose compensation be offered for some specified percentage decrease in the value of their assets (including losses related to any loss of use of their land), since they feel that the property owner is otherwise forced to bear the cost of a public benefit.

Opponents of a new standard counter that they do not wish to see ESA singled out as having a different, more generous standard for payment of compensation from that required under current interpretation of the Constitution or for any other agency or law. They further state that the right of a property owner to use his or her land has never been absolute in any case. The cost to the federal government from changed thresholds for compensation and the constraints that would likely be placed on the operation of the ESA under a more lenient standard are among the contentious issues slowing action on reauthorization. (See also CRS Report 93-346A, *Endangered Species Act and Private Property Rights: A Legal Primer.*)

Funding for Land Conservation. A comparatively favorable federal budget estimate at the beginning of the 106th Congress led to interest in providing additional funds for the conservation of listed species, and one bill (H.R. 701), which would provide permanent appropriations for this and other purposes, was reported on February 16, 2000. The Administration has offered general support for such concepts through its Lands Legacy Initiative (see CRS Report RS20471, The Administration's Lands Legacy Initiative in the FY2001 Budget Proposal – a Fact Sheet) but has endorsed no particular bill of its own. Among other things, H.R. 701 would offer greater funding for land acquisition by the various federal land-managing agencies, including FWS, through the Land and Water Conservation Fund, and also provide incentives for conservation of listed species on private lands. It includes increased funding for measures to protect various species that are not listed; such programs could reduce the need for listing target species later. In the Senate, S. 25 is similar in many respects to H.R. 701 in its treatment of the LWCF. The recently introduced S. 2181 also shares many features of H.R. 701 in its sections dealing with the LWCF. A key feature of such proposals is that they would nearly all be permanently appropriated, and therefore offer a more secure funding source on which agencies and state governments could rely and plan. While such provisions would clearly be welcomed by the beneficiaries, they also augment the level of controversy surrounding the measures. (For a more information, see CRS Report RL30444, Resource Protection: A Comparison of H.R. 701 (Amended)/S. 2123, S. 25 and S. 2181 with Current Law.)

Salmon Conservation. NMFS officials listed nine salmon and steelhead populations in Washington and Oregon (March 1999) and two additional chinook salmon populations in California (September 1999), and proposed listing northern California steelhead trout (early February 2000). This completed most of the pending decisions on Pacific salmon, with a total of 26 populations now listed as either threatened or endangered. NMFS officials are working closely with state, local, and tribal officials, as well as the public, in developing a variety of recovery measures to address habitat restoration and other concerns. A critical decision will come on May 22, 2000 when NMFS will decide, in response to an Army Corps of Engineers review, whether to recommend to Congress that the four Lower Snake River hydroelectric dams be breached to benefit salmon recovery. NMFS is expected to announce that the four Lower Snake River dams should remain in place for at least 5 or 10 more years, to allow for a more complete assessment of progress toward recovering endangered salmon.

Making the ESA User-Friendly. As a result of the controversy over ESA and property rights, Interior Secretary Babbitt moved to decrease ESA conflict in several ways. New FWS policies relieve owners of small parcels of land of some of their responsibilities, and efforts were made to encourage landowners to increase the populations of listed species on their land. Under these "safe harbor agreements", the landowners receive, in return, promises that the presence of additional individuals of a listed population would not restrict their decisions to change the use of the land (see below). There has also been an Administration focus on listing species as threatened rather than endangered, to allow FWS to take advantage of the Act's more flexible provisions on the protection of threatened species.

The Administration also simplified some measures and requirements to address many of the concerns of private landowners. For example, as of February 1, 2000, 269 incidental take permits (ITPs) had been issued after permittees developed Habitat Conservation Plans (HCPs). FWS and NMFS have a simplified version for smaller projects with fewer impacts. HCPs have been criticized by industry as cumbersome, expensive, and unworkable (though this appears to be changing as industries gain more experience with them), while

environmental groups have frequently denounced them as plans without serious protection, unmonitored and forgotten once signed, and most likely to be useful to large corporations. While these changes have been made within the framework of existing law, there is great interest among some groups in including many of them in an amended ESA.

