

A Future For All: A Blueprint for Strengthening the Endangered Species Act

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A Future for All Species: A Blueprint for Strengthening the Endangered Species Act

Executive Summary

The U.S. Fish and Wildlife Service and National Marine Fisheries Service have announced an effort to develop new implementing regulations for the Endangered Species Act to ensure that these regulations are "up-to-date, clear, and effective." To date, the details of the changes under consideration have not been released. In an effort to help the Obama administration develop a proposal that truly strengthens implementation of the Endangered Species Act, the strongest and most effective law for protecting biodiversity passed by any nation, the Center for Biological Diversity has developed the following set of recommendations for key programs:

Listing:

- Increase funding requests to Congress to ensure the program has sufficient funds to protect all species at risk of extinction.
- Streamline the internal agency-review process for listing species to more closely mirror the process of peer review of journal articles.
- Revise regulations for listing species to limit delay of protection for species designated as "warranted but precluded" to no more than three years.

Critical Habitat:

- Change the definition of "adverse modification" as actions that result in "a direct or indirect alteration that appreciably diminishes the value of any area of designated critical habitat for either the survival or recovery of a listed species."
- Clarify that "appreciably diminishes" includes any action that would destroy or degrade any primary constituent element such that any area of critical habitat would be of less or no value to the species. Note that use of "any area" makes clear that piecemeal destruction of critical habitat is not acceptable.
- Develop a plan for designating critical habitat for all listed species within the next 10 years.
- Promulgate regulations explicitly requiring consideration of recovery plans when designating or revising critical habitat when such designation or revision occurs subsequent to issuance of the species' recovery plan.
- When considering whether to exclude areas based on the existence of a conservation plan, utilize the "policy for consideration of conservation efforts," and do not exclude any areas based upon conservation plans that do not meet the criteria of this policy, do not provide for endangered species recovery, or are temporary or voluntary in nature.

Recovery:

To give greater effect to recovery plans and thereby speed species recovery, we recommend the following:

- Promulgate regulations requiring recovery plans to be developed within three years of listing.
- Promulgate regulations explicitly requiring consideration of recovery plans during consultation with other federal agencies.
- Create guidance requiring that recovery-plan goals be met prior to a species being downlisted or delisted. If the goals are determined to be inadequate, the goals should be updated prior to a downlisting or delisting decision.
- Promulgate guidelines specifying what federal agencies need to do to comply with their responsibility to use their authority to carry out programs for the conservation of species (16 U.S.C. § 7(a)(1)), specifying that federal agencies with substantial conflicts with endangered species must develop conservation plans that are consistent with species recovery plans.

Addressing climate change:

- Identify all listed and candidate species threatened by climate change, reexamine these species' status, and implement changes to critical habitats, recovery plans and consultation requirements based upon this new information.
- Require consultation with the U.S. Fish and Wildlife Service for all federal projects that appreciably contribute to global warming and thereby affect listed species.

Protecting endangered species from take:

- For each listed species, promulgate guidelines under section 11(f) defining activities that constitute take.
- Develop procedures for monitoring compliance with incidental-take permits and for tracking cumulative to ensure excessive take allowances are not granted.
- Promulgate guidance for habitat conservation plans that requires no net loss of habitat and ensures that replacement habitat will be of equal quality to any habitat destroyed.
- Promulgate guidance that requires plans to have measureable goals for species recovery in terms of both habitat quantity and quality and species population numbers.

- Promulgate guidance that requires outside scientific peer review of all conservation plans and requires science-based monitoring of plan goals.
- Promulgate guidance that requires changes in habitat conservation plans if monitoring finds a greater level of take than authorized or a significant species level decline.
- Promulgate regulations requiring a determination for all habitat conservation plans of whether they contribute to recovery or merely avoid jeopardy.

Adoption of these recommendations could dramatically improve the effectiveness of the already successful Endangered Species Act by speeding protection for clearly imperiled species and ensuring they receive the protection they need to survive and recover.

