

CRS Issue Brief for Congress

Received through the CRS Web

Endangered Species: Difficult Choices

Updated August 12, 2003

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CONTENTS

SUMMARY

MOST RECENT DEVELOPMENTS

BACKGROUND AND ANALYSIS

Overview

Prohibitions and Penalties

Listing

Critical Habitat

Recovery Plans

Land Acquisition and Cooperation

Permits

Exemptions; Emergencies

Miscellaneous

Major Provisions of Current International Law

Issues in the 108th Congress

Resource Conflicts

Use of "Sound Science"

Defense Department Activities

Private Property and Takings

Funding for Land Conservation

Making the ESA More User-Friendly

Consultation with the EPA on Pesticides

Critical Habitat Designation

Additional Legislative Initiatives

Appropriations Issues

LEGISLATION

FOR ADDITIONAL READING

Endangered Species: Difficult Choices

SUMMARY

The 107th Congress considered various measures proposing to amend the Endangered Species Act of 1973 (ESA). Major issues in recent years have focused on whether to incorporate further protection for property owners and reduce regulatory impacts, whether to increase the protection afforded listed species, or whether to modify various aspects of the ESA, such as the role of science in decision-making. The Clinton Administration made significant changes to ESA regulations, and many have advocated including these changes in the law itself. The 108th Congress may focus attention on reauthorization, the role of science in ESA decision-making, and on whether the ESA should be modified in the context of Department of Defense activities.

The ESA has been one of the more contentious environmental laws. This may stem from the strict substantive provisions of this law, which can affect the use of both federal and non-federal lands. 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.

The ESA is administered by the Fish and Wildlife Service (FWS) for terrestrial and freshwater species and some marine mammals, and by the National Marine Fisheries Service (NMFS, now NOAA Fisheries) for marine and anadromous species. The U.S.

Geological Survey’s Biological Resources Division conducts research on species for which the FWS has management authority.

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

In the 107th Congress, the Senate Environment and Public Works Subcommittee on Fisheries, Wildlife, and Water held an oversight hearing on the ESA listing and delisting process. The House Committee on Resources held several hearings on the role of science in ESA proceedings, and a bill was reported. Other hearings were held by House and Senate committees on specific issues. In addition, two bills were introduced to deal comprehensively with reauthorization; these measures did not receive any action. On the international side, the African Elephant Conservation Act (P.L. 107-111), the Rhinoceros and Tiger Conservation Act of 1994 (P.L. 107-112), and the Asian Elephant Conservation Act (P.L. 107-141) were reauthorized.

Early in the 108th Congress, the prominent issues are 1) how the ESA might affect military readiness (H.R. 1235, H.R. 1588, H.R. 1835, S. 747, S. 927, S. 1047, and S. 1050) and 2) what might constitute sound science as a basis for ESA action (H.R. 1097, H.R. 1253, H.R. 1662, and S. 369).



MOST RECENT DEVELOPMENTS

On July 31, 2003, the Senate Committee on Agriculture, Nutrition, and Forestry reported H.R. 1904 (amended), authorizing hazardous fuels reduction projects on BLM and Forest Service lands that contain threatened and endangered species, establishing a healthy forests reserve program to promote the recovery of threatened and endangered species, and providing safe harbor under the ESA to landowners who enroll in the healthy forests reserve program. On July 30, 2003, the Senate Committee on Environment and Public Works ordered S. 1210 reported, proposing to assist in the conservation of marine turtles and their nesting habitat in foreign countries. On July 22, 2003, the Senate Committee on Energy and Natural Resources held a hearing on H.R. 1904. On July 17, 2003, the House passed H.R. 2691, including §138 prohibiting Interior Department FY2004 funding of the Klamath Fishery Management Council.

BACKGROUND AND ANALYSIS

Overview

The 1973 ESA (16 U.S.C. 1531-1543; P.L. 93-205, as amended) is a comprehensive attempt to protect species at risk of extinction and to consider habitat protection as an integral part of that effort. Under the ESA, species of plants and animals (both vertebrate and invertebrate) may be listed as either “endangered” or “threatened” according to assessments of the risk of their extinction. More flexible management can be provided for species listed as threatened. Distinct population segments of vertebrate species may also be listed as threatened or endangered, and consequently some populations of chinook, coho, chum, and sockeye salmon in Washington, Oregon, Idaho, and California are protected under the ESA, even as other healthy populations of these same species in Alaska are not listed and can be commercially harvested. More limited protection is available for plant species under the ESA. Once a species is listed, powerful legal tools, including penalties and citizen suit provisions, are available to aid the recovery of the species and the protection of its habitat. Use of these tools, or the failure to use them, has led to conflict. For more detailed background information on the ESA, see CRS Report RL31654, *The Endangered Species Act: A Primer*.

As of December 31, 2002, a total of 1,072 species of animals and 748 species of plants had been listed as either endangered or threatened, of which the majority (517 species of animals and 745 species of plants) occur in the United States and its territories and the remainder only in other countries. Of the 1,262 U.S. species, 1,000 are covered in recovery plans. (See the U.S. Fish and Wildlife Service (FWS) at [<http://endangered.fws.gov/>] and the National Marine Fisheries Service (NMFS, which recently changed its name to NOAA Fisheries) at [<http://www.nmfs.noaa.gov/endangered.htm>].)

At times, efforts to protect and recover listed species can be controversial; declining species can function like the proverbial canary in the coal mine, since declining species often flag larger issues of resource scarcity and altered ecosystems. Past resource debates in which ESA-listed species were part of larger issues include Tennessee’s Tellico Dam (water storage

and construction jobs versus farmland protection and tribal graves, as well as snail darters); Pacific 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 Texas's Edwards Aquifer (allocation of water among various users with differing short- and long-term interests, as well as several spring-dependent species). Some current issues are discussed below.

