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The Endangered Species Act: Consideration of Economic Factors

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Summary

The Endangered Species Act (ESA) provides for the listing and protection of species that are found to be "endangered" or "threatened" – species that might become extinct. The listing of a species as endangered triggers the prohibitions in the Act against "taking" (killing or harming) individuals of the protected species, unless a permit is obtained to take individuals incidental to an otherwise lawful proposed action, or an exemption for the proposed action is obtained. Unauthorized taking of a listed species can result in civil or criminal penalties. These prohibitions and potential penalties can affect various activities, including development and use of land, with attendant economic impacts. Therefore, the extent to which likely economic impacts can be taken into account under the ESA has generated interest and discussion.

The determination of whether a species should be listed as endangered or threatened must be based "solely on the basis of the best scientific and commercial data available." ("Commercial data" here refers to trade data.) The data that may be considered at the listing stage may include facts related to a species' population, habitat, distribution, etc., as well as threats to its continued survival, but must not include economic factors.

However, economic factors may be, and in some instances must be, considered in devising responses to the listing of a species – *e.g.* in the designation of critical habitat, in the process for obtaining an exemption for a particular proposed action from the prohibitions of the ESA, and in the development of the recovery plan for a listed species. Economic factors also play less direct roles in the permitting processes.

Parts of the ESA relate to commercial importation and trade in listed species. This report does not address those issues, but rather discusses the ESA generally, aside from the commercial context, and how some of its provisions relate to the consideration of economic factors. It will be updated as circumstances warrant.

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Introduction

The Endangered Species Act (ESA)[1] provides for the listing and protection of species that are found to be "endangered" or "threatened" – species that need conservation efforts because they might become extinct. The listing of a species as endangered triggers the prohibitions in the Act against "taking" (killing or harming) individuals of the protected species, unless a permit is obtained to take individuals incidental to an otherwise lawful proposed action, or unless an exemption for the proposed action is obtained. Unauthorized taking of a listed species can result in civil or criminal penalties. These prohibitions and potential penalties can affect various activities, including the use and development of land, with attendant economic impacts. Therefore, the extent to which likely economic impacts can be taken into account under the ESA has been of interest. Some parts of the Act relate to importation and commercial trading in listed species.[2] This report does not address those issues, but discusses the ESA generally and how some of its provisions, aside from the commercial context, relate to the consideration of economic factors. It will be updated as circumstances warrant.

Background

The ESA defines an "endangered species" as any species which is "in danger of extinction throughout all or a significant portion of its range." Excepted from this definition, however, are "species of the Class Insecta determined by the Secretary to constitute a pest whose protection under the provision of this chapter would present an overwhelming and overriding risk to man." This language appears to recognize the economic or health threats that some insects present. A "threatened" species is one likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range."

The Secretary of the Interior (with respect to terrestrial species) and the Secretary of Commerce (with respect to anadromous fish and certain other marine

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[1] Act of December 28, 1973, Pub. L. No. 93-205, 87 Stat. 884, codified at 16 U.S.C. §§ 1531 *et seq.*

[2] Note too that § 10(b) of the ESA and 50 C.F.R. § 17.23 provide for "hardship exemptions" in some instances involving subsistence use or where a person had a contract to sell individuals of a listed species that predated the listing of that species and the person would suffer economic hardship if the contract were not carried out.

species) decide whether to list a species as endangered or threatened. The listing of a species triggers certain duties for federal agencies and applicants for federal permits, authorizations, or funding to consult with the Secretary (in practice either the Fish and Wildlife Service or the National Marine Fisheries Service respectively) if a proposed action may affect a listed species. This consultation will determine if the proposed action is likely to jeopardize the continued existence of a species or destroy or adversely modify habitat of a species determined by the Secretary to be critical.[3] If so, the Secretary is to suggest reasonable and prudent alternatives to the proposed action that would avoid jeopardizing the listed species.