Introduction

The Endangered Species Act (ESA) is the strongest law protecting biodiversity passed by any nation. It has been tremendously successful at averting extinction and putting species on track to recovery. Indeed scientists estimate that were it not for the Act, at least 227 additional species would have gone extinct since 1973, when the landmark law was passed (Scott et al. 2006). The length of time a species has been protected and whether or not it has critical habitat both significantly increase the likelihood the species is improving (Taylor et al. 2005). Adding further evidence that the ESA is recovering species, a systematic look at all listed species in the northeastern United States found that no listed species had gone extinct and that 93 percent were stable and moving toward recovery (Suckling 2006). This success is particularly impressive given that the Endangered Species Act has long suffered from poor implementation and weak enforcement. This includes lengthy delays in listing of species, failure to designate critical habitat, a regulatory definition of adverse modification of critical habitat that failed to consider species recovery, excessive allowance of take, and poor implementation of recovery plans (Greenwald et al. 2006, Suckling and Taylor 2006, Schwartz 2008).

The U.S. Fish and Wildlife Service (FWS) and National Marine Fisheries Service (NMFS) recently announced a joint effort to develop new ESA implementing regulations "to enhance conservation of listed species" (FWS 2011). The agency's initial list of proposed changes, however, fails to address key problems in ESA implementation and in some cases may even weaken and complicate implementation. The agencies, for example, state a desire to "expand opportunities for the states to engage more often and more effectively in the implementation of the ESA's various provisions, especially those pertaining to the listing of species." Yet in many cases states have actively opposed listing of clearly imperiled species, often based on economic arguments expressly disallowed by the ESA. Species are often listed over the objection of states. This suggests that expanding their involvement will not necessarily benefit species.

Other proposed changes include improving "the efficiency and effectiveness of designation of critical habitat," including clarifying the definition of adverse modification' improving "procedures for the development and approval of conservation agreements with landowners," clarifying "the scope and content of the incidental take statements" and crafting "a multi-faceted strategy to address the challenge of the conservation of endangered species and the administration of the Federal Insecticide, Fungicide, and Rodenticide Act." Changes in some of these areas may be beneficial, but the list fails to address many longstanding problems, such as listing delays and failure to implement recovery plans (Greenwald et al. 2006, Schwartz 2008).

The following recommendations represent a list of administrative changes to strengthen implementation of the Endangered Species Act and speed recovery of threatened and endangered species.

Listing of Species as Threatened or Endangered

Listing of species as threatened or endangered is the keystone of the Endangered Species Act because it is only after a species is listed that it receives the protections of the Act. The listing program has long suffered from a backlog of species that are known to be imperiled, but are not listed (Greenwald et al. 2006). Under the Bush administration, the rate of species listings fell to an all-time low with just 62 species listed over eight years — a rate of seven species a year. During these eight years, more than 250 species that had been waiting an average of 20 years for protection sat on the candidate list, where they receive no protection. Hundreds of other species that had been petitioned by citizens, scientists and conservation groups waited for findings to determine if they need protection.

The rate of species listings has improved under the Obama administration, with 69 species listed to date for a rate of 25 per year. The administration also recently negotiated a historic settlement agreement that will determine whether 757 imperiled species will be protected under the ESA, including 259 candidates. Under this agreement, species such as the American wolverine, Pacific walrus, Mexican gray wolf, Pacific fisher, ashy storm petrel, Oregon spotted frog, Miami blue butterfly and Rio Grande cutthroat trout will finally be added to the endangered species list or be eliminated from consideration.

Even with these major steps forward, hundreds of imperiled species not covered by the agreement will continue to wait indefinitely for protection. These include recently determined candidate species such as the whitebark pine and eastern gopher tortoise and recently petitioned species including 374 Southeast aquatics for which FWS has determined listing may be warranted.

These continued delays have many causes, including limited funding for the listing program, inefficient listing processes and political opposition (Ando 1999, Greenwald et al. 2006, FWS 2009). The budget for listing species has risen considerably in recent years from \$9 million in 2002 to more than \$22 million in 2010 (Department of the Interior and Related Agencies Appropriations Act, 2002 and 2010). The administration's proposed budget for 2012 asked for an increase in the listing budget to just under \$25 million (FWS 2011b). These increases are encouraging but insufficient. This is in part because of a cumbersome process for listing species that in the words of the FWS itself "includes many levels of sequential review," in which more than 15 agency scientists, solicitors and officials have to sign off on every decision (FWS 2009). Besides slowing listing of species, this review process provides multiple opportunities for political intrusion into what should be a scientific decision. To address these problems, we recommend the following administrative actions:

- Increase funding requests to Congress to ensure the program has sufficient funds to protect all species at risk of extinction.
- Streamline the internal agency-review process for listing species to more closely mirror the process of peer review of journal articles.

• Revise regulations for listing species to limit delay of protection for species designated as "warranted but precluded" to no more than three years.