Prohibitions and Penalties. The ESA contains civil and criminal penalties for “take” of endangered species, which means to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or 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). There has been controversy over the extent to which habitat modification is prohibited. A 1995 Supreme Court decision held that the inclusion of significant habitat modification was a reasonable interpretation of the term “harm” in the ESA. (See CRS Report 95-778 A, *Habitat Modification and the Endangered Species Act: The Sweet Home Decision.*)

Listing. Species may be listed on the initiative of the appropriate Secretary or by petition from an individual, group, or state agency. The Secretary must decide whether to list the species based only on the best available scientific and commercial information, after an extensive series of procedural steps to ensure public participation and the collection of information. In making the decision as to whether a species needs the protections of the ESA, the Secretary may not take into account the economic effects that listing may have; economic and other considerations are taken into account in structuring alternatives for assisting the species. (See CRS Report RL30792, *The Endangered Species Act: Consideration of Economic Factors*, for an analysis of when and how the ESA allows consideration of economic factors.)

Critical Habitat. With certain exceptions, if a species is listed, the appropriate Secretary must designate critical habitat (CH) — areas where the species is currently found or which might provide additional habitat for the species recovery. However, if the publication of this information is not “prudent” because it could harm the species (e.g., by encouraging vandals or collectors), the appropriate Secretary may decide not to designate CH. The appropriate Secretary may also postpone designation for up to one year if the information is not determinable (16 *U.S.C.* 1533). As a practical matter, CH has not been designated for many listed species in large part because FWS prefers to allocate scarce resources to the listing of new species. In addition, a court has found an FWS regulation to be an unlawful interpretation of the ESA in that it does not take into account the recovery plans of listed species (*Sierra Club v. U.S. Fish and Wildlife Service*, 245 F. 3d 434 (5th Cir. 2001)). While any area, whether or not federally owned, may be designated as CH, private land primarily is affected by CH designation if some federal action (e.g., license, loan, permit, etc.) is also involved, such that “consultation” between federal agencies is necessary. Federal agencies must avoid “adverse modification” of CH, either through their own actions or activities that are federally approved or funded.

Recovery Plans. The appropriate Secretary must develop recovery plans for the conservation and survival of listed species. At first, recovery plans tended to cover birds and mammals, but a 1988 amendment forbade the Secretary from favoring particular taxonomic groups (16 *U.S.C.* 1533). The ESA and its regulations provide little detail on the

requirements for recovery plans, and these plans are not binding on federal agencies or others.

Land Acquisition and Cooperation. The federal government may acquire land 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). 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 authorized 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).

Permits. There are two ways in which proposed actions can be evaluated for possible adverse impacts on listed species and permits issued. First, under §7 of the ESA, if federal agency actions or actions of a non-federal party that require an agency's approval, permit, or funding may affect a listed species, the federal agency must ensure that those actions are "not likely to jeopardize the continued existence" of any endangered or threatened species, nor to adversely modify CH. To review the possible effects of their actions on listed species and CH, federal agencies must consult with the appropriate Secretary. If the Secretary finds that an action would jeopardize a listed species or adversely modify CH, the Secretary must suggest reasonable and prudent alternatives that would avoid these harms. Pending completion of the consultation process, agencies may not make irretrievable commitments of resources that would foreclose any alternatives. The Secretary may issue a written statement that allows incidental taking of a species, subject to terms and conditions specified in the statement (16 *U.S.C.* 1536).

For actions without a federal nexus (i.e., no federal funding, permit, or license), under §10 of the ESA, the appropriate Secretary may issue permits to allow the "incidental take" of species during otherwise lawful actions. An applicant for a permit must submit a habitat conservation plan (HCP) that shows the likely impact of the planned action, steps to be taken to minimize and mitigate the impact, and funding for the mitigation; alternatives that were considered and rejected; and any other measures that the Secretary may require. The FWS and NMFS/NOAA Fisheries have vastly expanded use of this section and provided streamlined procedures for activities with minimal impacts (16 *U.S.C.* 1539).

Exemptions; Emergencies. Proponents of federal action may apply for an exemption from §7(a)(2) of the ESA for that action (not for a species). Under the ESA, a Committee (commonly called the "God Squad") of six specified federal officials and a representative of each affected state 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. To date, this process has been little used and only one exemption (Grayrocks Dam, WY) has been granted and carried out. The Committee is required to accept the President's determination (under specified circumstances) on an exemption in declared disaster areas, but the ESA does not address other emergency actions or situations. The Committee must also grant an exemption if the Secretary of Defense determines that an exemption is

necessary for national security (16 *U.S.C.* 1536). To date, no security exemption has been sought.

Miscellaneous. 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 endangered species owned before the ESA went into effect; and specify rules for establishing experimental populations (16 *U.S.C.* 1539).

Major Provisions of Current International Law. For the United States, the ESA implements the Convention on International Trade in Endangered Species of Wild Fauna and Flora (“CITES”; TIAS 8249), 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, CITES focuses exclusively on trade and does not consider or attempt to address habitat loss. 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). The ESA also regulates import and export of controlled products and provides some exceptions. The 13th regular meeting of CITES parties will be held October 3-14, 2004, in Bangkok, Thailand.

Issues in the 108th Congress

ESA reauthorization has been on the legislative agenda since authorization expired in 1992, and bills have been introduced in each Congress to address various aspects of endangered species protection.

Resource Conflicts. One of the express purposes of the ESA is to “provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved.” (16 *U.S.C.* 1531(b)) As our nation runs out of open space and our population puts increasing pressures on our natural resources, the conservation of species and their habitats may highlight underlying resource and economic conflicts. Public values and affected economic interests may be complex and sometimes conflicting. The situations described below have been the subject of Congressional oversight and legislative interest.

Klamath River Basin. In the Klamath River Basin, which straddles the Oregon/California border, the Bureau of Reclamation consulted with the FWS and NMFS/NOAA Fisheries on operating the Klamath Project in 2001, an acute drought year. As a result of those consultations, the Bureau decided to allocate nearly all the water to protect two species of endangered suckers in Upper Klamath Lake, the project’s primary reservoir, and to protect threatened coho salmon in the Klamath River. (Whether there is enough water even to meet both of these needs may present another difficulty.) This action was taken to avoid jeopardizing these species and to meet obligations to the Klamath and Yurok tribes. The authority and duty of the Bureau to use irrigation water to preserve species had been upheld in *Klamath Water Users Protective Association v. Patterson*, 204 F.3d 1206 (9th Cir, 1999). In addition, the lack of downstream flows had adverse impacts on salmon fisheries and on federal wildlife refuges that are home to many migratory birds and ESA-listed bald eagles. Because of the drought conditions, implementation of this operating plan

meant that water could not be delivered to many irrigation-dependent Oregon farmers. A federal district court denied a plea for release of water to the farmers (*Kandra v. United States*, 145 F. Supp. 1192 (D. Or. 2001)).

