The Endangered Species Act (ESA) in the 112th Congress: Conflicting Values and Difficult Choices

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Summary

The Endangered Species Act (ESA; P.L. 93-205, 16 U.S.C. §§ 1531-1543) was enacted to increase protection for, and provide for the recovery of, vanishing wildlife and vegetation. Under ESA, species of plants and animals (both vertebrate and invertebrate) can be listed as endangered or threatened according to assessments of their risk of extinction. Habitat loss is the primary cause for listing species. Once a species is listed, powerful legal tools are available to aid its recovery and protect its habitat. Accordingly, when certain resources are associated with listed species—such as water in arid regions like California, old growth timber in national forests, or free-flowing rivers—ESA is seen as an obstacle to continued or greater human use of these resources. ESA may also be controversial because dwindling species are usually harbingers of broader ecosystem decline or conflicts. As a result, ESA is considered a primary driver of large-scale ecosystem restoration issues.

The 112th Congress may conduct oversight of the implementation of various federal programs and laws that address threatened and endangered species. This could range from addressing listing and delisting decisions under ESA to justifying funding levels for international conservation programs. The 112th Congress may also face specific resource conflicts involving threatened and endangered species, including managing water supplies and ecosystem restoration in San Francisco Bay and the Sacramento and San Joaquin Rivers Delta in California (i.e., Bay-Delta) and managing water supplies in the Klamath Basin. In the 112th Congress, resource-specific issues may be addressed independently, whereas oversight on the implementation of ESA may be addressed in debates about particular species (e.g., wolves, polar bears, and salmon).

The 112th Congress may consider legislation related to global climate change that includes provisions that would allocate funds to the Fish and Wildlife Service's endangered species program and/or to related funds to assist species adaptation to climate change. Other major issues concerning ESA in recent years have included the role of science in decision-making, critical habitat (CH) designation, incentives for property owners, and appropriate protection of listed species, among others.

The authorization for spending under ESA expired on October 1, 1992. The prohibitions and requirements of ESA remain in force, even in the absence of an authorization, and funds have been appropriated to implement the administrative provisions of ESA in each subsequent fiscal year. Proposals to reauthorize and extensively amend ESA were last considered in the 109th Congress, but none were enacted. No legislative proposals were introduced in the 110th or 111th Congresses to reauthorize ESA.

This report discusses oversight issues and legislation introduced in the 112th Congress to address ESA implementation and management of endangered and threatened species.

Contents

Tables

Contacts

Most Recent Developments

On March 18, 2011, the Department of the Interior announced a settlement with 10 environmental groups to temporarily remove ESA protection for gray wolves in Montana and Idaho while continuing species recovery in adjacent states.[1] On February 19, 2011, the House passed H.R. 1 (seeking to provide continuing appropriations for the remainder of FY2011), including language that would (1) decrease funding for the Cooperative Endangered Species Fund to $2,479,000; (2) decrease funding for the Neotropical Bird Fund to $4,430,000; (3) decrease funding for the Multinational Species Fund to $7,875,000; (4) limit funding for the Pacific Coastal Salmon Recovery Fund to $50 million; and (5) prohibit funds from being used by NMFS and FWS for implementing certain actions described in BiOps for the operations of the Central Valley Project and the California State Water Project.

Introduction

Increasing numbers of animal and plant species face possible extinction. Endangered and threatened species—and the law that protects them, the 1973 Endangered Species Act (ESA, P.L. 93-205, as amended; 16 U.S.C. §§ 1531-1543)—are controversial, in part, because dwindling species are often harbingers of resource scarcity. The most common cause of species' decline is habitat loss or alteration. Habitat loss occurs due to development, climate change, changes in land management practices, competition from invasive species, and other factors, nearly all related to economic, political, or social interests.[2]

ESA has been among the most contentious environmental laws because its substantive provisions can affect the use of both federal and nonfederal lands and resources. Congress faces the issue of how to balance these interests with the protection of endangered and threatened species and, as stated in ESA, "the ecosystems upon which endangered species and threatened species depend." Because of strong support and strong opposition, ESA has not been reauthorized since the last authorization expired in 1992. In the 109th Congress, there were several unsuccessful attempts to enact comprehensive legislation that would have reauthorized ESA.[3] Consequently, congressional efforts in the 110th and 111th Congresses focused on addressing specific controversial features of ESA and on oversight of concerns such as the science used for making decisions and designating critical habitat, but little legislation related to ESA was enacted.[4]

[1] See http://www.eenews.net/assets/2011/03/18/document_pm_01.pdf.

[2] For example, see CRS Report RL34326, *Apalachicola-Chattahoochee-Flint (ACF) Drought: Federal Water Management Issues*, coordinated by Nicole T. Carter.

[3] For a review of action by the 109th Congress on ESA, see CRS Report RL33468, *The Endangered Species Act (ESA) in the 109th Congress: Conflicting Values and Difficult Choices*, by Eugene H. Buck et al.

[4] For a review of action by the 110th Congress on ESA, see CRS Report RL33779, *The Endangered Species Act (ESA) in the 110th Congress: Conflicting Values and Difficult Choices*, by Eugene H. Buck et al.; for a review of action by the 111th Congress on ESA, see CRS Report R40185, *The Endangered Species Act (ESA) in the 111th Congress: Conflicting Values and Difficult Choices*, by Eugene H. Buck et al.