Designation of critical habitat and the definition of adverse modification

In passing the U.S. Endangered Species Act, Congress recognized the fundamental importance of protecting species' habitat, stating "[i]f the protection of endangered species depends in large measure on the preservation of the species' habitat, then the ultimate effectiveness of the Endangered Species Act will depend on the designation of critical habitat" (U.S. Congress 1976, Salzman 1990). Critical habitat provides important protections for endangered plants and animals, requiring federal agencies to consult with FWS and NOAA to ensure that their actions do not adversely modify critical habitat. These protections substantively contribute to species recovery. Indeed Taylor et al. (2005) found that species with critical habitat were more than twice as likely to be improving as those without.

For roughly the first 20 years after passage of the Endangered Species Act, FWS did not routinely designate critical habitat for listed species and after that only did so when sued by conservation organizations (Taylor and Suckling 2006, Schwartz 2008). As a result, only 45 percent of listed species have designated critical habitat (Center for Biological Diversity unpublished data). The agency has recently begun to designate critical habitat concurrently with listing of species, as required by the law. It has showed little interest, however, in designating habitat for species that did not receive it during the decades in which the law was ignored.

Additionally, critical habitat has not received the protection it should have because FWS and NOAA have been operating under Reagan-era regulations that wrote recovery out of the definition of adverse modification. The 1986 regulations define "destruction or adverse modification" of critical habitat as "a direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species" (50 CFR 402.02). As this definition prohibits recovery-threatening actions only if they also threaten jeopardy, it eliminates recovery as an independent standard. In addition to being illegal (see below), this definition undermines the ultimate purpose of the ESA: the recovery of listed species.

In 2004 the 9th Circuit Court of Appeals struck down the Reagan regulation, concluding that it "finds that adverse modification to critical habitat can only occur when there is so much critical habitat lost that a species' very survival is threatened," which would "drastically narrow the scope of protection commanded by Congress under the ESA" (Gifford Pinchot Task Force v. United States Fish and Wildlife Service, 378 F.3d 1059 (9th Cir. 2004). Other circuits have issued similar rulings. It is clear that a new definition must be promulgated consistent with the statute. To correct this definition and address the deficit of species with critical habitat, we recommend the following action:

• Change the definition of adverse modification as actions that result in "a direct or indirect alteration that appreciably diminishes the value of any area of designated critical habitat for either the survival or recovery of a listed species."

- Clarify that "appreciably diminishes" includes any action that would destroy or degrade any primary constituent element such that any area of critical habitat would be of less or no value to the species. Note that use of "any area" makes clear that piecemeal destruction of critical habitat is not acceptable.
- Develop a plan for designating critical habitat for all listed species within the next 10 years.
- Promulgate regulations explicitly requiring consideration of recovery plans when designating or revising critical habitat when such designation or revision occurs subsequent to issuance of the species' recovery plan.
- When considering whether to exclude areas based on the existence of a conservation plan, utilize the "policy for consideration of conservation efforts," and do not exclude any areas based upon conservation plans that do not meet the criteria of this policy, do not provide for endangered species recovery, or are temporary or voluntary in nature.

Recovery of threatened and endangered species

The purpose of the Endangered Species Act is not solely to save species from extinction but to recover them to the point that the protections provided by the Act are no longer necessary (16 U.S.C. § 1532(b)). To fulfill this purpose, the Act requires development of recovery plans for all listed species that include actions necessary for recovery and specific criteria to determine when species are recovered. Typically, recovery plans are developed by teams of scientists with expertise in the particular species and its habitat. As with listing and critical habitat, species with recovery plans were found to be more likely to be improving than species without, indicating that plans do contribute to recovery (Taylor et al. 2005). Eighty-five percent of listed species currently have recovery plans (Schwartz 2008, Center for Biological Diversity unpublished data).

Despite the fact that the Endangered Species Act mandates that federal agencies "shall implement" recovery plans, FWS has repeatedly maintained that recovery plans are not regulatory and instead are merely guidance documents. In recent years it has delisted species that have not met the criteria specified in the recovery plan (e.g. FWS 2008). FWS has similarly argued that it need not follow recovery plans when designating critical habitat and when consulting with other federal agencies over the impacts of their actions on listed species (e.g. FWS 2005). Perhaps in part because of this antipathy toward recovery plans, recovery actions specified in plans are not consistently achieved (Lundquist et al. 2002).

To give greater effect to recovery plans and thereby speed species recovery, we recommend the following:

 Promulgate regulations requiring recovery plans to be developed within three years of listing.