In February 2002, the National Research Council (NRC) released an Interim Report evaluating two federal biological opinions on endangered and threatened fishes in the Klamath River Basin that had prevented the Bureau from delivering water to many farmers. In this report, the NRC concluded there was neither sound scientific basis for maintaining Upper Klamath Lake levels and increased river flows as recommended in those biological opinions, nor sufficient basis for supporting the contrary assertions. On February 27, 2002, the Bureau released its 10-year biological assessment for its 10-year Klamath Project operation plan, in which it anticipated regular water deliveries to farmers for the 2002 growing season. Operating under a letter of permission from the FWS, the Bureau released only very low flows downstream in April and May 2002 and instead delivered water to the Upper Basin farmers. The Bureau also rejected the FWS and NMFS/NOAA Fisheries biological opinions on its 10-year operating plan and stated that it would comply for the immediate future but also requested new consultation.

In March 2002, the House Resources Committee held an oversight hearing on the NRC's Interim Report. The Klamath River experienced an unusually large salmon return in 2002, but many fish died in the lower River from disease. Many assert that low water flows caused the die-off; the Bureau is studying the situation. Despite increased rains and water availability, the same set of issues and interests continue to be present. In the 107th Congress, P.L. 107-349 (the Klamath Basin Emergency Operation and Maintenance Refund Act) authorized the Secretary of the Interior to reimburse project operation and maintenance expenses for 2001. In the Klamath area, upstream farmers are pitted against salmon fishing, Native American interests, and other downstream users; all sides have policy concerns that can be asserted and involve valuable sectors of the local economy. Farmers point to their contractual rights and the hardships for their families; others assert that the salmon industry is more valuable and that farmers could be provided temporary economic assistance, while salmon extinction would be permanent. Still others assert that there are ways to serve all interests, or that the science underlying the agencies' determinations is simply wrong.

In the 108th Congress, H.R. 1760 would establish water conservation and habitat restoration programs in the Klamath River Basin and provide emergency disaster assistance to those who suffered economic harm from the Klamath River Basin fish kill of 2002. A provision (§138) prohibiting Interior Department funding of the Klamath Fishery Management Council was included in the FY2004 Interior and Related Appropriations bill, H.R. 2691, passed by the House on July 17, 2003 (no similar provision was included in the Senate-reported S. 1391). The House provision has sparked considerable controversy among interested parties. The provision relates to the ongoing conflict in the Klamath River Basin over water allocations for farmers in the Klamath River Project area in the Upper Basin and water needed to avoid harm to three federally listed fish species. The Bureau of Reclamation (Department of the Interior) is currently operating the Klamath Project under a one-year operations plan announced in April 2003 while it continues to work on completing a 10-year operations plan. The FWS and NOAA Fisheries completed consultation on a 2002 10-year plan on May 31, 2002; however, the Bureau rejected the FWS and NMFS/NOAA Fisheries biological opinions on its 10-year operating plan and stated that it would comply for the immediate future but also requested new consultation. Controversies continue over science

and data used to support the agencies decisions. (For additional information, see CRS Report RL31098, *Klamath River Basin Issues: An Overview of Water Use Conflicts*.)

Salmon Restoration. Similarly, salmon protection in the Pacific Northwest presents many difficult choices, especially now that regional hydropower facilities are recognized as playing an increasingly important role in fishery management decisions and drought conditions have become more severe. NMFS/NOAA Fisheries officials have listed a total of 26 distinct groups (called “evolutionarily significant units”) of Pacific salmon and steelhead trout as either threatened or endangered. NMFS/NOAA Fisheries officials are working closely with state, local, and tribal officials, as well as the public, to develop a variety of recovery measures that address habitat restoration and other concerns. In late July 2000, NMFS/NOAA Fisheries decided, in response to an Army Corps of Engineers review, to delay any recommendation to Congress concerning whether to breach the four Lower Snake River hydroelectric dams to benefit salmon recovery. NMFS/NOAA Fisheries concluded, in a draft Biological Opinion and a Basin-Wide Recovery Strategy, that the four Lower Snake River dams should remain in place for at least eight more years, to allow for a more complete assessment of progress toward recovering endangered salmon. The final Federal Columbia River Power System biological opinion, reflecting this policy, was released on December 21, 2000. (A copy of this biological opinion is available at [<http://www.nwr.noaa.gov/1hydrop/hydroweb/docs/Final/2000Biop.html>].)

In *Alsea Valley Alliance v. Evans* (161 F. Supp 2d 1154 (D.C. Or. 2001), Judge Hogan remanded the listing of the Oregon Coast Evolutionary Significant Unit of coho salmon as a threatened species, finding that listing to have been arbitrary and capricious under the Administrative Procedure Act. The ESA permits listing of a species, subspecies, or “distinct population segment.” This allows some species such as wolves to be listed in an area (the lower 48 states) even if a viable population exists elsewhere (Alaska). NMFS/NOAA Fisheries had clarified in a policy statement what was meant by distinct population segment in the context of certain fish. NMFS/NOAA Fisheries equated “distinct population segment” with being an “evolutionary significant unit (ESU)” (56 *Fed. Reg.* 58,612 (November 20, 1991)). An ESU is a population that is “substantially reproductively isolated from other conspecific population units” and “represent[s] an important component in the evolutionary legacy of the species” (56 *Fed. Reg.* 58,618). However, the NMFS/NOAA Fisheries policy on hatchery fish (58 *Fed. Reg.* 17,573 (April 5, 1993)) states that a hatchery population will not be considered part of an ESU if: 1) the hatchery population is of a different genetic lineage than natural populations; 2) artificial propagation has produced appreciable changes in the characteristics of a hatchery population that are believed to have a genetic basis; or 3) there is substantial uncertainty about the relationship between existing hatchery fish and the natural population (58 *Fed. Reg.* 17,575).

