Overview

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Introduction

As it approaches its 50th anniversary, the Endangered Species Act of 1973 (ESA) remains a lightning rod for litigation, and the source of ongoing legal debate and competing interpretations. Enacted with little controversy and minimal debate before it was signed into law by President Nixon, the ESA set forth what was believed to be the commonsense objective of saving species from extinction. As declared by the law's purpose, the ESA is "to provide a means whereby the ecosystems upon which endangered and threatened species depend may be conserved, [and] to provide a program for the conservation of such endangered and threatened species."[1] Yet, despite the seemingly simplistic and singular goal, the ESA quickly became the fodder for legal debate and policy clashes.

Within two years, the fundamental meaning of the ESA and its central action-forcing provision set forth in the no jeopardy requirement of section 7(a)(2) became embroiled in controversy with the listing of the snail darter as an endangered species and the designation of a stretch of the Little Tennessee River, the site of the congressionally authorized and funded Tellico Dam, as its critical habitat. Three years later, in 1978, the ESA landed in front of the U.S. Supreme Court, for its landmark interpretation in *Tennessee Valley Authority v. Hill*.[2] Setting the stage for subsequent lawsuits and foreshadowing the in-depth legal scrutiny that would be provided to other key provisions of the act, the Court's six-member majority opinion, issued by Chief Justice Burger, declared that

> [o]ne would be hard pressed to find a statutory provision whose terms were any plainer than those in § 7 of the Endangered Species Act. Its very words affirmatively command all federal agencies "to *insure* that actions *authorized*, *funded*, or *carried out* by them do not *jeopardize*

1. 16 U.S.C. § 1531(b).
2. Tenn. Valley Auth. v. Hill, 437 U.S. 153 (1978).

> the continued existence" of an endangered species or "*result* in the destruction or modification of habitat of such species. . . ." This language admits of no exception.[3]

The ESA, the Court recognized, is "the most comprehensive legislation for the preservation of endangered species ever enacted by any nation."[4]

With these strong judicial pronouncements as the backdrop, the meaning of many of the ESA's key provisions has been the fodder for legal debate for decades. In fact, since 1973, there have been approximately 1,200 reported cases dealing with the ESA, and the act's central requirements have also been the subject of numerous rulemakings, agency guidance documents, congressional hearings and amendments, and legal commentary. The very evolution of this book has tracked return visits of the ESA to the U.S. Supreme Court, with the first edition in 2002 following on the heels of *Bennett v. Spear*, interpreting whether the biological opinions issued under section 7(a)(2) constitute final agency action subject to judicial review.[5] The second edition of 2010 came not long after the Supreme Court's review of what constitutes discretionary agency subject to section 7(a)(2) in *National Association of Home Builders v. Defenders of Wildlife*.[6] And this third edition comes in the aftermath of the meaning of the term "critical habitat" in *Weyerhaeuser Co. v. U.S. Fish and Wildlife Service*.[7] The ESA has been the impetus for U.S. Supreme Court review on six occasions, including the 1992 standing decision in *Lujan v. Defenders of Wildlife*,[8] the 1995 decision on the meaning of the take prohibition in section 9 in *Babbitt v. Sweet Home Chapter of Communities for a Great Oregon*,[9] and the pending case involving the application of the Freedom of Information Act to draft biological opinions in *U.S. Fish and Wildlife Service v. Sierra Club*.[10] This degree and scope of judicial review points to the legal complexity of the ESA, and serves as the basis for the content of this volume, with chapter contributions from leading experts on the ESA from across the ideological spectrum.

As Michael Bean explains in his short history of the ESA (Chapter 1), the law provides a comprehensive approach to the complex problem of species extinction. For instance, like the Migratory Bird Treaty Act and the Marine Mammal Protection Act, the ESA prohibits the take of protected species. Like the Lacey Act, the ESA regulates commerce in wildlife and plants. The ESA also provides for habitat acquisition similar to the provisions of the Migratory Bird Conservation Act. Even the ESA's most distinctive provision, the interagency consultation requirements set forth in section 7, finds a progenitor in

3. *Id*. at 173 (citing 16 U.S.C. § 1536 (1976 ed.)).
4. *Id*. at 180.
5. Bennett v. Spear, 520 U.S. 154 (1997).
6. Nat'l Assoc. of Home Builders v. Defenders of Wildlife, 551 U.S. 644 (2007).
7. Weyerhaeuser Co. v. U.S. Fish & Wildlife Serv., 139 S. Ct. 361 (2018).
8. Lujan v. Defenders of Wildlife, 504 U.S. 555 (1992).
9. Babbitt v. Sweet Home Chapter of Cmtys for a Great Or., 515 U.S. 687 (1995).
10. U.S. Fish & Wildlife Serv. v. Sierra Club, No. 19-547 (Sup. Ct.).

the Fish and Wildlife Coordination Act. The ESA, however, is unique because it adopts all of these approaches to the battle against extinction and the drive toward species recovery.

