



Endangered Species Act

BACKGROUND: Numerous organisms native to the United States have become extinct, while many others have been so depleted in numbers that they are in danger of or threatened with extinction. In an attempt to conserve endangered and threatened species and the ecosystems they depend on, a comprehensive Endangered Species Act (ESA) was passed in 1973. That act, as amended, recognizes threatened and endangered species of animals and plants, prohibits taking or trade in listed animal species and trade in listed plants, protects habitat of listed species from destruction by federal actions, provides exemption and experimental population processes, specifies interagency cooperation, and requires preparation of recovery plans and monitoring of species awaiting listing and those recently recovered.

STATUTE: Endangered Species Act (ESA) of 1973, as amended; Public Law (PL) 93-205. Major amendments were enacted in 1978 (PL 95-632), 1979 (PL 96-159), 1982 (PL 97-304), and 1988 (PL 100-478). The resulting law is codified at 16 USC §§ 1531 *et seq.*

REGULATIONS: 50 *CFR* Part 17, Endangered and threatened wildlife and plants (FWS)¹
50 *CFR* Part 222, General endangered and threatened marine species (NMFS)
50 *CFR* Part 223, Threatened marine and anadromous species (NMFS)
50 *CFR* Part 224, Endangered marine and anadromous species (NMFS)
50 *CFR* Part 226, Designated critical habitat (NMFS)
50 *CFR* Part 402, Interagency cooperation—Endangered Species Act of 1973, as amended (FWS/NMFS)
50 *CFR* Part 424, Listing endangered and threatened species and designating critical habitat (FWS/NMFS)
50 *CFR* Parts 450–453, Endangered species exemption process (FWS/NMFS)

REFERENCES: U.S. Department of the Interior. Fish and Wildlife Service. Endangered and threatened wildlife and plants: Listing priority guidance. September 21, 1983. 48 *FR* 43098–43105.

U.S. Department of Commerce. National Oceanic and Atmospheric Administration. National Marine Fisheries Service. Endangered and threatened species: Listing and recovery priority guidelines. May 30, 1989. 54 *FR* 22925–22927.

¹ Acronyms in parentheses indicate the federal agency or agencies which implemented each regulation. FWS = Fish and Wildlife Service; NMFS = National Marine Fisheries Service.

Definitions

Important terms are defined in section 3 of the act. An *endangered species* is “any species which is in danger of extinction throughout all or a significant portion of its range” (with an exception for insect pests). *Threatened species* means “any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.” Other important terms that are defined in the law include *conserve*, *critical habitat*, *Secretary*, *species*, and *take*. Significant terms that are defined in the regulations implementing the ESA include *candidate species*, *incidental take*, and *jeopardize the continued existence of*.

Agencies responsible for implementing ESA

Two federal agencies are primarily responsible for implementing the ESA: the U. S. Fish and Wildlife Service (FWS) in the Department of the Interior and the National Marine Fisheries Service (NMFS), which is part of the National Oceanic and Atmospheric Administration in the Department of Commerce. NMFS is responsible for most marine organisms, while the FWS is responsible for all other species. Endangered and threatened wildlife are listed in 50 *CFR* 17.11(h); endangered and threatened plants in 50 *CFR* 17.12(h). (The current list of threatened and endangered species is available at the following Internet address: <http://www.fws.gov/r9endspp/lspinfo.html>. This list is updated regularly by the FWS.)

Relationship to other laws

Federal agencies are encouraged to coordinate ESA compliance, particularly under section 7, with compliance with other environmental laws such as the National Environmental Policy Act. However, compliance with any one of these laws does not necessarily fulfill all the requirements of the other. Thus, federal agencies must take care that they complete all the steps necessary to comply with each law and its implementing regulations.