Background

Overview

The 1973 ESA was a comprehensive attempt to protect species at risk of extinction and to consider habitat protection as an integral part of that effort. In addition, an express purpose of 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)). Under 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.[5] More flexible management can be provided for species listed as threatened, compared to those listed as endangered. Distinct population segments of vertebrate species may also be listed as threatened or endangered. Consequently, some populations of Chinook, coho, chum, and sockeye salmon in Washington, Oregon, Idaho, and California have been listed under ESA, even as other healthy populations of these same species in Alaska are not listed and may be commercially harvested. More limited protection is available for plant species under ESA. Once a species is listed, legal tools, including penalties and citizen suits, are available to aid species recovery and protect habitat. Use of these tools, or the failure to use them, has led to conflict. A more detailed discussion of the major provisions of ESA is provided in CRS Report RL31654, *The Endangered Species Act: A Primer*, by M. Lynne Corn, Kristina Alexander, and Eugene H. Buck.

ESA is administered by the Fish and Wildlife Service (FWS, Department of the Interior) for terrestrial and freshwater species and some marine mammals, and by the National Marine Fisheries Service (NMFS; also referred to as NOAA Fisheries) in the Department of Commerce's National Oceanic and Atmospheric Administration for the remaining marine and anadromous[6] species.[7] The U.S. Geological Survey's Biological Resources Division conducts research on species for which FWS has management authority; NMFS conducts research on the species for which it is responsible.

As of December 20, 2010, a total of 1,163 species of animals and 796 species of plants were listed as either endangered or threatened under the ESA, of which the majority (578 species of animals and 793 species of plants) occur in the United States and its territories;[8] the remainder occur only in other countries.[9] Of the 1,371 U.S. species, 1,138 (83%) are covered in active

[5] Endangered species are defined as "in danger of extinction throughout all or a significant portion of its range" while threatened species are defined as "likely to become an endangered species in the foreseeable future throughout all or a significant portion of its range."

[6] Anadromous refers generally to fish that hatch in fresh water, migrate to the ocean to grow and mature, and then migrate back to fresh water to reproduce.

[7] For background on ESA programs of the two administering agencies, see FWS programs at http://www.fws.gov/endangered/ and NMFS programs at http://www.nmfs.noaa.gov/pr/species/.

[8] For comparison, the International Union for Conservation of Nature and Natural Resources (IUCN; World Conservation Union) announced in 2008 that it considered 16,928 species to be threatened with extinction—an increase of 622 species since 2007. In addition, the IUCN identified 869 species that had become extinct or were extinct in the wild (i.e., found only in captivity or in cultivation), with an additional 257 species identified as possibly extinct. For more information, see http://cmsdata.iucn.org/downloads/state_of_the_world_s_species_factsheet_en.pdf.

[9] As early as 1940, when the United States signed what is known as the Western Hemisphere Convention, the United States has acknowledged a goal of conserving species and their habitats. Subsequent U.S. ratification of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) also confirmed U.S. interest in (continued...)

recovery plans.[10] In the most recent data available, FY2009 federal and state expenditures on endangered and threatened species totaled nearly $1.5 billion, of which almost $1.4 billion was reported by federal agencies and about $80 million was reported by the states.[11] The top 10 species with the highest total FY2009 expenditures (excluding land acquisition costs) included seven subpopulations of steelhead and Pacific salmon ($317 million altogether), pallid sturgeon ($41 million), bull trout ($35 million), and red-cockaded woodpecker ($25 million).

However, species do not exist in isolation, but evolve and fluctuate in abundance because of their relationships with other species and the physical environment. Conservationists increasingly are talking about not only species, but also ecosystems as the units of interest. At times, efforts to protect and recover listed species are controversial; declining species often function like the proverbial canary in the coal mine, by flagging 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, including salmon and spotted owls); and the management of the Apalachicola Basin in Alabama, Florida, and Georgia (allocation of water among metropolitan, agricultural, and industrial users along with commercial and recreational fishing interests, as well as one listed fish and three mussel species).

Implementation of Wildlife Treaties

ESA is the domestic implementing legislation for 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 ESA by dividing its listed species into groups according to the estimated risk of extinction, but uses three major categories (called appendices), rather than two.[12] In contrast to ESA, CITES classifies species based solely on the risk that trade poses to their survival. ESA makes violations of CITES violations of U.S. law if committed within U.S. jurisdiction (16 U.S.C. § 1538). ESA also regulates import and export of controlled products and provides some exceptions.[13]

(...continued)

preserving nature, not just on our own shores, but worldwide. ESA protects foreign endangered species by regulating their importation into the United States, but does not regulate any take of foreign species in their country of origin by U.S. citizens. FWS reviews foreign species under the ESA's listing criteria and conducts a required regulatory and public comment process before listing a foreign species under ESA. Listed foreign species can be imported to the United States if they meet requirements of § 10 or § 4(d) of ESA.

[10] Statistics are updated daily at http://ecos.fws.gov/tess_public/Boxscore.do.

[11] Fish and Wildlife Service, *Federal and State Endangered and Threatened Species Expenditures, Fiscal Year 2009*; available at http://www.fws.gov/endangered/esa-library/pdf/2009_EXP_Report.pdf.

[12] For additional information on CITES, see http://www.cites.org/.

[13] For more information on CITES, see CRS Report RL32751, *The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES): Background and Issues*, by Pervaze A. Sheikh and M. Lynne Corn.