The ESA's comprehensive approach has had significant impacts on the management and use of public and private lands and waters. Not surprising, the law has engendered much controversy during its first 48 years. At least some of this controversy is due to an inadequate understanding of what the law does and does not require. This misunderstanding is by no means limited to the lay public; even many lawyers find themselves at sea when faced with a client's first encounter with the ESA. Some of the ESA's controversy also arises from perceptions about how the ESA could be enforced, rather than how it is actually enforced. For example, the section 9 take prohibition could be applied to regulate many types of land use activities, but successful enforcement of the prohibition against habitat loss is exceedingly rare.

As with the first two editions of this book, the third edition is intended to guide both the novice and the experienced practitioner to the ins and outs of the ESA. The book covers not only the ESA statute, regulations, and case law but also many nonlegal aspects of implementing the ESA, including science, funding, and political issues.

Responsibility for Implementation

The ESA is administered jointly by the Secretaries of Commerce and the Interior. Within the Department of Commerce, the National Marine Fisheries Service (NMFS) is responsible for carrying out the act. This agency has jurisdiction over most marine species and anadromous fish. At the Interior Department, lead responsibility for the ESA is vested in the U.S. Fish and Wildlife Service (FWS). FWS applies the ESA to terrestrial species, freshwater species, and certain marine species, including sea turtles while on land.

Many states have their own laws to protect rare and vulnerable species, but these laws vary significantly. Many are limited in scope, whereas others closely resemble the federal ESA. Still others create even more rigorous standards than the ESA's. In general, the requirements of the federal law prevail when there might be a conflict. State laws can control in cases of conflict only where they are more stringent.[11] States can enter into cooperative agreements with the Services, and in doing so qualify for federal financial assistance and receive a narrow exception from the take prohibition for certain conservation programs.[12] In Chapter 12, Robert Fischman, William Snape, and Susan George analyze the scope of state endangered species laws.

Throughout this book, the manner in which the Services apply the ESA is discussed in a variety of contexts, such as listing decisions (Jesup, Chapter 2), section 7 consultations (Taylor and Sayers, Chapter 5), the section 9 take prohibition (Quarles, Weiland, and Ferrasci-O'Malley, Chapter 6), and exceptions

11. 16 U.S.C. § 1535(f).
12. *Id.* § 1535(d)(2); 50 C.F.R. §§ 17.21(c)(5), 17.31(b).

to the section 9 prohibitions (Wheeler and Ratliff, Chapter 7; Male and Ford, Chapter 8). This book also addresses specific issues such as protecting plants (Wheeler, Chapter 9), applying the ESA in international settings (Wheeler, Young, and Husen, Chapter 11), and captive wildlife (Winders, Goodman, and Rally, Chapter 13).

The ESA's Goals

In 1973, Congress enacted the ESA with a bold declaration of the law's reasons and goals. In section 2 of the law, Congress declared that "various species of fish, wildlife, and plants in the United States have been rendered extinct as a consequence of economic growth and development untempered by adequate concern and conservation."[13] Congress also recognized that other species were in danger of extinction and "these species of fish, wildlife, and plants are of esthetic, ecological, educational, historical, recreational, and scientific value to the Nation and its people."[14] Moreover, Congress recognized that the United States had pledged itself through various international agreements to conserve endangered species.[15]

To address these issues, Congress established that the goals of the ESA are "to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions" under which the United States pledged to conserve endangered species.[16]

A central question raised throughout this book is whether Congress provided the tools necessary to achieve these goals. For example, Congress underscored the importance of conserving ecosystems but provided no comprehensive approach for achieving this goal. In fact, "ecosystem" appears in only one other instance in the act, as part of the definition of "conserve." Another issue raised throughout the book is whether Congress provided enough tools to recover species that depend on voluntary conservation actions carried out by private landowners and states. When enacting the ESA, Congress focused on regulation of human activities that harm species and adopted some of the most stringent prohibitions in our federal environmental laws. But over the past decades, we have seen that these prohibitions are inadequate to recover many species. Activities such as restoring wetlands, reintroducing populations that have been extirpated, and removing invasive species generally require landowners to voluntarily agree to support those actions, rather than regulatory prohibitions. To address this problem, the Services have developed tools to encourage landowners to help recover species. Chapter 8 (Male

13. 16 U.S.C. § 1531(a)(1).
14. *Id.* § 1531(a)(3).
15. *Id.* § 1531(a)(4).
16. *Id.* § 1531(b).

and Ford) discusses these tools, their importance, and the challenges to effective implementation.