Protection and management of protected species on federal land

The ESA declares [section 2(b)] that it is “the policy of Congress that all federal departments and agencies shall seek to conserve endangered species and threatened species and shall utilize

their authorities in furtherance of the purposes of this Act.” In particular, section 7, Interagency Cooperation, requires agencies to consult with the FWS and/or NMFS (the Services) to “insure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined by the Secretary . . . to be critical . . .” [ESA Section 7(a)(2)]. That is, the ESA requires all federal agencies to participate as much as possible in the conservation and recovery of threatened and endangered species.

Section 7: Interagency Cooperation

Section 7 requires consultation with the Services by all federal agencies when any activity they authorize, fund, or carry out (i.e., when they are “action agencies”) may affect a *listed* species or *designated* critical habitat. In addition, action agencies must confer with the Services when any proposed action is likely to jeopardize *proposed* species or adversely modify *proposed* critical habitat.

Compliance with section 7 can take various paths as discussed below. Which procedure applies and whether one or both Services will be involved depend upon the nature of the proposed action and the species or critical habitat that might be impacted by it.

- **Consultations.** Consultations are of several types: informal (the most common ones), formal, early, or emergency.
 - **Informal:** Except in those cases where the need for formal consultation is obvious from the start, the Services encourage all action agencies to start section 7 compliance with informal consultation. If the action agency determines that a proposed action is not likely to adversely affect listed species or their critical habitat (i.e., the effects are completely beneficial, insignificant, or discountable) and if the Services concur in writing with that determination, then formal consultation is not necessary, and section 7 consultation has been completed.
 - **Formal:** Formal consultation is necessary when a federal agency determines that an action may affect a listed species or its des-

ignated critical habitat, or when the Services, through informal consultation, do not concur with an action agency's finding of "not likely to adversely affect" a listed species or "not likely to adversely modify" designated critical habitat. Formal consultation results in a biological opinion written by the Services and sent to the action agency. Based on that opinion, the action agency determines whether and in what manner to proceed with the proposed action. An exemption process (described below) is available if the action agency determines that it must proceed with the action in spite of a jeopardy or adverse modification finding.

- **Early:** Early consultation is an optional process an action agency may undertake on behalf of an applicant for a federal permit or license. It is intended to reduce the potential for conflicts between listed species or designated critical habitat and proposed actions.
 - **Emergency:** Emergency consultations are held when an agency must respond quickly to a natural disaster or other calamity. These consultations are followed by a written formal consultation if listed species or critical habitats have been adversely affected.
- **Reinitiation of consultation.** Formal consultations need to be reinitiated when the proposed action or available information changes in ways not considered in the original consultation. Reinitiations involving major changes in analyses of effects or changes in the Services' biological opinion are addressed fully in a new formal consultation.
- **Conferences.** A conference considers the effect of an action on *proposed* species or *proposed* critical habitat. If a proposed species or critical habitat considered in a conference is listed or designated during the life of a project that retains federal involvement, then a consultation with the Services may be needed. Often the result of the conference can, however, be used as though it had been a consultation on a listed species or designated critical habitat, thus eliminating the need for an involved second interaction with the Services.

Jeopardy or adverse modification determinations

Jeopardy or adverse modification findings in biological opinions are rare; only an estimated 600 such findings resulted from approximately 186,000 section 7 consultations during fiscal years 1987 through 1995. If a biological opinion contains a jeopardy or adverse modification finding, the action agency has several options: It may adopt the Services' reasonable and prudent alternatives; refuse to grant the permit, fund the project, or undertake the action; request an exemption; reinitiate consultation; or choose to take another action. The action agency must notify the Services of its final decision on any action that receives a jeopardy or adverse modification biological opinion.

Reasonable and prudent alternatives

When the Services issue a jeopardy biological opinion, they usually include reasonable and prudent alternatives to avoid jeopardizing the species or adversely modifying critical habitat. It is up to the action agency to determine if it will implement these alternatives. The action agency's adoption of these alternatives with a written notice of that fact to the Services concludes the section 7 consultation process.