No Surprises. Among the administrative changes of greatest interest is the "no surprises rule." Inclusion of this provision in an agreement with a landowner means that the owner properly carrying out a conservation agreement is assured that there will be no further costs or restrictions on the use of the property, except by mutual consent. In some cases, changes may be carried out provided that the costs are not borne by the landowner. While landowners like the increased certainty, the program has been criticized by conservationists as potentially locking in conservation measures that are inadequate or unable to respond to changing conditions. One conservation group sued over the agencies' failure to go through formal rule-making. The FWS and the National Oceanic and Atmospheric Administration jointly proposed a "no surprises" rule (62 FED. REG. 29091 (May 29, 1997)) in response to the March 21, 1997 settlement agreement in Spirit of the Sage v. Babbitt No. 1:96CV02503 (SS)(D.D.C.). A final rule was published at 63 FED. REG. 8859 (February 23, 1998). An attempt to enact this "no surprises" policy and regulation into law was a major impetus for Administration interest in ESA legislation in the 105th Congress.

The changes in the Federal Register of June 17, 1999 (see *Safe Harbor Agreements*, below) modified the no surprises policy, in part. Specifically, a condition of an incidental take permit is a finding that the permitted taking will not appreciably reduce the likelihood of the survival and recovery of the species. If continuation of permitted activities would be inconsistent with the finding, and the inconsistency is not remedied in a timely fashion, the new regulations provide for cancellation of the incidental take permits with no surprises agreements.

Safe Harbor Agreements. A safe harbor agreement is made between a landowner or other responsible party and FWS (or NMFS). The agreement is voluntary and unlike an HCP in that the agreement is not done as a condition of getting a permit. Rather, it is an attempt by the landowners to see that their "good deeds" in conserving listed species and habitat (beyond the requirements of the law) are not "punished" by increased restrictions based on the voluntary improvements. The landowners agree to carry out certain activities on the land that would tend to increase the numbers of the listed species. The agreement covers a specified number of years.

If, at the end of the agreement, the owner wishes to take actions that might reduce the resulting elevated population or the quality or quantity of the improved habitat, there will be no penalty under ESA for doing so, provided that the baseline conditions in the agreement continue to be met. (Provisions are included to require that the agency receive advanced warning so as to remove as many of the listed plants or animals as possible and take specified other steps to retain as much of the advantages gained during the terms of the agreement as possible.) Final rules for this program (including "No surprises" provisions similar to those discussed above) were published June 17, 1999 (64 FR 32706). Some property rights groups criticize the program as offering insufficient incentive to landowners; conservation groups are concerned that the standard for entering the agreements does not require that they support recovery, and in the end might harm recovery efforts if the landowner returns the property to baseline conditions.

Candidate Conservation Agreements. A landowner might enter such an agreement with FWS or NMFS to conserve a declining but unlisted species. If the landowner carries out the agreement as promised, she or he receives assurances from the agency that should the species be listed in the future no additional measures will be required beyond those specified. Landowners' efforts, singly and collectively, may stave off a listing. Criticism of these agreements on the one hand is that they do not offer sufficient incentive to landowners to stimulate their participation, and may indeed require them to carry out measures more strict than those that might have been necessary with a listed species. Environmentalists and others counter that the requirements on landowners may be minimal, and might stave off listing when such a decision is biologically unjustified. Final rules for this program were published June 17, 1999 (64 FR 32706).

Critical Habitat Designation. The Administration has supported restrictions on its own ability to designate critical habitat (CH) under ESA (e.g., see proposed restrictions under appropriations process, below). In an announcement on Oct. 22, 1999, FWS placed designation of CH at the lowest priority in its listing budget, and stated that it could not comply with all of the demands of ESA under current budget constraints. Conservation groups saw a contradiction between that claim, and the agency's failure to request more funds for listing as well as its request in the last budget cycle to have Congress place a special cap on funding for designation of CH. (See Appropriations Riders, below.)

In the agency's view, CH offers little protection for a species beyond that already available under the listing process. Moreover, though the avoidance of adverse modification of CH is an obligation only for federal agencies and actions, it is frequently misunderstood by the public as a major restriction on a landowner's authority to manage land. While a landowner may feel some restrictions on management of land because of the presence of a listed species, the bulk of the restrictions, so this view holds, come as a result of the Act's prohibition on taking a listed species, and only occasionally due to the added strictures resulting from designated CH. Thus (according to some agency officials), the expense of CH designation, combined with the small margin of additional conservation benefit, make CH requirements a poor use of scarce budgetary resources, especially if the public views CH as the major regulatory impact of ESA, rather than as a supplement to the ESA's prohibition on "taking" a listed species. According to FWS, CH designation shows its greatest conservation benefit when it includes areas not currently occupied by the species; these areas may be important as connecting corridors between populations or as areas in which new populations may be re-introduced.