The mistake the judge felt NMFS/NOAA Fisheries made with respect to coho salmon was to include hatchery fish in the coho ESU (in this instance, the hatchery fish were genetically identical to naturally hatched fish in the same water source), but *not* to count the same hatchery fish when deciding whether to list the coho ESU. The court concluded that, in this instance, not considering the numbers of hatchery fish when making the listing decision was arbitrary and created a further distinction (hatchery-spawned vs. identical non-hatchery fish) below the level of ‘distinct population segment,’ which the agency lacked authority to do.

Although the United States did not appeal this decision, intervening parties have appealed, and the 9th Circuit blocked implementation of the lower court decision until the appellate case is heard. It is not clear how this case might affect other listings, since subsequent decisions could strike down other listings where genetically similar hatchery fish were included in ESUs but not counted in making the listing decisions. In addition, it is not clear whether courts will approve the NMFS/NOAA Fisheries hatchery policy that permits excluding from a population segment fish from a dissimilar genetic lineage, even if they otherwise meet the definition of the ESU. The decision could have implications for salmon listings in general.

In the 108th Congress, H.R. 1097 proposes to direct the Secretary of Commerce to modify scientific analysis of federal efforts to restore Columbia River Basin salmon and steelhead listed under the ESA. Section 103 of S. 1555 would designate “salmon restoration areas” in northern California. H.R. 1945 would authorize the Secretary of Commerce to provide financial assistance to states for salmon habitat restoration projects in coastal waters and upland drainages; this bill was ordered reported by the House Committee on Resources on June 11, 2003. On June 24, 2003, the Senate Environment and Public Works Subcommittee on Fisheries, Wildlife, and Water held a hearing to examine implementation of NOAA Fisheries’ 2000 Biological Opinion for ESA-listed anadromous fish as it pertains to operation of the Federal Columbia River Power System.

Rio Grande Silvery Minnow. Efforts to protect the Rio Grande silvery minnow under the ESA from competing New Mexico water users (primarily the city of Albuquerque and irrigators) have ignited considerable controversy. After several federal court decisions clarified that withholding water from irrigators for ESA-related purposes was permissible under some existing water contracts, provisions have been included in both the House and Senate FY2004 energy and water development appropriations bills that would affect this understanding. In the House-passed H.R. 2754, §504 would prohibit the use of FY2004 federal funds to release water from two Bureau of Reclamation projects for ESA compliance. In the Senate-reported S. 1424, §205 would prohibit the use of FY2004 or earlier fiscal year funds to reduce water deliveries under existing contracts for the purpose of ESA compliance unless such water is obtained from a willing seller or lessor and §206 would establish an executive committee to oversee the ESA Collaborative Program associated with this complex situation. S. 997 would authorize the Secretary of the Army to conduct restoration of the Middle Rio Grande bosque. H.R. 2982 would establish a water supply stabilization program in cooperation with the ESA Collaborative Program.

Use of “Sound Science”. The ESA was enacted to conserve listed species — to bring them to the point where they do not need the special protections of the ESA — and one of its purposes is to protect the ecosystems of which species listed as endangered are a part. The ESA, as amended, requires that decisions to list a species be made “solely on the basis of the best scientific and commercial data available” There is no elaboration on the meaning of the latter part of this phrase in the law itself or in FWS regulations, but there is some legislative history on the phrase (see CRS Report RL31654, *The Endangered Species Act: A Primer*).

In many instances, there may be little information on many species facing extinction and few personnel and limited funds available to conduct studies on many of the less charismatic species, or those of little known economic import. What should be done in such instances?

The ESA does not elaborate on this question, but it could be argued that, combining the protective purpose of the ESA — to save and recover species — with the wording of “best ... data available,” arguably dwindling species should be given the benefit of the doubt and a margin of safety permitted. This is the position taken in the *FWS Handbook* at pp. 1-6, which states that efforts should be made to develop information, but if a biological opinion must be rendered promptly, it should be based on the available information, “giving the benefit of the doubt to the species,” with consultation possibly being reinitiated if additional information becomes available. This phrase is drawn from H.Rept. 96-697, p. 12 (1979), which stated that the “best information available” language was intended to allow the FWS to issue biological opinions even when inadequate information was available, rather than being forced to issue negative opinions. But the report also states that if a biological opinion is rendered on the basis of inadequate information, the federal agency proposing an action has the duty to show its actions will not jeopardize a species and a continuing obligation to make a reasonable effort to develop information, and that the statutory language “continues to give the benefit of the doubt to the species.”

The FWS and NMFS/NOAA Fisheries developed a joint policy on Information Standards Under the Endangered Species Act (59 *Fed. Reg.* 34271 (July 1, 1994)) that might provide useful information on this issue. Under this policy, FWS and NMFS/NOAA Fisheries are to receive and use information from a wide variety of sources, including from individuals. Information may range from the informal — oral, traditional, or anecdotal — to peer-reviewed scientific studies, and hence the reliability of the information can also be variable. Service biologists are to impartially review and evaluate all information for purposes of listing, consultation, recovery, and permitting actions, and to ensure that any information used by the Services to implement the ESA is “reliable, credible, and represents the best scientific and commercial data available.” Service biologists are to document their evaluations of all information and, to the extent consistent with the use of the best scientific and commercial data available, use primary and original sources of information as the basis of recommendations. In addition, documents developed by Service biologists will be reviewed to “verify and assure the quality of the science used to establish official positions, decisions, and actions”

Another joint policy notes that in addition to the public comments received on proposed listing rules and draft recovery plans, the Services are to also formally solicit expert opinions and peer review to ensure the best biological and commercial information. With respect to listing decisions, the agencies are to solicit the expert opinions of three specialists and summarize these in the record of final decision. Special independent peer review can also be used when it is likely to reduce or resolve an unacceptable level of scientific uncertainty (59 *Fed. Reg.* 34270 (July 1, 1994)).