Listing a species as endangered also means that the prohibitions of the ESA regarding the "taking" of endangered species apply. "Taking" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.[4] The meaning of "harm" is elaborated on in regulations to include destruction of habitat severe enough to actually kill or injure wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering.[5] Current regulations provide that unless a special rule has been promulgated for a threatened species, threatened species shall receive the same protections as endangered species.[6] Exceptions to the taking prohibitions are allowed as a result of either the consultation process under § 7 of the Act, or under the § 10 provisions that allow "incidental take permits" to be issued.

If a development or activity cannot be modified so that it avoids jeopardizing a listed species, the person or agency proposing the action must either desist, risk penalties for unlawful takes, or pursue the exemption process provided under the ESA to exempt that activity (not the species) from the penalties of the Act.

This report will discuss the role of economics in the listing of species, designation of critical habitat, the exemption process, and the development of recovery plans.

The Listing Process

The determination of whether a species should be listed as endangered or threatened must be based on several factors that relate to the surviving numbers of a species and threats to its continued existence, but do not include a consideration of the economic effects of listing.[7] While the origins of threats to a species may be

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[3] 16 U.S.C. § 1536(a) and (b).

[4] 16 U.S.C. § 1532(19).

[5] 50 C.F.R. § 17.3.

[6] 50 C.F.R. § 17.31.

[7] 16 U.S.C. § 1533(a)(1) states that the Secretary by regulation shall "determine whether any species is an endangered species or a threatened species because of any of the following factors:

(continued...)

caused by development or other economic activities, listing determinations are expressly to be made "solely on the basis of the best scientific and commercial data available." The word "solely" was added in the 1982 amendments to the Act[8] to clarify that the determination of endangered or threatened status was intended to be made without reference to extraneous conditions such as economic factors. The committee reports elaborated on this point and also state that "commercial data" refers to trade data:

> ...The principal purpose of the amendments to Section 4 is to ensure that decisions pertaining to the listing and delisting of species are based solely upon biological criteria and to prevent non-biological considerations from affecting such decisions. To accomplish this and other purposes, Section 4(a) is amended in several instances ....
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> Section 4(b) of the Act is amended in several instances by Section 1(a)(2) of H.R. 6133. First, the legislation requires that the Secretary base his determinations regarding the listing or delisting of species "solely" on the basis of the best scientific and commercial data available to him. The addition of the word "solely" is intended to remove from the process of the listing or delisting of species any factor not related to the biological status of the species. The Committee strongly believes that economic considerations have no relevance to determinations regarding the status of species and intends that the economic analysis requirements of Executive Order 12291, and such statutes as the Regulatory Flexibility Act and the Paperwork Reduction Act not apply. The Committee notes, and specifically rejects, the characterization of this language by the Department of the Interior as maintaining the status quo and continuing to allow the Secretary to apply Executive Order 12291 and other statutes in evaluating alternatives to listing. The only alternatives involved in the listing of species are whether the species should be listed as endangered or threatened or not listed al all. Applying economic criteria to the analysis of the alternatives and to any phase of the species listing process is applying economics to the determinations made under Section 4 of the Act and is specifically rejected by the inclusion of the word "solely" in this legislation.

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[7] (...continued)

(A) the present or threatened destruction, modification, or curtailment of its habitat or range;

(B) overutilization for commercial, recreational, scientific, or educational purposes;

(C) disease or predation;

(D) the inadequacy of existing regulatory mechanisms; or

(E) other natural or manmade factors affecting its continued existence."

[8] Pub. L. No. 97-304, 96 Stat. 1411.

> Section 4(b) of the Act, as amended, provides that listing shall be based solely on the basis of the best "scientific and commercial data" available. The Committee did not change this information standard because of its interpretation of the word "commercial" to allow the use of trade data. Retention of the word "commercial" is not intended, in any way, to authorize the use of economic considerations in the process of listing a species.[9]

The conference report confirms that it was the intent of both chambers that economic factors not play a role in the listing of species for protection.