Under current law, the agency is obliged to designate CH at the time of listing. Two exceptions are provided. If the designation is not "prudent" (*e.g.* due to the threat of illegal collection or killing), it may be omitted. If it is not "determinable" due to insufficient data, it may be postponed up to one year after listing. In practice, FWS has designated CH for only about 10% of listed domestic species; in every case brought against the agency for failure to designate CH, the agency has lost. (At least 13 cases have been decided; others are pending.)

In a notice soliciting public comment, FWS proposes to "develop policy or guidance and/or revise regulations, if necessary, to clarify the role of habitat in endangered species conservation" (64 FR 31871-31874, June 14, 1999). The notice clarifies the agency's long-standing disaffection for this provision of the law and its view that its conservation benefit is low compared to its cost. Given the agency's stated position, the importance that the environmental community attaches to CH especially in some specific cases, and the distress

its designation causes among many landowners, the issue has been the focus of at least one bill (S. 1100) in the 106th Congress. See CRS Report RS20263, *The Role of Designation of Critical Habitat under the Endangered Species Act*.

Convention on International Trade in Endangered Species. The 11th Conference of Parties to this treaty (CITES) will be held in Nairobi, Kenya in April 2000. U.S. draft proposals were published on July 8, 1999 (64 *FR* 36893), and are being finalized. To date, the likely issues at the meeting have not generated great controversy. For more information from FWS, see http://international.fws.gov/cop11/cop11.html.

Legislation in the 106th Congress. S. 1100 (Chafee, S.Rept. 106-126) would require, among other things, that CH be designated with the release of the final recovery plan for a species (due in 2½ years), or within 3 years of listing for species without a recovery plan. The change would lengthen the potential delay after listing from one year, as required in current law, to 3 years. As a practical matter, on the other hand, FWS has stated its negative view of CH designation generally, and (partly as a result) 90% of species have no designated CH. Therefore, if the change prompted FWS to revise its current practice and follow the proposed law, designation of CH might be shortened (i.e., from "nearly never, unless sued" to 3 years). CH could also be designated at the time of listing if necessary to avoid extinction.

In the House, Chairman Young introduced H.R. 3160 on Oct. 22, 1999; hearings were held on February 2 and March 1, 2000, and additional hearings are expected. The bill would reauthorize ESA, allow economic injury as grounds for a citizen lawsuit, increase the role of states in listing decisions, place a deadline on recovery plans, make data considered in listing decisions publicly available, permit federal agencies to go ahead with actions that may affect listed species if FWS or NMFS fail to meet deadlines for consultation, and make other changes. Hearings were held on February 2 and March 1, 2000; additional hearings are expected. H.R. 960 (Miller) is very similar to H.R. 2351 of the 105th Congress. It is a farreaching reauthorization broadly supported by the environmental community.

Appropriations Issues. Appropriations bills continue to play an important role in the ESA debate in the 106th Congress. ESA funding over the last several years is shown in Figure 1 (below).

In a broader sense, the amount the federal government and others spend on ESA has been hotly debated. Even in an agency like NMFS, with major responsibilities for ESA, the amount of spending for endangered species cannot be reliably allocated to ESA alone. (NMFS's budget counts spending for both ESA and the Marine Mammal Protection Act under "Protected Species" and does not, for practical reasons, attempt to distinguish funds spent under one law or the other.) FWS itself funds some activities which benefit listed species through other programs, e.g., management of refuges which provide not only hunting, fishing, and bird-watching opportunities, but also habitat for listed species. Agencies with high probabilities of spending to benefit listed species include the Forest Service, National Park Service, and Bureau of Land Management. Agencies with responsibilities for dams and irrigation, soil erosion, pollution cleanup, etc., may also spend some fraction of their budget each year in ways that protect (or avoid deliberate harm to) listed species. Since some of the activities by these agencies might be done for more than just their ESA benefits (e.g., the rerouting of a trail to protect prime grizzly bear habitat may also benefit soil erosion control, bird habitat, and human safety), FWS spending might be viewed as the most readily measured part of federal spending.