ESA and CITES also address the illegal trade in wildlife. International illegal wildlife trade is estimated to be worth more than $10 billion annually and has been associated with the decline of species, spread of disease, and proliferation of invasive species, among other things.[14]

In addition, FWS's Multinational Species Conservation Fund (MSCF) benefits tigers, the six species of rhinoceroses, Asian and African elephants, marine turtles, and great apes (gorillas, chimpanzees, bonobos, orangutans, and the various species of gibbons). This fund supports conservation efforts benefitting these species, often in conjunction with efforts under CITES.[15]

In the 112th Congress, H.Res. 47 would express the sense of the House of Representatives regarding the contributions of CITES and urge CITES adopt stronger protections for the polar bear, sharks, and bluefin tuna. H.R. 50 would reauthorize certain provisions of the MSCF related to elephants, rhinoceroses, and tigers through FY2016.

Issues in the 112th Congress

ESA reauthorization has been on the legislative agenda since the funding authorization expired in 1992, and bills have been introduced in each subsequent Congress to address various aspects of endangered species protection. Below are descriptions of some of the issues that may receive attention in the current Congress.

Are Species Protection and Restoration Working?

The answer to this question depends on what is measured. Since a major goal of ESA is the recovery of species to the point at which ESA protection is no longer necessary, this may be a useful starting point. In the 37 years since the ESA was enacted, 47 U.S. and foreign species or distinct population segments thereof have been delisted.[16] The reasons cited by FWS are (1) recovery (20 species); (2) extinction (9 species; however, some may have been extinct when listed); and (3) original data in error (18 species). Recovered species include the American alligator, bald eagle, brown pelican, peregrine falcon (two subspecies), and three species of kangaroo. Extinct species include the dusky seaside sparrow, Guam broadbill (a bird), and two small fish living in desert springs. However, it can be quite difficult to prove whether extraordinarily rare species are simply that or, in fact, are already extinct. For example, the endangered ivory-billed woodpecker, thought by many to be extinct, may have been rediscovered in a remote area of Arkansas a few years ago. Rare species are, by definition, hard to find.

Some have asserted that ESA is a failure since only 20 species have been delisted due to recovery; however, only 9 species have been delisted because of extinction. Others note that full recoveries are relatively few because the two principal causes of extinction—habitat loss and invasive non-native species—continue to increase. In addition, "only those species whose

[14] For more information on illegal wildlife trade, see CRS Report RL34395, *International Illegal Trade in Wildlife: Threats and U.S. Policy*, by Liana Sun Wyler and Pervaze A. Sheikh.

[15] For more information on the MSCF, see CRS Report RS21157, *International Species Conservation Funds* , by Pervaze A. Sheikh and M. Lynne Corn.

[16] For updated information, see http://ecos.fws.gov/tess_public/DelistingReport.do.

situations are known to be the most desperate will receive priority,"[17] thereby making recovery difficult.

Another measure of "success" might be the number of species that have stabilized or increased their populations, even if the species are not actually delisted; for example, 35 species have been reclassified (downlisted) from endangered to threatened.[18] Under this standard, ESA could be considered a success, since a large number (41%, according to one study)[19] of listed species have improved or stabilized their population levels after listing. 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, although these species are still rare.[20] One approach to gauge progress might be to look at what proportion of the recovery objectives identified in species recovery plans have been achieved. **Table 1** indicates how the rate of achievement of recovery objectives changes with the increasing length of time after species are listed. A recent report concluded that the impact of species conservation efforts may be underestimated because measures do not account for species that either (1) would have deteriorated further in the absence of conservation actions, or (2) have improved numerically, although not enough to change their status.[21]

Table 1. Percent Recovery Achieved Versus Time Listed

(data as of September 30, 2006)

Recovery Plan objectives	% of 48 species listed 5 years or less	% of 279 species listed 6-10 years	% of 940 species listed 11 years or more
0%-25% recovery achieved	100	95.0	67.8
26%-50% recovery achieved	0	3.9	22.8
51%-75% recovery achieved	0	0.4	6.2
76%-100% recovery achieved	0	0.7	3.2

Source: FWS, *Report to Congress on the Recovery of Threatened and Endangered Species: Fiscal Years 2005-2006*, p. 1-53. Note that "% recovery achieved" has not been reported in more recent reports in this series.

On May 17, 2005, the Majority Staff of the House Committee on Resources released an oversight report entitled *Implementation of the Endangered Species Act of 1973*.[22] It reviewed and critiqued various ways that recovery might be measured.

[17] National Research Council Commission on Life Sciences, *Science and the Endangered Species Act*, National Academy Press (Washington, DC: 1995), p. 169.

[18] Krishna Gifford and Deborah Crouse, "Thirty-Five Years of the Endangered Species Act," *Endangered Species Bulletin*, v. 34, no. 1 (Spring 2009):.4-7.

[19] U.S. Dept. of the Interior, Fish and Wildlife Service, *Endangered Species Bulletin*, Washington, DC, Sept. 2007. Available at http://www.fws.gov/endangered/bulletin/2007/ES_Bulletin_09-2007.pdf.

[20] See CRS Report 98-32, *Endangered Species List Revisions: A Summary of Delisting and Downlisting*, by Robert J. Noecker.

[21] Michael Hoffman et al., "The Impact of Conservation on the Status of the World's Vertebrates," *Science*, v. 330 (December 10, 2010): 1503-1509.