> Section 2 of the Conference substitute amends section 4 of the Act in several ways. The principal purpose of these amendments is to ensure that decisions in every phase of the process pertaining to the listing or delisting of species are based solely upon biological criteria and to prevent non-biological considerations from affecting such decisions.[10]
>
> The Committee of Conference (hereinafter the Committee) adopted the House language which requires the Secretary to base determinations regarding the listing or delisting of species "solely" on the basis of the best scientific and commercial data available to him. As noted in the House Report, economic considerations have no relevance to determinations regarding the status of species and the economic analysis requirements of Executive Order 12291, and such statutes as the Regulatory Flexibility Act and the Paperwork Reduction Act, will not apply to any phase of the listing process. The standards in the Act relating to the designation of critical habitat remain unchanged. The requirement that the Secretary consider for listing those species that states or foreign nations have designated or identified as in need of protection also remains unchanged.[11]

Therefore, the Act makes it clear that the decision as to whether a species is endangered or threatened is to be a scientific one in which economic factors do not play a part. Once this determination has been made, however, economic considerations may be, and in some instances must be, considered in analyzing what actions may be taken. This process has been analogized to making a diagnosis of whether a patient has cancer solely on medical grounds, but later considering economic factors in determining appropriate treatment once the patient has been diagnosed.

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[9] H.R. Rep. No. 97-567 at 19-20 (1982).

[10] H.R. Rep. No. 97-835 at 19 (1982).

[11] *Ibid.*, at 20.

Designation of Critical Habitat

In contrast to the process for listing a species as needing the protections of the ESA, in which process economic factors are not to play a part, economic factors expressly are to be considered in the designation of critical habitat for species. Concurrently with determining a species to be endangered or threatened, the Secretary "to the maximum extent prudent and determinable" is to designate the critical habitat of the species.[12]

When the Secretary designates critical habitat, the Secretary must take into consideration the economic impacts of doing so:

> on the basis of the best scientific data available and after taking into consideration the economic impact, and any other relevant impact, of specifying any particular area as critical habitat. The Secretary may exclude any area from critical habitat if he determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless he determines, based on the best scientific and commercial data available, that the failure to designate such area as critical habitat will result in the extinction of the species concerned.[13]

Therefore, although economic factors are not to be considered in the listing of a species as endangered or threatened, economic factors must be considered when deciding whether and where to designate critical habitat, and some habitat areas may be excluded from designation based on such concerns, unless the failure to designate the habitat would result in the extinction of the subject species.

The significance of designating critical habitat is debatable. The Fish and Wildlife Service has asserted that designation does not add substantially to the protections afforded listed species, critical habitat designations are inordinately expensive compared to listing determinations, and that the agency would prefer not to use scarce resources to designate critical habitat. In fact, critical habitat has been designated for less than one fourth of listed species. On the other hand, modification of critical habitat may trigger § 7 consultation, may affect a finding of "harm," and may facilitate development of recovery plans.[14]

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[12] 16 U.S.C. § 1533(a)(3). The reference to prudence reflects the fact that it is necessary to take into account whether designating the habitat of a listed species would result in specimen collecting or other public intrusion into that habitat to the detriment of the species. The word "determinable" refers to whether it has been possible factually to determine the extent of the critical habitat. If the facts relevant to the designation of critical habitat are not yet available, the Secretary may postpone designation for an additional year. Eventually, habitat is to be designated to the maximum extent it is prudent to do so.

[13] 16 U.S.C. § 1533(b)(2).

[14] *See* Pamela Baldwin, CRS Report RS20263: *The Role of Designation of Critical Habitat under the Endangered Species Act*.

Exemptions

Federal agencies and non-federal persons may seek to have a particular action exempted from the penalties for taking endangered or threatened species in order to allow an activity or project to proceed even if that activity or project would destroy individuals of a listed species and might even jeopardize the continued existence of that species.

As originally enacted, the Act was an absolute prohibition against activities that would jeopardize endangered species. When the prospective impoundment of water behind the nearly completed Tellico dam threatened to eradicate the only known population of the snail darter (a small fish), the Supreme Court concluded that the "plain language" of the Act at that time mandated that the dam not operate.