Courts that have considered the “best data available” language have held that an agency is not obliged to conduct studies to obtain missing data (*Southwest Center for Biological Diversity v. Babbitt*, 215 F. 3d 58 (D.C. Cir. 2000)), but cannot ignore available biological information (*Connor v. Burford*, 848 F. 2d 1441 (9th Cir. 1988)), especially if the ignored information is the most current (*Southwest Center for Biological Diversity v. Babbitt*, 926 F. Supp. 920 (D.C. Ariz. 1996)), nor treat one species differently from the way other similarly-situated species are treated (*Ibid.*), and may not decline to list a dwindling species and wait until it is on the brink of extinction in reliance on possible but uncertain future actions of an agency (*Biodiversity Legal Foundation v. Babbitt*, 943 F. Supp. 23 (D. D.C.

1996). ‘Best scientific and commercial data available’ is not a standard of absolute certainty, reflecting Congress’ intent that the FWS take conservation measures before a species is ‘conclusively’ headed for extinction (*Defenders of Wildlife v. Babbitt*, 958 F. Supp. 670, 679-680 (D. D.C. 1997)). If the FWS does not base its listings on speculation or surmise or disregard superior data, the fact that the studies it does rely on are imperfect does not undermine those authorities as the best scientific data available — “the Service must utilize the best scientific ... data *available*, not the best scientific data *possible*” (*Building Industry Ass’n of Sup. Cal. v. Norton*, 247 F. 3d 1241, 1246-1267 (D.C. Cir. 2001), *cert. denied* 2002 U.S. LEXIS 479).

On the other hand, the availability of judicial review can help ensure that agency decisions and their use of scientific data are not “arbitrary or capricious” and that regulations are rationally related to the problems causing the decline of a species, especially in situations when other interests are adversely affected. (See *Connor v. Andrus*, 453 F. Supp. 1037 (W.D. TX. 1978), striking down regulations totally banning duck hunting in an area in order to protect one listed species of duck). Another court stated that the bar the FWS has to clear in terms of evidence is very low, but it must at least clear it and, in the context of issuance of Incidental Take Permits under §10(a), this means the agency must demonstrate that a species is or could be in an area before regulating it, and must establish the causal connection between the land use being regulated and harm to the species in question. Mere speculation as to the potential for harm is not sufficient (*Arizona Cattle Growers Association v. United States Fish and Wildlife Service*, 273 F. 3d 1229 (9th Cir. 2001)).

In the 107th Congress, the House Committee on Resources held several hearings and reported one bill (H.R. 4840). In the 108th Congress, S. 369 would modify the scientific criteria used in the listing process and for identifying recovery and delisting goals. H.R. 1097 proposes to direct the Secretary of Commerce to modify scientific analysis of federal efforts to restore Columbia River Basin salmon and steelhead listed under the ESA. H.R. 1253 proposes to amend the ESA to establish special requirements for determining whether the Preble’s meadow jumping mouse is an endangered or threatened species. H.R. 1662 would amend the ESA to direct the Secretary of the Interior to give greater weight to scientific or commercial data that are empirical or have been field-tested or peer-reviewed. For more information on this issue, see CRS Report RS21264, *The Endangered Species Act (ESA), ‘Sound Science,’ and the Courts*, and CRS Report RL31546, *The Endangered Species Act and Science: The Case of Pacific Salmon*.

Defense Department Activities. The events of September 11, 2001, have focused attention on all statutes that might impinge on military training activities. The ESA allows for an automatic exemption for activities involving national security, but an exemption has never been sought on this basis, there are no regulations that elaborate on it, and little information is available as to how it might apply in practice. It is, however, worded as an exemption for an individual action of an agency and is worded as an exemption that must be granted by the high-level committee (“God Squad”) assembled to consider exemptions. This issue was debated in the 107th Congress during consideration of P.L. 107-314 (H.R. 4546); a conference committee deleted House language to limit CH designation on Department of Defense lands if a Sikes Act natural resource management plan was completed that “addresses” endangered and threatened species and their habitat. See CRS Report RL31415, *The Endangered Species Act, Migratory Bird Treaty Act, and Department of Defense Readiness Activities: Current Law and Legislative Proposals*.

Under §7 of the ESA, the “reasonable and prudent alternatives” that FWS may suggest to an agency as part of consultation must be ones that “can be taken” by the agency. A regulation (50 *C.F.R.* §402.02) elaborates on this requirement as being measures that are economically and technologically feasible and “that can be implemented consistent with the scope of the Federal agency’s legal authority and jurisdiction.” In a case involving water use by the Army at Fort Huachuca, the final biological opinion of the FWS required the Army to take actions allegedly beyond its authority (although the court noted that the Army had voluntarily agreed to do similar things in a memorandum of agreement). However, the court remanded the final opinion because of other flaws, so the extent to which actions beyond the authority of the Army to complete may actually be required is not yet known. This issue was debated in the 107th Congress during consideration of P.L. 107-206 (H.R. 4775); House language addressing water consumption at military installations in relation to the ESA was eliminated in conference.

In the 108th Congress, the House Armed Services Subcommittee on Readiness and Management Support held a hearing on March 13, 2003, on potential amendments to the Endangered Species Act to address military readiness concerns. On April 1, 2003, the House Armed Services Subcommittee on Readiness and Management Support concluded hearings on authorizing FY2004 funding for the Department of Defense, focusing on impacts of environmental laws on readiness and the Administration’s related legislative proposal. H.R. 1235 and §2 of H.R. 1835 would amend the ESA to modify the management of critical habitat for endangered and threatened species on military installations to address military readiness concerns. On May 6, 2003, the House Committee on Resources held a hearing on H.R. 1835; this Committee reported H.R. 1835 (amended) on May 14, 2003 (H.Rept. 108-99, Part I). H.R. 1965 would modify how the ESA would be applicable to military lands. On May 14, 2003, the House Armed Services Committee amended H.R. 1588 at §317 to amend the ESA by modifying how designation of critical habitat would apply to military lands. In addition, H.R. 1588 (§319) would address how water consumption at Fort Huachuca, Arizona, was to be considered under the ESA. H.R. 1588 was reported (amended) on May 16, 2003 (H.Rept. 108-106) and passed by the House (amended) on May 22, 2003.