In addition, state and local governments, business, and individuals may also spend in similarly complex ways. A FWS report estimated the "reasonably identifiable" expenditures of federal and certain state governments at \$233 million for FY1993, with 18% of the amount used for land acquisition. One effort to take a more expansive view of this question was prepared by the Majority Staff of the House Resources Committee (Serial No. 104-65, p. 192-223). After discussion of many aspects of spending by various agencies and an attempt to develop estimates for many of them, the report noted "...it is probably impossible to quantify the costs of recovery since many costs may be indirect or hidden in other expenditures and the estimated costs found in recovery plans may bear no actual relationship to reality."

100 80 \$ millions Coop. End. 60 Sp. Fund Recovery 40 20 Consultation Listing Candidate 0 Conserv. 1999 2000 FY2001 Request

Figure 1. FWS Endangered Species Program Appropriations (Current dollars*)

*Amounts for recovery in the FY2001 request include \$4.98 million for the Landowner Incentive Program (LIP).

Sources: Annual FWS Budget Justifications.

Multinational Species Conservation Fund. The Multinational Species Conservation Fund, which benefits Asian and African elephants, tigers, and the six species of rhinoceroses, would increase from \$2.4 million to \$3.0 million (+25%) under the President's request for FY 2001. The Fund often works with efforts under the Convention on International Trade in Endangered Species (CITES), to which the United States is a Party. This program is authorized under three acts, described below. Table 1 shows funding levels for FY2000-2001. In the appropriations bill, the Fund is a separate line item from ESA funding.

Table 1. Funding for Multinational Species Conservation Fund, FY 2000-2001 (x \$1000)

Multinational Species Conservation Fund	FY2000 Enacted	FY2001 Requested
African elephant	966	970
Tiger and Rhinos	676	970
Asian elephant	677	970
Administration	72	90
Total	2,391	3,000

Appropriations Riders, FY1998 — FY2000. In FY1998, Congress set a limit in the text of the Interior Appropriations bill on expenditures for the listing function (which, through FY1998, included listing, delisting, up-listing, downlisting, and designation of critical habitat). The effect is to limit the discretion of the agency to transfer funds for additional listings, e.g., if lawsuits mandate agency action on listing certain species. Without a cap, funding could have been transferred from other listing activities to meet the additional requirements of a lawsuit, or from other programs within the agency's Resources Management function. With the cap, a court order to carry forward a listing decision on particular species makes listing into a zero-sum game, at least at a fiscal level: the listing of some species or designation of their critical habitat would preclude the listing of others. FWS welcomed this change as a protection of other programs whose budgets it wishes to protect. (There are various lawsuits regarding listing pending in the courts, including one for a failure to list a number of plant species in southern California.)

For FY1999, Congress passed a variant of the previous year's language. The change exempts steps to delist or downlist a species from the cap on spending for Listing by transferring delisting and downlisting activities from the Listing function to the Recovery function, and listing of foreign species to the International Affairs program. The result of these changes leaves the Listing program managing only its most controversial functions: listing and uplisting of domestic species, plus critical habitat designation, and these functions would be subject to the cap.

For FY2000, the Administration proposed to add, within the cap for listing, a further restriction on designation of critical habitat, which is part of the listing function. Under the Administration's proposal, of the total amount for listing (\$7.5 million proposed), no more than \$1 million would have been allowed to be spent on designation of additional critical habitat. Since such designations are very costly, perhaps only one or two new areas may be able to be designated under this additional restriction. Congress accepted the restriction on the total amount available for listing, but did not include the restriction on designating critical habitat.

Major Provisions of the Current Law: Domestic

The ESA (16 U.S.C. 1531-1543) was passed in 1973, but was preceded by simpler acts in 1966 and 1969. It has been amended on numerous occasions since then: 1976, 1977, 1978, 1979, 1980, 1982, and 1988. The following are its major domestic provisions in the order they appear in the U.S. Code:

- 1. An **endangered species** is defined as "any species which is in danger of extinction throughout all or a significant portion of its range...." A **threatened species** is defined as "any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." The ESA does not rely on a numerical standard: such a standard would not reflect the wide variety of many species' biology. (For example, a population of 10,000 butterflies, all confined to one mountaintop, would clearly be at greater risk than 10,000 butterflies scattered over thousands of square miles.) The protection of the Act extends to all species and subspecies of animals (not just birds and mammals), although for vertebrates, further protection can be given even for distinct population segments within a species, and not just the species as a whole. More limited protection is available for plant species under the Act. (16 U.S.C. 1532)
- 2. The term "take" under the Act means to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct" (16 U.S.C. 1532). (Harassment and harm are further defined in regulation at 50 C.F.R. 17.3.) Taking is prohibited under 16 U.S.C. 1538. There has been controversy over the extent to which the prohibition on taking may include habitat modification. A 1995 Supreme Court decision (*Sweet Home*) held that the inclusion of significant habitat modification was a reasonable interpretation of the term "harm" in the law. (See CRS Report 95-778 A.)
- 3. Most listed species are managed by the Secretary of the Interior through FWS. However, marine species, including some marine mammals, are the responsibility of the Secretary of Commerce, acting through the National Marine Fisheries Service (NMFS). The law assigns the major role to the Secretary of the Interior (all references to "Secretary" below are to the Secretary of the Interior unless otherwise stated) and provides in detail for the relationship of the two Secretaries and their respective powers. (16 U.S.C. 1533)
- 4. When the appropriate Secretary initiates or receives a substantive petition from a party (which may be a state or federal agency including FWS or NMFS, an individual, or some other entity), the Secretary must decide whether to list the species, based only on the best scientific information and trade statistics, and after an extensive series of procedural steps to ensure public participation and the collection of information. The Secretary may not take into account the economic effects that listing may have on the area where the species occurs. This is the only place in the ESA where economic considerations are expressly forbidden. (See CRS Report 89-274 A, Consideration of Economic Factors under the Endangered Species Act, for an analysis of when the ESA does allow consideration of such factors.) Some steps may be skipped for emergency listings. Economic factors are not taken into account at this stage because Congress felt that listing was fundamentally a scientific question: is the continuation of the species threatened

or endangered? Through the 1982 amendments particularly, Congress clearly intended to separate this scientific question from subsequent decisions on appropriate protection. (16 U.S.C. 1533)

- 5. In the interval between a proposal and a listing decision, the Secretary must monitor the status of these "candidate" species and promptly list them to prevent sudden significant risks (16 U.S.C. 1533). Furthermore, federal agencies must confer with the appropriate Secretary on actions likely to jeopardize the continued existence of the species proposed to be listed. However, the agencies are not required, for candidate species, to avoid irretrievable commitments of resources. (16 U.S.C. 1536)
- 6. If a species is listed, the Secretary must designate critical habitat (either where the species is found or, if it is not found there, where there are features essential to its conservation) at the time of listing. However, if the publication of this information is not "prudent" because it would harm the species (e.g., by encouraging vandals or collectors), the Secretary may decide not to designate critical habitat. The Secretary may also postpone designation for up to one year if the information is not determinable. (16 U.S.C. 1533 etc.) As a practical matter, critical habitat has not been designated for many listed species. While any area, whether or not federally owned, may be designated as critical habitat, private land is affected by designation primarily if some federal action (e.g., license, loan, permit, etc.) is also involved. In either case, federal agencies must avoid "adverse modification" of critical habitat, either through their own actions or activities that are federally approved or funded.
- 7. The appropriate Secretary must develop recovery plans for the conservation and survival of listed species. Recovery plans to date tend to cover birds and mammals, but a 1988 amendment now forbids the Secretary to favor particular taxonomic groups. (16 U.S.C. 1533) The Act and regulations provide little detail on the requirements for recovery plans, nor are these plans binding on federal agencies or others.
- 8. Land may be acquired to conserve (recover) endangered and threatened species, and money from the Land and Water Conservation Fund may be appropriated for this acquisition. (16 U.S.C. 1534)
- 9. The appropriate Secretary must cooperate with the states in conserving protected species and must enter into cooperative agreements to assist states in their endangered species programs, if the programs meet certain specified standards. If there is a cooperative agreement, the states may receive federal funds to implement the program, but the states must normally provide a minimum 25% matching amount. Under the 1988 amendments, a fund was created to provide for the state grants. While the authorized size of the fund is determined according to a formula, money from the fund still requires annual appropriation. (16 U.S.C. 1535)
- 10. If their own actions or actions of non-federal parties that require the agencies' approval, permits, or funding may affect a listed species, federal agencies must ensure that those actions (including those affecting private actions such as funding, permit approval, etc.) are "not likely to jeopardize the continued existence" of any

endangered or threatened species, nor to adversely modify critical habitat. To be sure of the effects of their actions, they must consult with the appropriate Secretary. "Action" is quite broadly defined: it includes anything authorized, funded, or carried out by the agency, including permits and licenses. If the appropriate Secretary finds an action would jeopardize the species, he must suggest reasonable and prudent alternatives that would avoid harm to the species. Pending completion of the consultation process, agencies may not make irretrievable commitments of resources that would foreclose any of these alternatives. (16 U.S.C. 1536)