Incidental take

"Take" of an individual of a listed species is defined by the ESA as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." In analyzing the effects of a proposed federal action, the Services may recognize that some individuals or habitat may be taken and will provide an "incidental take" statement as part of the biological opinion. Such a statement allows a federal agency to go forward with a proposed action even if that action would otherwise be prohibited under the ESA because it would "take" individuals of a listed species. (Incidental take can also be allowed for non-federal actions if a permit for such take is issued as discussed below under section 10.) The incidental take statement specifies the allowable number of individuals or the extent of the habitat of anticipated take, if any; reasonable and prudent *measures* (not to be confused with reasonable and prudent *alternatives* discussed above) to minimize the take; and nondiscretionary terms and conditions needed to implement these measures.

If an action agency declines to take the reasonable and prudent measures, the Services state in writing that any anticipated taking would be prohibited by section 9, unless a permit is granted under section 10 of the ESA. If, however, the action agency agrees to the measures, then as long as the incidental take level is not exceeded, the action can continue with no further consultation. If the incidental take level is exceeded, then the action agency must immediately stop the action causing the taking and reinitiate formal consultation.

Exemptions

If a federal agency determines that a proposed action must go forward in spite of a jeopardy or adverse modification finding in a biological opinion, it may apply for an exemption. An exemption must be granted if the Secretary of Defense finds it is necessary for reasons of national security. Also, under certain circumstances the President may grant an exemption to restore public facilities in declared natural disaster areas.

The exemption process is seldom used, and requested exemptions are not always granted. Even when one is granted, the action agency may be required to adopt specific measures when implementing the proposed action.

Other ESA provisions of interest to DOE

Section 4: Determinations of endangered species and threatened species. Regulations to implement section 4 are found in 50 CFR 424. Criteria have been developed for deciding which species to list as endangered or threatened (50 CFR 424.11) and for designating critical habitats (50 CFR 424.12). Critical habitat must be designated when a species is listed unless that designation would not be beneficial to the species. In addition, section 4 requires recovery plans for listed species and monitoring of both delisted species and species that warrant listing but have not yet been formally listed (i.e., candidate species).

Section 9: Prohibited acts. This section identifies actions that are not allowed because they could directly or indirectly harm listed species. It prohibits taking any species of endangered wildlife or fish (but not plants) and forbids the possession, sale, and transport of illegally taken species. Section 9 also outlaws the import and export of endangered species, sales of endangered species in interstate or foreign commerce, and shipment of such species in interstate and foreign commerce

for commercial purposes. These restrictions apply not only to federal agencies and permittees, but to all persons subject to United States' jurisdiction.

Exceptions to section 9's ban on takings include threats to human life and federal and non-federal incidental takings in the course of an otherwise lawful activity.

Section 10: Exceptions. Section 10 of the ESA provides exceptions to allow certain activities that would otherwise be prohibited by section 9 (e.g., it authorizes permits for scientific purposes or incidental take). This section also authorizes release of listed species as either "essential" or "nonessential" experimental populations. By definition, no proposed action impacting a "nonessential experimental population" can lead to a jeopardy determination for the entire species during formal section 7 consultation.

More information

More information about the ESA and protected species can be found at the following Internet addresses, which lead to numerous additional sources of information:

- **FWS Endangered Species**
<http://www.fws.gov/r9endspp/endspp.html>
- **NMFS**
<http://www.nmfs.gov/>
- **The Nature Conservancy**
<http://www.tnc.org/>
- **EcoNet's Endangered Species Resources**
<http://www.igc.org/igc/issues/habitats/>
- **EE Link - Endangered Species**
<http://eelink.net/EndSpp/endangeredspecies-mainpage.html>

Questions of policy or questions requiring policy decisions will not be dealt with in EH-412 Information Briefs unless that policy has already been established through appropriate documentation. Please refer any questions concerning the subject material covered in this Information Brief to Lois Thompson, Air, Water and Radiation Division, EH-412, (202) 586-9581, fax (202) 586-3915 or lois.thompson@eh.doe.gov.