[22] Available at http://www.waterchat.com/Features/Archive/050517_ESA_Implementation_Report.pdf.

An April 2005 study by GAO found that, although FWS spends almost half of its recovery funds on the highest-priority species, in practice, factors other than a species' priority ranking (e.g., regional office workload and opportunities for partnerships to maximize scarce recovery funds) determine how funding is allocated.[23] GAO found that FWS does not have a process to routinely assess funding decisions to ensure that they are appropriate. In 2006, GAO examined federal efforts to recover 31 selected species.[24] GAO determined that, while many factors affected the recovery of species, recovery plans played an important role in the recovery of all but one of the species examined. Critics claimed the GAO study was biased to reflect positively on the recovery planning process by the selection of species examined.

A December 2008 study by GAO found that, although FWS, NMFS, and other federal agencies had implemented a majority of recommendations to strengthen ESA implementation contained in 10 GAO reports released during the previous 10 years, almost one-third of these recommendations had not been implemented.[25] For example:

- FWS has not clarified the role of critical habitat and how and when it should be designated;
- FWS has not periodically assessed expenditures on species in relation to their relative priority; and
- FWS and NMFS are not tracking the amount of time spent by federal agencies preparing for consultation before the process officially begins.

"Sound Science" and ESA

ESA requires that determinations of a species' status be made "solely on the basis of the best scientific and commercial data available."[26] In several recent situations, legal, economic, and social disputes have resulted from actions under ESA. Examples of these controversies include the Florida panther, Klamath River Basin suckers and coho salmon, gray wolf, and Sonoran Desert bald eagles.[27] Critics in some of these disputes suggest that the science supporting ESA action has been insufficiently rigorous or mishandled by the agencies.

Many rare and endangered species are little studied because they are hard to find and it is difficult to locate enough of them to study. There may be little information on many species facing extinction, and only limited personnel or funds available to conduct studies on many of the less

[23] U.S. Government Accountability Office, *Endangered Species: Fish and Wildlife Service Generally Focuses Recovery Funding on High-Priority Species, but Needs to Periodically Assess Its Funding Decisions*, GAO-05-211 (April 6, 2005). Available at http://www.gao.gov/new.items/d05211.pdf.

[24] U.S. Government Accountability Office, *Endangered Species: Many Factors Affect the Length of Time to Recover Select Species*, GAO-06-730 (Washington, DC: GPO, September 8, 2006). In this report, GAO acknowledged that results from nonprobability (i.e., non-random) samples cannot be used to make inferences about a population (i.e., all ESA-listed species). However, in the view of GAO, review of the selected species provides valuable, case-level insights into their progress toward recovery and the role that recovery plans have played in that progress.

[25] U.S. Government Accountability Office, *Endangered Species Act: Many GAO Recommendations Have Been Implemented, But Some Issues Remain Unresolved*, GAO-09-225R (December 19, 2008). Available at http://www.gao.gov/new.items/d09225r.pdf.

[26] 16 U.S.C. § 1533(b)(1)(A).

[27] See CRS Report RL32992, *The Endangered Species Act and "Sound Science"*, by Eugene H. Buck, M. Lynne Corn, and Kristina Alexander.

charismatic species, or those of little known economic import. Some question what should be done in such instances. In response, some suggest that considerations other than species conservation should prevail; others seek to change the current posture of the law by changing the role of science. These considerations are complicated by the cost and time required to acquire more complete data, particularly in connection with many lesser-known species.

Courts, in considering the "best data available" language, have held that an agency is not obliged to conduct studies to obtain missing data,[28] but cannot ignore available biological information,[29] especially if the ignored information is the most current.[30] Nor may an agency treat one species differently from other similarly situated species,[31] or decline to list a dwindling species and wait until it is on the brink of extinction in relying on possible but uncertain future actions of an agency.[32] "Best scientific and commercial data available" is not a standard of absolute certainty, reflecting Congress's intent that FWS take conservation measures before a species is conclusively headed for extinction.[33] If FWS does not base its listings on speculation or surmise or disregard superior data, the imperfections of the studies upon which it relies do not undermine those studies as the best scientific data available—"the Service must utilize the best scientific ... data available, not the best scientific data possible."[34]

Judicial review can also 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 when other interests are adversely affected.[35] In *Arizona Cattle Growers Association v. United States Fish and Wildlife Service*,[36] the court stated that the evidentiary bar FWS must clear is very low, but it must at least clear it. In the context of issuing incidental take permits under Section 10(a), this ruling 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. An agency must consider the relevant facts and articulate a rational connection between these facts and the choices made.[37]

Endangered Species and Climate Change

In the absence of congressional action on climate change,[38] some environmental groups are eyeing use of ESA (among other approaches) as a means of restricting greenhouse gas emissions. The idea, as spearheaded by the Center for Biological Diversity (CBD), is to petition FWS and

[28] Southwest Center for Biological Diversity v. Babbitt, 215 F. 3d 58 (D.C. Cir. 2000).

[29] Connor v. Burford, 848 F. 2d 1441 (9th Cir. 1988).

[30] Southwest Center for Biological Diversity v. Babbitt, 926 F. Supp. 920 (D.C. Ariz. 1996).

[31] Id.

[32] Biodiversity Legal Foundation v. Babbitt, 943 F. Supp. 23 (D. D.C. 1996).

[33] Defenders of Wildlife v. Babbitt, 958 F. Supp. 670, 679-680 (D. D.C. 1997).