- 11. Proponents of federal action may apply for an exemption for that action (not for a species) from the Act. Under the ESA, a Committee of six specified federal officials and a representative of each affected state (commonly called the "God Squad") must decide whether to allow a project to proceed despite future harm to a species; at least five votes are required to pass an exemption. The law includes extensive rules and deadlines to be followed in applying for such an exemption and some stringent rules for the Committee in deciding whether to grant an exemption. The Committee must grant an exemption if the Secretary of Defense determines that an exemption is necessary for national security. (16 U.S.C. 1536) (For further discussion, see CRS Reports 89-274 A and 90-242 ENR.)
- 12. For actions without a federal nexus, the Secretary may also issue permits to allow incidental take of species for otherwise lawful actions that do not involve some federal nexus such as loans, permits, licenses, etc. The applicant for an "incidental take permit" must submit a habitat conservation plan (HCP) that shows the likely impact, the steps to minimize and mitigate the impact, the funding for the mitigation; the alternatives that were considered and rejected; and any other measures that the Secretary may require. Secretary Babbitt has vastly expanded use of this section and provided streamlined procedures for activities with minimal impacts. (16 U.S.C. 1539)
- 13. Other provisions specify certain exemptions for raptors; regulate subsistence activities by Alaskan natives; prohibit interstate transport and sale of listed species and parts; control trade in parts or products of an endangered species that were owned before the law went into effect; and specify rules for the establishment of experimental populations, among other specialized provisions. (Provisions of the Act referring to international activities are discussed below.) (16 U.S.C. 1539)
- 14. Prohibited actions are set out and criminal and civil penalties are specified, and provision is made for citizen suits to enforce the Act in certain respects. (16 U.S.C. 1538 and 1540)

Major Provisions of the Current Law: International

For the United States, the ESA implements the Convention on International Trade in Endangered Species of Wild Fauna and Flora ("CITES"; TIAS 8249; see CRS Report 94-675 ENR, *Convention on International Trade in Endangered Species: Its Past and Future*), signed by the United States on March 3, 1973; and the Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere (the "Western Hemisphere Convention"; 50

Stat. 1354; TS 981), signed by the United States on October 12, 1940. CITES parallels the ESA by dividing its listed species into groups, according to the estimated risk of extinction, but uses three major categories, rather than two. In contrast to the ESA, however, CITES focuses exclusively on trade, and does not consider or attempt to control habitat loss. The following are the major international provisions of the ESA:

- 1. The Secretary may use foreign currencies (available under 7 U.S.C. 1691, the Food for Peace program) to provide financial assistance to other countries for conserving endangered species. (As a practical matter, however, very little money is currently available under this provision.) The Act also authorizes appropriations for this purpose. (16 U.S.C. 1537 and 1542)
- 2. The Act designates the Interior Secretary as the Endangered Species Scientific Authority (ESSA) under CITES. As the ESSA, the Secretary must determine that export from the United States and import from other countries of living or dead organisms, or their products, will not harm the species in question. The Secretary has authority to enforce these determinations. The Secretary is required to base export determinations upon "the best available biological information," although population estimates are not required. Certain other responsibilities are also spelled out in CITES. (16 U.S.C. 1537-1538)
- 3. The Interior Secretary is also named as the Management Authority for the United States under CITES. The Management Authority must assure that specimens are exported legally, that imported specimens left the country of origin legally, and that live specimens are shipped under suitable conditions. Certain other responsibilities are also spelled out in CITES. (16 U.S.C. 1537)
- 4. The ESA makes violations of CITES violations of U.S. law if committed within the jurisdiction of the United States. (16 U.S.C. 1538)
- 5. The ESA requires importers and exporters of controlled products to use certain ports and provides for exemptions for scientific purposes and for programs intended to assist the recovery of listed species. There are also certain exemptions for Alaska Natives and for products owned before December 28, 1973, including scrimshaw. (16 U.S.C. 1538-1539)
- 6. The 1988 amendments created a major program for the conservation of African elephants.