> Concededly, this view of the Act will produce results requiring the sacrifice of the anticipated benefits of the project and of many millions of dollars in public funds. But examination of the language, history, and structure of the legislation under review here indicates beyond doubt that Congress intended endangered species to be afforded the highest of priorities.[15]

After this Supreme Court decision, the ESA was amended to include a process by which economic and other impacts could be reviewed and projects exempted from the restrictions that otherwise would apply.[16] An "Endangered Species Committee" (Committee), consisting of specified Cabinet officials and one individual from each affected state reviews applications for exemptions. A federal agency, the Governor of the state in which an agency action will occur, or a permit or license applicant may apply to the Secretary for an exemption. The application must describe the consultation process carried out and provide a statement as to why the proposed action cannot be modified to conform with the requirements of the statute.

To be eligible for an exemption, the agency concerned and the exemption applicant must have carried out the consultation processes required under § 7 of the Act in good faith and must have made a reasonable and responsible effort to develop and fairly consider modifications or reasonable and prudent alternatives to the proposed action that do not jeopardize the continued existence of a listed species or result in the destruction or adverse modification of critical habitat of such a species. They also must have conducted the required biological assessments and, to the extent determinable within the time provided, refrained from making any irreversible or irretrievable commitment of resources that would foreclose the formulation or implementation of reasonable and prudent alternative measures to avoid jeopardizing the species and habitat in question. These qualifying requirements are to ensure that the exemption process will be a meaningful one and that the consideration of the issues will not be preempted by the commitment of resources and preclusion of alternatives through actions already taken.

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[15] Tennessee Valley Authority v. Hill, 437 U.S. 153, 174 (1978).

[16] 16 U.S.C. § 1536(e).

The Secretary, in consultation with the other members of the Committee, holds a hearing on the application and prepares a report. The report reviews whether the applicant has made any irreversible or irretrievable commitment of resources; discusses the availability of reasonable and prudent alternatives and the benefits of each; provides a summary of the evidence concerning whether the action is in the public interest and is nationally or regionally significant; and outlines appropriate and reasonable mitigation and enhancement measures which should be considered by the Committee.[17] Economic impacts may play a part in the evaluations of public interest and national or regional significance, and in the development of mitigation and enhancement measures.

The Committee then makes a final determination of whether to grant an exemption. The Committee shall grant an exemption if, based on the evidence, the Committee determines that:

> (i) there are no reasonable and prudent alternatives to the agency action;
>
> (ii) the benefits of such action clearly outweigh the benefits of alternative courses of action consistent with conserving the species or its critical habitat, and such action is in the public interest;
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> (iii) the action is of regional or national significance; and
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> (iv) neither the federal agency concerned nor the exemption applicant made any irreversible or irretrievable commitment of resources prohibited by subsection (d) of this section [commitments as described above that jeopardize species or critical habitat].[18]

The Committee also must establish reasonable mitigation and enhancement measures as necessary and appropriate to minimize the adverse effects of an approved action on the species or critical habitat. These measures must be funded by the applicant. Again, economic impacts may well be a factor in several of these evaluations and measures.

An exemption must be granted for an agency action if the Secretary of Defense finds the exemption is necessary for reasons of national security.[19] The Committee may not grant an exemption that the Secretary of State finds would violate a treaty or other international obligation of the United States.[20] The President is authorized to make exemption determinations for a project for the repair or replacement of a public facility in a major disaster area if the President determines it is (1) necessary

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[17] 16 U.S.C. § 1536(g).

[18] 16 U.S.C. § 1536(h).

[19] 16 U.S.C. § 1536(j).

[20] 16 U.S.C. § 1536(i).

to prevent the recurrence of the natural disaster and to reduce the potential loss of human life, and (2) to involve an emergency situation which does not allow the ordinary procedures to be followed.[21]

An exemption is permanent unless the Secretary finds that the exemption would result in the extinction of a species that was not the subject of consultation, or was not identified in the biological assessment and the Committee determines that the exemption should not be permanent.[22]

The costs of required mitigation and enhancement measures specified in an approved exemption must be included in the overall costs of continuing the proposed action and the applicant must report annually to the Council on Environmental Quality on compliance with mitigation and enhancement measures.[23] The obligation to fund mitigation continues throughout the impacts of the exemption.