[34] 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.

[35] See Connor v. Andrus (453 F. Supp. 1037 (W.D. Tex. 1978)) (striking down regulations totally banning duck hunting in an area to protect one listed species of duck).

[36] 273 F. 3d 1229 (9th Cir. 2001).

[37] Pacific Coast Federation of Fishermen's Associations, Inc. v. NMFS, 265 F.3d 1028, 1034 (9th Cir. 2001).

[38] For current CRS reports on climate change, see http://www.crs.gov/Pages/clis.aspx?cliid=2522.

NMFS to list as endangered or threatened various animals whose habitat is or will be adversely affected by climate change. Once the species is listed, the argument would be made that sources of substantial greenhouse gas (GHG) emissions, such as coal-fired power plants, cause an unlawful "take" of these species under ESA Section 9 by the effect such emissions have, via climate change, on the species' habitat. This could force negotiation of an incidental take permit for the source with GHG-limiting terms and conditions. Note that "take" is defined in the ESA to include "harm" to a member of a listed species, and "harm," in turn, is defined by regulation to include "significant habitat modification or degradation" where it actually kills or injures wildlife.[39] As a result, federal agencies proposing to issue permits for the construction or modification of GHG sources would be required, the argument runs, to initiate Section 7 consultation.[40]

Any effort to address climate change through the ESA would encounter several obstacles, chief among them whether the causal link between GHG emissions and habitat harm is too attenuated to fall within the ESA's prohibitions and requirements. The ESA also provides federal agencies with various tools to minimize ESA/climate change conflicts, such as Section 4(d) "special rules" for threatened species.[41]

In May 2008, FWS listed the polar bear as threatened, and used the 4(d)-rule mechanisms to limit challenges based on the polar bear's habitat.[42] In connection with the listing, FWS opposed using the ESA to address climate change. FWS argued in the listing preamble that current scientific understanding has not established a causal connection between specific sources of GHG emissions and specific impacts to polar bears or their habitat, concluding that the Section 7 consultation mechanism would not be triggered by federal actions leading to greater GHG emissions (e.g., permitting of fossil-fuel-fired power plants). Then, in the special rule, FWS prohibited suits for takes of polar bears if the underlying action occurred outside of Alaska. This would stifle any suit, including a citizen suit, that a non-Alaska power plant harmed the bear under the ESA.

In the 112th Congress, H.R. 39 proposes to delist the polar bear as a threatened species under ESA. Section 402 of H.R. 909 would amend ESA to prohibit the consideration of impacts from greenhouse gases in implementation of ESA.

Regional Resource Conflicts

As open space dwindles and increasing human populations put pressures on wildlands and natural resources, efforts to conserve species and their habitats may highlight underlying resource crises and economic conflicts. Public values and affected economic interests may be complex and sometimes at odds. The situations described below are examples of regional issues that have been the subject of recent congressional oversight and legislative interest. There are many more regional resource issues that relate to ESA and are of congressional interest.

[39] 50 *C.F.R.* § 17.3.

[40] For additional information, see CRS Report RS22906, *Use of the Polar Bear Listing to Force Reduction of Greenhouse Gas Emissions: The Legal Arguments*, by Robert Meltz, and CRS Report RL34573, *Does the Endangered Species Act Listing Provide More Protection of the Polar Bear?*, by Kristina Alexander.

[41] John Kostyack and Dan Rohlf, "Conserving Endangered Species in an Era of Global Warming," *Environmental Law Reporter*, vol. 38, no. 4 (2008): 10203-10213.

[42] 50 *C.F.R.* § 17.40(q).

Klamath River Basin

Controversy arose in 2001 when the Bureau of Reclamation (Department of the Interior) announced it would not release water from part of its Klamath irrigation project to approximately 200,000 acres of farm and pasture lands within the roughly 235,000-acre project service area. The operational change sought to make more water available for three fish species under ESA protection—two endangered sucker species, and a threatened coho salmon population. The Klamath Project straddles the Oregon/California border and has been the site of increasingly complex water management conflicts involving several tribes, fishermen, farmers, environmentalists, and recreationists. Upstream farmers point to their contractual rights to water from the Klamath Project and to hardships for their families if water is cut off. Others assert that the downstream salmon fishery 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 agency determinations is simply wrong.

Specifically at issue is how to operate the bureau's project facilities to meet irrigation contract obligations without jeopardizing the three listed fish. The Trinity River diversion from the Klamath basin to central California also has ramifications for the bureau's role in the Central Valley Project (CVP). Ten-year and annual operation plans, and associated biological assessments (by the bureau) and BiOps (by FWS and NMFS) have been variously criticized and defended.[43] On July 31, 2007, the House Natural Resources Committee held an oversight hearing on allegations of political intervention influencing scientific and policy decisions at the Department of the Interior, with respect to Klamath River salmon.

A Klamath Basin Restoration Agreement was negotiated by 29 Klamath River stakeholders and signed on February 18, 2010, to address conflicting water management objectives. A second related Klamath Hydropower Settlement Agreement may result in the removal of four dams on the Klamath River that block salmon and steelhead from historic spawning areas.[44] The Department of the Interior is developing a plan to evaluate the costs and benefits of dam removal, and Secretary Salazar is expected to issue a final decision by March 31, 2012. At issue for the 112th Congress is whether to provide legislative support for the two new Klamath agreements. Parties to these agreements have indicated that they will seek such legislative support from Congress, but no measures have yet been introduced.