LEGISLATION

P.L. 106-113 (H.R. 3194, Istook)

Section 1001 (a)(3) contains appropriations for Interior and Related Agencies. Signed by President on November 29, 1999.

H.R. 701 (Don Young)

Creates a new program to benefit conservation of listed species on private lands and amends several existing programs, resulting in benefits to listed species or in reducing the risk of later species listings. These and other titles funded through permanent appropriations of receipts from leasing energy resources on Outer Continental Shelf. Introduced February 10, 1999; referred to Committee on Resources. Reported (amended) February 16, 2000 (H.Rept. 106-499, Part I). Referred sequentially to Committee on Agriculture until March 17, and to Committee on the Budget until March 31 for such provisions as fall within their respective jurisdictions.

H.R. 960 (Miller)

Reauthorizes and amends Act, adding several benefits in tax code for measures to conserve listed species on non-federal lands. Introduced March 4, 1999; referred to Committee on Resources.

H.R. 3160 (Don Young)

Reauthorizes ESA, allows economic injury as grounds for a citizen lawsuit, increases the role of states in listing decisions, places a deadline on recovery plans, makes data considered in listing decisions publicly available, permits federal agencies to go ahead with actions that may affect listed species if FWS or NMFS fail to meet deadlines for consultation, and makes other changes. Hearings held February 2 and March 1, 2000. Introduced October 27, 1999; referred to Committee on Resources.

S. 1100 (Chafee)

Amends ESA to require designation of critical habitat concurrent with recovery plan or within 3 years, whichever is first. Adds "military training and operations" to economic impacts as a factor to be considered in designation. Introduced May 20, 1999; referred to Committee on Environment and Public Works. Reported July 28, 1999 (amended), S. Rept. 106-126.

FOR ADDITIONAL READING

- U.S. General Accounting Office. Endangered Species Act: Types and Number of Implementing Actions. [Washington] 1992. 40 p.

 GAO/RCED-92-131BR
- U.S. House of Representatives. Committee on Resources. Oversight Hearing on Examining the Expenditures of Agencies that Participate in Efforts to Save Endangered and Threatened Species. Apr. 17, 1996. 350 p.

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CRS Products

- CRS Report RS20263, *The Role of Designation of Critical Habitat under the Endangered Species Act.* Pamela Baldwin. 6 p.
- CRS Report RL30444, Resource Protection: A Comparison of H.R. 701 (Amended)/ S. 2123, S. 25 and S. 2181 with Current Law. Jeffrey Zinn and M. Lynne Corn. 52 p.

CRS Report RL30123. *Harmful Non-Native Species: Issues for Congress*, by M. Lynne Corn, Eugene H. Buck, Jean Rawson, and Eric Fischer. 50 p.

- CRS Report 98-178 A. *Endangered Species Act Amendments: Analysis of S. 1180 and H.R.* 2351, by Pamela Baldwin and M. Lynne Corn. 51 p.
- CRS Report 98-32 ENR. *Endangered Species List Revisions: A Summary of Delisting and Downlisting*, by Robert J. Noecker. 19 p.
- CRS Report 97-752 ENR. *African Elephant Issues: CITES and CAMPFIRE*, by M. Lynne Corn and Susan R. Fletcher. 6 p.
- CRS Report 93-664 ENR. The Clinton Administration's Forest Plan for the Pacific Northwest, by Ross W. Gorte. 6 p.
- CRS Report 94-675 ENR. Convention on International Trade in Endangered Species: Its Past and Future, by M. Lynne Corn. 17 p.
- CRS Report 93-346 A. Endangered Species Act and Private Property Rights: A Legal Primer, by Robert Meltz.
- CRS Report 90-242 ENR. *Endangered Species Act: The Listing and Exemption Processes*, by M. Lynne Corn and Pamela Baldwin. 29 p.
- CRS Report 95-778 A. *Habitat Modification and the Endangered Species Act: The Sweet Home Decision*, by Pamela Baldwin. 2 p.
- CRS Report 98-666 ENR. *Pacific Salmon Anadromous Trout: Management Under the Endangered Species Act*, by John R. Dandelski and Eugene H. Buck. 6 p.