Section 316 of S. 747, §301(a) of S. 927, and §322(a) of S. 1047/S. 1050 would amend Part III of subtitle A of title 10 of the U.S. Code to declare that completion of an Integrated Natural Resources Management Plan under the Sikes Act would provide the ‘special management considerations or protection’ required under the ESA and preclude designation of critical habitat; S. 1047 and S. 1050 were reported by the Senate Committee on Armed Forces on May 13, 2003 (S.Rept. 108-46). In addition, §330 of S. 1047/S. 1050 would create a task force to resolve ESA conflicts at Barry M. Goldwater Range, Arizona. The Senate completed action on S. 1047 (amended) on June 4, 2003. Also on June 4, 2003, the Senate amended H.R. 1588, incorporating the language of S. 1050 (amended), and passed this amended measure. On June 25, 2003, the Senate Environment and Public Works Subcommittee on Fisheries, Wildlife, and Water held a hearing on the ESA §7 consultation process.

Private Property and Takings. Some landowners fear that the presence of an ESA-listed species or the designation of their land as CH for a listed species will result in restrictions on current or new activities on their land with subsequent loss of some or all of their property value. At the other end of the spectrum, there are those, particularly in the Northeast and Midwest, who value the presence of a rare flower or frog on their land.

Under the Constitution, a person's property cannot be taken by the government without "just compensation," whether the taking occurs under the ESA or any other federal law. In the past, "taking" has been strictly interpreted by the courts and has not included 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. The U.S. Court of Federal Claims ruled (in *Tulare Lake Basin Water Storage District, et al. v. US*, 49 Fed. Cl. 313 (2001)) that water could not be taken from certain California irrigators to benefit endangered fish unless compensation was provided. However, the outcome of this case rests on facts that may not be present in other instances, so the value of the case as precedent is not yet clear.

Critics of the ESA would like to see it amended to provide compensation in a broader range of circumstances than those required under the Constitution. These critics generally propose that compensation be offered for some specified percentage decrease in the value of property owners' assets (including losses related to any loss of use of their land), since they feel that property owners are otherwise being forced to bear the cost of a public benefit. Such provisions have been included in several bills introduced in previous Congresses; proponents usually include Fifth Amendment takings under the Clean Water Act (§404), but not takings pursuant to other national interests (e.g., homeland security, highway construction).

Opponents of a revised "taking" standard counter that they do not wish to see the ESA singled out as having a different, more generous standard for compensation than that required under current interpretation of the Constitution or for any other agency or law. They further state that the rights of property owners to use their land have never been absolute, and that regulation in the public interest has long been accepted, as through zoning, for example. The cost to the federal government from changed thresholds for compensation and the constraints that would likely be placed on the implementation of the ESA under a more lenient takings standard are among the contentious issues slowing action on ESA reauthorization. (See also CRS Report RS20929, *The Endangered Species Act and Claims of Property Rights 'Takings': Case Law Summary*.) However, both proponents and opponents of the ESA favor enacting incentives (primarily tax benefits) to encourage landowner cooperation.

Funding for Land Conservation. In the 106th Congress, several bills would have permanently appropriated funds for acquiring lands to conserve listed species. These bills ultimately died, but additional funding for some of these programs was included in annual appropriations for FY2001 (Title VIII of P.L. 106-291), including the Cooperative Endangered Species Conservation Program, which provides grants to states, including support for state land acquisition. Other federal land acquisition funds contained in Title VIII of P.L. 106-291 may benefit endangered species by protecting habitat, and this approach re-surfaced in the 107th Congress but was not enacted. (For more information, see CRS Report RL30444, *Conservation and Reinvestment Act (CARA): A Comparison of Current Versions of H.R. 701 with Current Law*.)

Making the ESA More User-Friendly. Former Interior Secretary Babbitt initiated actions to decrease ESA conflicts in several ways. New FWS and NMFS/NOAA Fisheries joint policies streamline permit procedures for small landowners, and other initiatives encourage landowners to increase protection for populations of listed species on their land. Under "safe harbor" agreements, landowners who increase suitable habitat can return to

“baseline conditions” without penalty. “No surprises” agreements provide landowners with greater certainty regarding activities that might otherwise have triggered penalties, an incentive for landowners to develop HCPs, since a landowner properly implementing such an agreement is assured that there will be no further costs or restrictions on the use of the property to benefit the species covered by the HCP, except by mutual consent or in extraordinary circumstances in which changes may be implemented by the government, without costs borne by the landowner. (See the final rule on Safe Harbor Agreements and Candidate Conservation Agreements (64 *Fed. Reg.* 32705, June 17, 1999), that modified the “no surprises” policy to require that a condition of a §10 incidental take permit be that if the permitted taking would be inconsistent with the survival and recovery of the relevant listed species, and the inconsistency is not remedied in a timely fashion, the incidental take permit may be revoked.) Federal managers focused on listing species as threatened rather than endangered, to allow FWS to take advantage of the ESA’s more flexible provisions for protecting threatened species. While administrative changes have been made within the framework of existing law, there is great interest among some groups in codifying many of these changes in an amended ESA. Others are critical of the agreements as difficult to enforce and as locking in the government to inflexible long-term positions that sometimes are based on inadequate knowledge.

In the 108th Congress, on June 25, 2003, the Senate Environment and Public Works Subcommittee on Fisheries, Wildlife, and Water held a hearing on the ESA §7 consultation process.

Consultation with the EPA on Pesticides. On January 24, 2003 (68 *Fed. Reg.* 3786), the Department of the Interior, Department of Commerce, and the Environmental Protection Agency (EPA) issued an advance notice of proposed rulemaking seeking comments on whether and how to possibly issue “counterpart regulations,” whereby new procedures would be authorized for the EPA to integrate their consultation duties with the regulation of pesticides by that agency. Counterpart regulations are authorized by 50 *C.F.R.* § 402.04, which states that such regulations would have to be proposed and published with a public comment period of at least 60 days. If finalized, the regulations would supersede the usual consultation regulations. No counterpart regulations have ever been issued and hence have never been challenged. The Notice also asked for comments on several issues, such as what roles the states, tribes, and other potential non-federal representatives might play in new consultation procedures, including, for example, whether pesticide companies could or should be designated to prepare biological evaluations on the effects of their products. Comments on the questions posed were due on or before March 10, 2003. Counterpart regulations were proposed by the Forest Service on June 5, 2003 (68 *Fed. Reg.* 33806; comments were due by August 4, 2003), relating to streamlining consultation on projects supporting the National Fire Plan. Other counterpart regulations reportedly are being developed with the Bureau of Land Management, the Bureau of Indian Affairs, and the National Park Service regarding fire-related projects and possibly other, more general, activities.