Gray Wolf

ESA protection for distinct population segments (DPSs) of wolves has changed back and forth since the first DPSs—Western and Eastern—were proposed in 2003.[45] The result is an extremely complex regulatory and legal saga, in which each effort by FWS to delist the wolf or designate a DPS has been rejected by a court. The issue for the 112th Congress is whether to attempt to delist any wolf population legislatively, to modify the effects of wolf recovery efforts, or to leave the issue to management of FWS (as affected by likely further court rulings).

[43] For background on this regional issue, see CRS Report RL33098, *Klamath River Basin Issues and Activities: An Overview*, by Kyna Powers et al.

[44] Copies of the two agreements can be found at http://www.edsheets.com/Klamathdocs.html.

[45] For more information, see CRS Report RL34238, *Gray Wolves Under the Endangered Species Act: Distinct Population Segments and Experimental Populations*, by Kristina Alexander and M. Lynne Corn.

In 2004, FWS determined that the two DPSs no longer needed the protection of the ESA and so were delisted. The Western and Eastern DPS designations and delistings were nullified by courts. In 2007, FWS designated a Western Great Lakes DPS and simultaneously delisted it. And in early 2008, FWS also designated and delisted the Northern Rocky Mountains DPS. However, courts found both delistings flawed and vacated both rulemakings.

In December 2008, FWS responded by returning the wolves in the Western Great Lakes and parts of the Northern Rocky Mountains areas to their former protected status, eliminating the DPS designations. That same rulemaking returned wolves in southern Montana, southern Idaho, and all of Wyoming to the status of "nonessential experimental populations"—their status before the DPS efforts. In April 2009 FWS published notices establishing DPSs in the Western Great Lakes and the Northern Rockies and delisting both populations except for in Wyoming. FWS was sued regarding the Western Great Lakes delisting and settled the case, returning the population to its previous status (threatened or endangered, depending on location). A court held in August 2010 that the Northern Rockies delisting violated the ESA, directing that the delisting be declared invalid. The Northern Rockies wolves were returned to their experimental population status, meaning they are treated as threatened in most circumstances.

In the 112th Congress, H.R. 509 and S. 249 would amend ESA to provide that it not apply to the gray wolf. H.R. 510 would amend ESA to prohibit treatment of gray wolves in Idaho and Montana as endangered species. H.R. 838 would prohibit treatment of gray wolves in Minnesota, Wisconsin, and Michigan as endangered species.

Delta Smelt

Delta smelt (*Hypomesus transpacificus*) is a small, slender-bodied fish found only in the San Francisco Bay and Sacramento-San Joaquin Rivers Delta in California (Bay-Delta), where they were once abundant. The species was listed as threatened under ESA in 1993 and, in recent years, its abundance has declined to the lowest ever observed. The decline has been attributed to a combination of several factors, including entrainment (i.e., entrapment) in water export pumps, competition and predation from exotic fish species, toxic contaminants, changes in habitat size and quality, and changes in food supply.[46] The contribution of each factor in causing the species decline is controversial. Some contend that all causes might contribute to the observed decline.[47]

The delta smelt decline has significant consequences for the operation of the federal Central Valley Project (CVP) and the State Water Project (SWP), which supply water to much of Central and Southern California. Because entrainment and/or adverse modification of delta smelt critical habitat by water pumps is believed to contribute to the decline of delta smelt, changes in how these pumps are operated have triggered consultation under ESA. ESA requirements following

[46] Testimony of Bob Johnson, Commissioner of the Bureau of Reclamation, at House Committee on Natural Resources, Subcommittee on Water and Power, hearing on "The Immediate Federal and State Role in Addressing Uncertain Water Deliveries for California and the Impacts on California Communities," 110th Cong., 2nd sess., January 29, 2008.

[47] In 2005, the Pelagic Organism Decline working group was created to address the decline in fish and zooplankton populations in the Bay-Delta. Subsequently, they hypothesized that pelagic fish decline could be a result of three factors acting individually or together. These factors included (1) toxic contaminants, (2) exotic species, and (3) water project effects. Based on this hypothesis, the group developed a set of conceptual models to explain pelagic fish decline. Their results have so far been inconclusive and more research is planned for 2008. See *Pelagic Organism Decline Progress Report: 2007 Synthesis of Results*, at http://www.fws.gov/sacramento/es/documents/POD_report_2007.pdf.

consultation have resulted in reduced pumping and less water for users, which has been very controversial.

To address the impact of pumping changes on delta smelt, an ESA Section 7 consultation between FWS and the bureau was initiated in 2004.[48] FWS initially issued a no-jeopardy BiOp with regard to impacts on delta smelt by the operations of the CVP and SWP in 2004, and re-issued the BiOp in 2005 to address potential critical habitat issues of the delta smelt. In May 2007, the FWS BiOp was found not to comply with ESA with regard to delta smelt.[49] The bureau and FWS reinitiated consultation based on new information on the delta smelt in 2007. While the consultation process was underway, the bureau implemented interim protective measures required by a court order issued in December 2007.[50] A revised BiOp was issued December 15, 2008.[51] FWS determined that the continued operation of water projects in the Bay-Delta as described in the OCAP BA is likely to jeopardize the continued existence of the delta smelt and adversely modify its critical habitat. Along with the revised BiOp, FWS outlined reasonable and prudent alternatives (RPAs) intended to protect each life-stage and critical habitat of the delta smelt, which resulted in reduction in water deliveries for many water users south of the Delta. These RPAs have been the subject of further litigation and much controversy. During the 111th Congress, amendments were offered to void implementation of the RPAs with respect to water reductions.