The Act expressly states that any action for which an exemption is granted is not to be considered a taking of any endangered species with respect to any activity necessary to carrying out the exempted action, and that any taking that is in compliance with the terms and conditions specified in a written statement issued by the Secretary after the consultation process is not to be considered a taking of the species concerned. In other words, the penalties that normally apply to the taking of an endangered or threatened species do not apply to takings resulting from exempted actions.

There have been only a very few exemption applications filed and only two exemptions granted (one was in re the Grayrocks dam and the other was to approve 13 timber sales sought by the Bureau of Land Management in the Department of the Interior, but this latter exemption request was withdrawn before the completion of appeals). One application was denied (in re the Tellico dam, which was later allowed by Congress to proceed); one was dismissed as premature (in re the proposed Pittston oil refinery in Maine); and two others were withdrawn before Committee consideration.

One commentator has speculated that the low number of exemption applications may in part be because the process is rigorous, but also because the incentive to negotiate compromises is strong.

> The main reasons for the low number of applications probably include the small number of jeopardy opinions issued, the stringent substantive standards for the grant of an exemption, and the complexity of the process. A likely additional factor is that most institutions, public or private, recognize that merely by seeking an exemption they risk being perceived as hostile to endangered species conservation. As long as public support for

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[21] 16 U.S.C. § 1536(p).

[22] 16 U.S.C. § 1536(h).

[23] 16 U.S.C. § 1536(*l*).

> conservation is believed to be high, there is an incentive to compromise and avoid the need for an exemption.[24]

Another factor may be that the harm to a species resulting from an exempted action must be taken into account in reviewing other proposed actions that also may affect that species; more vigorous conservation actions may be necessary elsewhere to compensate for the exempted harm in order to recover the species in question. This fact also may make exemptions less desirable.

Recovery Plans

Once a species is listed, the Secretary is to develop a recovery plan for that species that will assist the species in recovering to the point that the protection of the ESA is no longer needed. To the extent practicable, the Secretary is to develop recovery plans for those species that are most likely to benefit from such plans, "particularly those species that are, or may be, in conflict with construction or other development projects or other forms of economic activity;..." Recovery plans are to set goals for the conservation and survival of the species and set out objective, measurable criteria that would result in a determination that the species could be removed from listing. A recovery plan also is to contain "estimates of the time required and the cost to carry out those measures needed to achieve the plan's goal and to achieve intermediate steps toward that goal."[25] Economic impacts may play a role in the development of and choosing among recovery measures. Although all options must achieve recovery, the most cost-effective option may be selected.

ESA Provisions with Less Direct Economic Effects

Other ESA provisions may involve economic factors less directly than those discussed above, especially as implemented administratively. Permit applicants may confer on possible impacts on species that have been proposed for listing and informal consultation is available with respect to preliminary project planning for actions that may affect a listed species. Both of these processes may assist with development of economic projects and activities so as to avoid both ESA conflicts and the expense of modifying actions later on. In addition, certain administrative actions afford landowners and developers greater certainty in moving forward with development activities.[26] These rules, combined with other agency policies and

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[24] Michael Bean and Melanie Rowland, THE EVOLUTION OF NATIONAL WILDLIFE LAW, 264-265 (3d Ed. 1998).

[25] 16 U.S.C. § 1533(f).

[26] See the "No surprises" rule and policy (63 Fed. Reg. 8859 (February 23, 1998) (50 C.F.R. § 17.22(b)(5)), which limits the changes the government can require a landowner to make to habitat conservation plans that are the basis for § 10 incidental take permits, and the "Safe harbor" agreements rule and policy (64 Fed. Reg. 32706 (June 17, 1999) (50 C.F.R. § 17.22(c)), which allows a landowner to make beneficial habitat improvements to land and (continued...)

guidelines for improved processing of permit applications, have been seen by many as facilitating economic activities and development otherwise affected by the ESA.

[26] (...continued)
later return to initial baseline conditions without penalties.