- Promulgate regulations explicitly requiring consideration of recovery plans during consultation with other federal agencies.
- Create guidance requiring that recovery plan goals be met prior to a species being downlisted or delisted. If the goals are determined to be inadequate, the goals should be updated prior to a downlisting or delisting decision.
- Promulgate guidelines specifying what federal agencies need to do to comply with their responsibility to use their authority to carry out programs for the conservation of species (16 U.S.C. § 7(a)(1)), specifying that federal agencies with substantial conflicts with endangered species must develop conservation plans that are consistent with species recovery plans.

Protecting endangered species from climate change

Global warming and associated climate change from anthropogenic greenhouse pollution is the leading global threat to species survival (Karl et al. 2009). Recent models indicate that upward of one-quarter of all species globally will be driven to extinction in the near future if current warming trends continue (e.g. Malcolm et al. 2006).

The Endangered Species Act should be a critical component in a broader, integrated response to climate change (Cummings and Siegel 2009). Consultation under the Act should be conducted for federal actions that result in major emissions of greenhouse gases to ensure that such actions do not jeopardize the continued existence of species or adversely impact their critical habitats. To date, FWS and NOAA have resisted consulting on greenhouse emissions and have tried to limit the impact of listing of species that are threatened by climate change on major emitters. Species threatened by climate change should be identified, and additional measures should be identified to give these species a better shot at adaptation.

Recovery plans should be used as a basis for addressing climate change for individual species and their ecosystems by identifying those actions that will ensure species and their habitats are able to survive and recover in a warmer world. Such an approach will require updating many recovery plans. Povilitis and Suckling (2010) found that prior to 2005, less than 5 percent of recovery plans addressed climate change, whereas since 2005, 59 percent at least discussed climate change. To begin addressing the impacts of climate change on endangered species, we recommend the following administrative actions:

- Identify all listed and candidate species threatened by climate change, reexamine these species' status, and implement changes to critical habitats, recovery plans and consultation requirements based upon this new information.
- Require consultation with the U.S. Fish and Wildlife Service for all federal projects that appreciably contribute to global warming and thereby affect listed species.

Protecting endangered species from take

Habitat destruction is the leading cause of species imperilment; thus protecting habitat is essential to their recovery (Wilcove et al. 1998). The Endangered Species Act prohibits any person from "taking" endangered species, which has been defined to include the destruction of habitat. It is often unclear, however, what constitutes take, in terms of habitat destruction, because the destruction must result in the actual injury or death to an endangered species. This could be rectified by FWS and NOAA developing guidelines that specify circumstances under which habitat destruction qualifies as take of a listed species.

The agencies do require mitigation for take as part of consultation with federal agencies. According to the Government Accountability Office (GAO), however, the agencies grant incidental-take permits as part of biological opinions, but have no means of tracking whether measures to mitigate such take are carried out or to keep track of cumulative take for a particular species, exposing endangered species to unmitigated and excessive take, as well as potentially unobserved declines (GAO 2009).

The agencies also require mitigation for take where private companies or local governments apply for an incidental-take permit as part of a habitat conservation plan. Such mitigation does provide benefits to species, but always in the context of take from the actions that are being permitted and usually resulting in a net loss of habitat. As with consultation, the agencies have little capacity for monitoring compliance with conservation plans or for tracking cumulative take allowed under habitat conservation plans. Unlike federal agencies in consultation, the private and government entities entering into conservation agreements are under no obligation to consider or support species recovery, and the plans are not required to recover species. To correct all of the above deficiencies, we recommend the following administrative actions:

- For each listed species, promulgate guidelines under section 11(f) defining activities that constitute take.
- Develop procedures for monitoring compliance with incidental-take permits and for tracking cumulative to ensure excessive take allowances are not granted.
- Promulgate guidance for habitat conservation plans that requires no net loss of habitat and ensures that replacement habitat will be of equal quality to any habitat destroyed.
- Promulgate guidance that requires plans to have measurable goals for species recovery in terms of both habitat quantity and quality and species population numbers.
- Promulgate guidance that requires outside scientific peer review of all conservation plans and requires science-based monitoring of plan goals.
- Promulgate guidance that requires changes in habitat conservation plans if monitoring finds a greater level of take than authorized or a significant species-level decline.

• Promulgate regulations requiring a determination for all habitat conservation plans of whether they contribute to recovery or merely avoid jeopardy.

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