At issue during the 112th Congress may be congressional oversight of proposals to change operations and authorities for the Bureau of Reclamation's Central Valley Project and environmental and/or economic damages from federal water project operations. In the 112th Congress, H.R. 1 (seeking to provide continuing appropriations for the remainder of FY2011) includes language that would prohibit funds from being used by NMFS and FWS for implementing certain actions described in BiOps for the operations of the Central Valley Project and the California State Water Project (Section 1475, Division B, Title IV).

Private Property and Fifth Amendment Takings

The prohibitions in Section 9 (private actions) and Section 7 (federal nexus) at times frustrate the economic desires of owners of land or other property. This has long been a central issue for ESA's detractors, who assert that restrictions under ESA routinely "take" property in the constitutional sense of the term.[52] Conflicts between ESA and property owners come about despite the existence of ESA mechanisms intended to soften its impact on property owners.

Under the Fifth Amendment, property cannot be "taken" by the United States without just compensation. The Supreme Court has long tried, with limited success, to define which government actions affect private property so severely as to effect such a "taking." In briefest outline, government actions usually are deemed a taking when they cause either a permanent

[48] In 2004, the Bureau of Reclamation, which operates the CVP, issued a biological assessment (BA) of its proposal to increase pumping as part of a revised coordinated operational plan with the SWP, known as Operations Criteria and Plan (OCAP), and initiated consultation with FWS. Consultation was also initiated with NMFS on several other anadromous species (e.g., salmon and sturgeon).

[49] NRDC v. Kempthorne, 506 F. Supp. 2d 322 (E.D. Cal. 2007).

[50] NRDC v. Kempthorne, 2007 U.S. Dist. LEXIS 91968 (E.D. Cal. December 14, 2007).

[51] Available at http://www.fws.gov/sacramento/es/documents/SWP-CVP_OPs_BO_12-15_final_OCR.pdf.

[52] See CRS Report RL31796, *The Endangered Species Act (ESA) and Claims of Property Rights "Takings"*, by Robert Meltz.

physical occupation of private property or, through regulation, a *total* elimination of its economic use. When the government regulation removes only part, but not all, of the property's use or value, a three-factor balancing test is used to determine whether a taking has occurred.[53] Although these factors have been little explicated by the courts, for a taking to occur the property impact generally must be severe. Moreover, except for physical takings, the property impact is assessed with regard to the property as a whole, not just the regulated portion.

Approximately 20 court decisions have addressed takings challenges to ESA restrictions on land or other property, with all but two finding no taking. These cases have involved restrictions on timber cutting, reductions in water delivery to preserve instream flows needed by listed species (a particularly active area now), restrictions on shooting animals that were responsible for loss of livestock, and prohibitions on the transport or sale of endangered species. In several of these cases, the taking claim failed because it was filed in the wrong court or was not "ripe." Where takings claims were reached by the court, they were rejected principally because the economic impact was insufficient as to the property as a whole, or because of the long-standing principle that the government is not responsible for the actions of wild animals. Of the two decisions favoring the property owner, one, involving reduced water delivery to a water district owing to the need to maintain in-stream flows for listed fish, has been undermined by the judge who wrote it.[54] The other, however, instructs that when government requires water subject to appropriative water rights to be physically diverted to a fish ladder (here, for the use of a listed species), the diversion must be analyzed under a physical rather than regulatory taking theory.[55] Under such a theory, as noted, the holder of water rights is likely to win its taking claim—unless the government can show that "background principles" of state water law never gave the plaintiff the right to be free of the complained-of diversion. This case is now back in the trial court for further proceedings.

Critics want ESA amended to afford compensation for a broader range of property impacts than the Constitution provides—perhaps by specifying a fixed percentage of ESA-related property value loss, above which compensation must always be paid. Provisions to that effect have been included in bills of previous Congresses, although not in recent ones, but never enacted into law. Opponents of an explicit compensation standard counter that ESA should not be singled out for a more property owner-friendly standard than other statutes or the Constitution. More fundamentally, they note that property rights have never been absolute, and that regulation has long been noncompensable as long as the impact on the property owner is not severe.

[53] The three factors, announced by the Supreme Court in *Penn Central Transp. Co. v. New York City* in 1978 and reaffirmed by the Court many times since, are (1) the economic impact of the government action on the property owner; (2) the extent to which the government action interferes with the owner's reasonable investment-backed expectations; and (3) the "character" of the government action. These are vague guideposts only; the Court stresses that every case is to be decided ad hoc. Indeed, many question whether it is even appropriate to call the three factors a test.

[54] See Casitas Municipal Water Dist. v. United States, 76 Fed Cl. 100 (2007), aff'd in part, reversed in part on other grounds, 543 F.3d 1276 (Fed. Cir. 2008), holding to the contrary of Tulare Lake Basin Water Storage Dist. v. United States, 49 Fed. Cl. 313 (2001).

[55] Casitas Municipal Water Dist., 543 F.3d 1276.