Critical Habitat Designation. Under current law, FWS or NMFS/NOAA Fisheries must designate CH at the time a species is listed. Two exceptions are provided: if designation is not “prudent” (e.g., due to the threat of illegal collecting or killing), or if CH is not “determinable” due to insufficient data, in which case designation may be postponed as long as one year after species listing. The Clinton Administration, through appropriations

bills, supported restrictions on its own ability to designate CH under the ESA, as did the George W. Bush Administration. (See *ESA Listing Caps, New and Old*, below.)

FWS, based on its interpretation of a regulation (50 *C.F.R.* 402.02) that takes away the value of designating habitat to the recovery of a listed species, asserts that CH offers little protection for a species beyond that already available to any listed species and is a poor use of scarce budgetary resources. 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 where the species may be re-introduced. FWS designates CH for about one-third of listed domestic species; yet in every case brought against FWS for failure to designate CH, the agency has lost, and, in a case involving FWS's and NMFS's/NOAA Fisheries' failure to designate CH for threatened Gulf sturgeon, the Fifth Circuit found agency interpretation to be erroneous (*Sierra Club v. U.S. Fish and Wildlife Service*, 245 F. 3d 434 (5th Cir. 2001)), and a settlement agreement resulted in a CH proposal. FWS had solicited comments on its proposal to "develop policy or guidance and/or revise regulations, if necessary, to clarify the role of habitat in endangered species conservation" (64 *Fed. Reg.* 31871-31874; June 14, 1999), but no proposal has been issued. See CRS Report RS20263, *The Role of Designation of Critical Habitat under the Endangered Species Act*.

CH is frequently misunderstood by the public to be a significant direct restriction on private landowners' authority to manage land. While a landowner may experience some restrictions on land management because of the presence of an ESA-listed species (through the ESA's prohibitions on "taking" a listed species) and the presence of CH may shed light on whether "harm" has occurred, the express duty to avoid adverse modification of CH is an express obligation only for federal agencies and actions.

In the 108th Congress, H.R. 2602 would amend the Endangered Species Act of 1973 to make the authority of the Secretary to designate critical habitat discretionary instead of mandatory. H.R. 2933 would modify the definition of CH and the authority of the Secretary to designate it.

Additional Legislative Initiatives

In the 108th Congress, S. 128 and H.R. 1647 have been introduced to authorize activities to assist the international conservation of cranes. H.R. 1194 would amend the ESA to enable federal agencies responsible for the preservation of threatened and endangered species to rescue and relocate individuals of ESA-listed species that would be taken in the course of certain reconstruction, maintenance, or repair of federal or non-federal manmade flood control levees. H.R. 1183 would amend the Coastal Zone Management Act of 1972 to require that consideration be given to concerns for access restrictions affecting ESA-listed threatened and endangered species when constructing and operating marine renewable energy projects. H.R. 1965 would amend the ESA to provide incentives for private landowners to encourage voluntary habitat maintenance. Section 122 of S. 14 would establish a pilot project in Wyoming, Montana, Colorado, and New Mexico to improve coordination of federal permits, including ESA §7 permits. Section 204 of H.R. 7 would provide tax incentives for participating in ESA §6 programs. S. 1178 would amend the ESA to require the federal government to assume all costs relating to implementation of and compliance with the ESA. S. 1210 proposes to assist in the conservation of marine turtles and their

nesting habitat in foreign countries; this measure was ordered reported on July 30, 2003, by the Senate Committee on Environment and Public Works. S.Con.Res. 55/H.Con.Res. 216 would express the sense of the Congress regarding the policy of the United States at the 55th Annual Meeting of the International Whaling Commission.

H.R. 1904/S. 1449 would 1) authorize the Secretary of Agriculture (National Forest System lands) and the Secretary of the Interior (BLM lands) to conduct hazardous fuels reduction projects on lands that contain threatened and endangered species habitat (§102); 2) direct the Secretary of Agriculture to establish the healthy forests reserve program within the Forest Service for the purpose of protecting, restoring, and enhancing degraded forest ecosystems to promote the recovery of threatened and endangered species (§501); and 3) direct the Secretary of the Interior to provide safe harbor under the ESA to landowners who enroll in the healthy forests reserve program when such enrollment will result in a new conservation benefits for listed species (§506). H.R. 1904 was reported (amended) by the House Committee on Agriculture (May 9, 2003; H.Rept. 108-96, Part 1) and by the House Committee on the Judiciary (May 16, 2003; H.Rept. 108-96, Part 2). On May 20, 2003, the House passed H.R. 1904 (amended). On June 26, 2003, the Senate Committee on Agriculture, Nutrition, and Forestry held a hearing on H.R. 1904; the Committee reported this bill reported with an amendment in the nature of a substitute on July 31, 2003 (S.Rept. 108-121). The Senate Committee on Energy and Natural Resources held a hearing on H.R. 1904 on July 22, 2003. Title IV of S. 1453 would direct the Secretary of Agriculture to establish the healthy forests reserve program within the Forest Service for the purpose of protecting, restoring, and enhancing degraded forest ecosystems to promote the recovery of threatened and endangered species.