Additional Issues and Legislative Initiatives

Concern has been expressed over the adequacy of consultation and biological opinions related to pesticides and their possible effects on ESA-listed Pacific salmon.[56] Recent investigations indicate that about 10% of ESA-listed plants are available for purchase online, with most of these sales being illegal.[57]

Other issues have arisen for which legislation has been introduced in the 112th Congress:

- Section 3 of H.R. 332 would require compliance by all federal defense agencies with certain environmental laws, including ESA.
- Section 101 of H.R. 909 would declare the Draft Proposed Outer Continental Shelf (OCS) Oil and Gas Leasing Program 2010-2015 to be fully compliant with ESA.
- H.R. 946 would amend the Marine Mammal Protection Act of 1972 to permit activities aimed at reducing marine mammal predation on endangered Columbia River salmon.
- H.R. 991 would amend the Marine Mammal Protection Act of 1972 to allow importation of polar bear trophies taken in sport hunts in Canada before the date the polar bear was determined to be a threatened species under ESA.
- H.R. 1042 would amend ESA to require that certain species be treated as extinct if there is not a substantial increase in the population of a species during the 15-year period beginning on the date the species is determined to be endangered.

ESA Appropriations

Appropriations play an important role in the ESA debate, providing funds for listing and recovery activities as well as financing consultations that are necessary for federal projects.[58] In addition, appropriations bills have served as vehicles for some changes in ESA provisions.

Fish and Wildlife Service

Table 2 summarizes recent ESA and related funding for FWS. FWS currently is operating with continued funding at FY2010 levels through April 8, 2011, under the authority of a continuing resolution (P.L. 112-6), since Interior Department appropriations for FY2011 have not been enacted. In the 112th Congress, H.R. 1 (proposing continuing appropriations for the remainder of FY2011) would affect endangered species by decreasing funding for the Cooperative Endangered Species Fund to $2,479,000 (Section 1708, Division B, Title VII), the Neotropical Bird Fund to $4,430,000 (Section 1710, Division B, Title VII), and the Multinational Species Fund to

[56] See http://naturalresources.house.gov/UploadedFiles/012611-CEQ-letter-pesticide-biops.pdf.; see also http://www.cbbulletin.com/403308.aspx.

[57] Patrick D. Shirey and Gary A. Lamberti, "Regulate Trade in Rare Plants," *Nature*, v. 469 (January 27, 2011): 465-467.

[58] For an overview of FWS appropriations, see CRS Report R41155, *Fish and Wildlife Service: Appropriations and Policy*, by M. Lynne Corn.

$7,875,000 (Section 1711, Division B, Title VII). In addition, H.R. 1 includes language that would prohibit funds from being used by FWS for implementing certain actions described in BiOps for the operations of the Central Valley Project and the California State Water Project (Section 1475, Division B, Title IV).

The Administration's FY2012 request for endangered species and related funding within FWS's Ecological Services Account was released on February 14, 2011.[59] The central issue in the 112th Congress with these appropriations might be expected to focus on what level of funding is adequate to implement the programs required by law.

Table 2. Funding for FWS Endangered Species and Related Programs, FY2010-FY2012

($ in thousands)

	FY2010 Request	FY2010 Enacted	FY2011 Request	FY2012 Request
Endangered Species Program				
Candidate Conservation	10,592	12,580	11,471	11,426
Listing	20,103	22,103	20,945	24,644
Consultation	56,863	59,307	63,299	62,888
Recovery	76599	85,319	85,611	83,692
Subtotal	*164,157*	*179,309*	*181,326*	*182,650*
Related Programs				
Cooperative Endangered Species Fund	100,000	85,000	85,000	100,000
Multinational Species Fund	10,000	11,500	10,000	9,750
Neotropical Bird Fund	4,750	5,000	4,000	5,000
Total FWS	**278,907**	**280,809**	**280,326**	**297,400**

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

National Marine Fisheries Service

For NMFS, funding for ESA programs is included in a budget line item for "protected species research and management" that also includes funding authorized under the Marine Mammal Protection Act (See **Table 3**). NMFS currently is operating with continued funding at FY2010 levels through April 8, 2011, under the authority of a continuing resolution (P.L. 112-6), since Commerce Department appropriations for FY2011 have not been enacted.[60] In the 112th Congress,

[59] For more information on FWS FY2010 and FY2011 appropriations, see CRS Report R41258, *Interior, Environment, and Related Agencies: FY2011 Appropriations*, coordinated by Carol Hardy Vincent.

[60] For more information on NMFS FY2010 appropriations, see CRS Report R40840, *The National Oceanic and Atmospheric Administration (NOAA) Budget for FY2010*, by Harold F. Upton.

H.R. 1 (seeking to provide continuing appropriations for the remainder of FY2011) includes language that would limit funding for the Pacific Coastal Salmon Recovery Fund to $50 million (Section 1307, Division B, Title III) and prohibit funds from being used by NMFS for implementing certain actions described in a BiOp for the operations of the Central Valley Project and the California State Water Project (Section 1475, Division B, Title IV).

The Administration's FY2012 request for endangered species and related funding within NMFS's Protected Species Account was released on February 14, 2011. As for FWS above, the central issue in the 112th Congress with these appropriations might be expected to focus on what level of funding is adequate to implement the programs required by law.

Table 3. Funding for NMFS Protected Species Programs, FY2010-FY2012

($ in thousands)

	FY2010 Request	FY2010 Enacted	FY2011 Request	FY2012 Request
Protected Species	243,538	203,952	210,251	216,581

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

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