Appropriations Issues. Appropriations bills play an important role in the ESA debate. Appropriations provide funds for listing and recovery activities as well as finance FWS and NMFS/NOAA Fisheries consultations necessary for permits, such as those with the Army Corps of Engineers on permits that are necessary for federal projects. See the table below for recent ESA funding. Actions on FY2003 Department of the Interior appropriations (FWS), FY2003 NMFS/NOAA Fisheries appropriations, and international endangered species coordination in the foreign operations FY2003 appropriations bill were completed by the 108th Congress in. P.L. 108-7. H.R. 2691 and S. 1391 would provide Department of the Interior (FWS) appropriations for FY2004; H.R. 2691 was passed by the House on July 17, 2003, while S. 1391 was reported by the Senate Committee on Appropriations on July 10, 2003. H.R. 2800 and S. 1426 would provide for coordination with international endangered species programs.

Endangered Species Program Appropriations

(in thousands of dollars)

	FY2002 Enacted	FY2003 Request	FY2003 Enacted	FY2004 Request	FY2004 House passed	FY2004 Senate reported
Candidate Conservation	7,620	8,682	9,932	8,670	10,130	9,920
Listing	9,000	9,077	9,077	12,286	12,286	12,286
Consultation	45,501	47,770	47,770	45,734	46,034	47,734

	FY2002 Enacted	FY2003 Request	FY2003 Enacted	FY2004 Request	FY2004 House passed	FY2004 Senate reported
Recovery	63,617	60,215	65,840	62,029	66,739	64,529
Subtotal	125,738	125,744	132,619	128,719	135,189	134,469
Landowner Incentive	40,000	50,000	40,000 ^a	40,000	40,000	40,000
Stewardship Grants	10,000	10,000	10,000 ^b	10,000	10,000	10,000
Coop. End. Species Conservation Fund (CESCF)	96,235	91,000	81,000	86,614	86,614	86,614
Multinational Species Conservation Fund	4,000	5,000	4,800	7,000	6,000	5,000
Total FWS	275,973	281,744	268,419	272,333	277,803	276,083
Total NMFS/ NOAA Fisheries	211,483	200,845	188,316	210,132	NA	NA

Sources: Annual budget justifications, House and Senate committee reports, and floor debates.

a. \$40 million in previous years' unobligated appropriations was rescinded.

b. \$10 million in previous years' unobligated appropriations was rescinded.

ESA Listing Caps, New and Old. Beginning in FY1998, Congress enacted annual limits (i.e., “caps”) on funding FWS for its ESA listing function. This language limits FWS discretion to transfer funds to finance additional listings: if courts mandate agency action on listing certain species, other listings may not be able to be funded. FWS supported these limits to assure that funding for other agency programs could not be diverted to finance additional ESA listing activities. However, courts have held that budget constraints do not excuse an agency from compliance, in some circumstances.

The George W. Bush Administration's FY2002 budget proposed a new version of this cap by requesting authority to prioritize listings within the cap, regardless of judicial orders. The Administration stressed that (a) current court orders alone meant that FWS's ESA listing function was likely to run out of funds before the end of the fiscal year, and (b) if FWS were to make listing determinations on merely its own estimated backlog, the cost would be roughly \$120 million. The agency's critics (calling the language an “extinction rider”) responded that (1) few listings would have taken place in the last several years without the lawsuits; (2) the FWS's claims of conscientious attention to the ESA are contradicted by FWS's failure to seek adequate funding to address the backlog of ESA listings in light of its assertion of a \$120 million need; (3) the restriction is one-sided since de-listings and down-listings would have no such cap; and (4) the new authority would be a fundamental change in the ESA, since FWS could choose which species to protect, rather than protecting all species meeting the criteria specified under §4(b) of the ESA.

Acting on H.R. 2217 (FY2002 Department of the Interior appropriations), the House Appropriations Committee rejected the Administration's proposed language change, retained

the current \$8.48 million cap on spending for listing activities, and accepted a “subcap” of \$6 million on the designation of new CH. Therefore, if FWS were ordered to designate even a few areas of CH, funding for new ESA species listings could be restricted to no more than \$2.48 million. The Senate passed a \$9 million cap on listing, but did not include a “subcap” on CH, nor did it accept the Administration’s proposed change. The conference agreement (H.Rept. 107-234, October 11, 2001) adopted the \$9 million funding level for the listing program and specified that the \$6 million CH designation limitation does not include funds needed for litigation support. This measure was signed as P.L. 107-63 on November 5, 2001.

The Bush Administration’s FY2003 budget proposed \$9.077 million for listing, with a subcap of \$5 million for CH; P.L. 108-7 provided \$9.077 million for listing, with a subcap of \$6 million for CH. The Bush Administration’s FY2004 budget has proposed \$12.286 million for listing, with a subcap of \$5 million for CH.

LEGISLATION

P.L. 108-7 (H.J.Res. 2)

H.Con.Res. 216 (Delahunt); H.R. 7 (Blunt); H.R. 1097 (McDermott); H.R. 1183 (Delahunt); H.R. 1194 (Herger); H.R. 1235 (Gallegly); H.R. 1253 (Tancredo); H.R. 1588 (Hunter); H.R. 1647 (Baldwin); H.R. 1662 (Walden); H.R. 1760 (Thompson of California); H.R. 1835 (Gallegly); H.R. 1904 (McInnis); H.R. 1945 (Thompson of California); H.R. 1965 (Gibbons); H.R. 2602 (Otter); H.R. 2691 (Taylor of North Carolina); H.R. 2754 (Hobson); H.R. 2933 (Cardoza); H.R. 2982 (Udall); S.Con.Res. 55 (Snowe); S. 14 (Domenici); S. 128 (Feingold); S. 369 (Thomas); S. 747 (Warner); S. 927 (Warner); S. 997 (Domenici); S. 1047 (Warner); S. 1050 (Warner); S. 1178 (Enzi); S. 1210 (Jeffords); S. 1391 (Burns); S. 1424 (Domenici); S. 1449 (Crapo); S. 1453 (Leahy); and S. 1555 (Boxer).

FOR ADDITIONAL READING

CRS Report RL31806. *Appropriations for FY2004: Interior and Related Agencies.*

CRS Report RL31306. *Appropriations for FY2003: Interior and Related Agencies.*

CRS Report RS21500. *The Endangered Species Act (ESA), ‘Sound Science,’ and the Courts.*

CRS Report RL31796. *The Endangered Species Act and Claims of Property Rights ‘Takings’: A Summary of the Court Decisions.*