In two other chapters, this book further addresses whether the ESA is adequately equipped to achieve its goals. Chapter 16 (Wood and Schiff) discusses this issue from the perspective of private property rights and individual liberty, whereas Chapter 17 (Hartl and Owley) provides the viewpoints of two environmental advocates. None of the authors believes that current implementation of the ESA adequately conserves species, but the two chapters describe very different strategies for how best to achieve this goal.

Inadequate funding for the ESA is a perennial obstacle to effectively implementing the law. Although this problem is widely known, most ESA practitioners are only vaguely aware of how it affects the day-to-day implementation of the ESA. Chapter 15 (Malcom) provides the first-ever comprehensive review of the practical effects of these resource constraints. Citing empirical data, the chapter discusses how inadequate funding has hampered listings, recovery planning, section 7 consultations, and other core ESA functions.

Listing, Critical Habitat, Recovery Plans

To receive protection under the ESA, a species first must be listed as threatened or endangered. The listing process involves a detailed technical review that is almost always initiated by a petition submitted to the Service by a private organization or individual.[17] Listing decisions must be made on the basis of five criteria set forth in the ESA:

1. The present or threatened destruction, modification, or curtailment of the species' habitat or range;
2. Overutilization of the species for commercial, recreational, scientific, or educational purposes;
3. Disease or predation;
4. The inadequacy of existing regulatory mechanisms; or
5. Other natural or manmade factors affecting the species' continued existence.[18]

Decisions on listing proposals must be made according to specified time frames, although in practice the Services often miss these deadlines, which can be enforced through citizen lawsuits.[19] The ESA states that decisions are to be made "solely on the basis of the best scientific and commercial data available,"[20] and economics are not taken into account.[21] This focus on science is misleading, however, as Michael Runge explains in Chapter 14 on the science–policy interface. In reality, it is impossible to determine whether a species qualifies

17. *Id.* § 1533.
18. *Id.* § 1533(a)(1).
19. *Id.* § 1533(b)(1).
20. *Id.* § 1533(b)(1)(A).
21. *Id.* § 1533(a)(1)(D).

for listing without considering policy and value judgments. The lack of clear boundaries between science and policy judgments continues to trigger lawsuits and accusations of improper political interference in listing decisions. Despite these challenges, the number of listed species has grown considerably since the prior edition of this book. As of June 2020, a total of 1,666 domestic and 695 foreign species are listed. The number of species that warrant listing is likely several orders of magnitude greater.

With few exceptions, the Services also must designate critical habitat at or within a year of listing. Critical habitat can be occupied or unoccupied by the species. Occupied habitat, which makes up the vast majority of designated critical habitat, consists of the specific geographic areas that contain the physical and biological features essential to conserving the species and that may require special management or protection.[22] Critical habitat need not be designated if doing so will harm the species or when the benefits of excluding an area from designation, including economic benefits, outweigh the benefits of including the area.[23] Once critical habitat is designated, federal agencies are prohibited from authorizing (e.g., through permits, licenses, contracts), funding, or carrying out any action that is likely to result in the "destruction or adverse modification" of the critical habitat.[24] As of June 2020, critical habitat has been designated for nearly 800 U.S. species, but adverse modification findings are extremely rare (Chapters 3 and 5).

Two chapters of this book discuss listing and critical habitat in detail. In Chapter 2, Ben Jesup discusses the listing process and the manner in which the Services and the courts have interpreted the listing requirements. Dave Owen gives similar treatment to the critical habitat designation process and the destruction or adverse modification prohibition in Chapter 3, including by summarizing his research on how Services staff apply the prohibition in practice.

The ultimate goal of the ESA is to conserve listed species to a point where they no longer require the act's protections.[25] For each listed species, a recovery plan is supposed to guide this effort. Section 4(f) of the ESA directs the Services to "develop and implement plans for the recovery and survival" of listed species.[26] This duty does not apply if the Service finds that "such a plan will not promote the conservation of the species," as the case has been for most foreign-listed species.[27] Recovery plans must describe the criteria for when a species is deemed recovered, the conservation actions needed to reach that goal, and the estimated time and cost of recovery. Plans are nonenforceable and treated as guidance documents, which means that the Service can delist a species even if some recovery criteria have not been met. As of June 2020, plans had been finalized for nearly 1,000 species. The entire recovery planning

22. *Id.* § 1533(a)(3).
23. 50 C.F.R. § 424.12(a)(1)(i)–(ii).
24. 16 U.S.C. § 1536(a)(2).
25. *Id.* §§ 1531(b), 1532(3).
26. *Id.* § 1533(f).
27. *Id.*

process, including the requirement to review the recovery status of species every five years, is discussed in Chapter 4 (Li).

As of June 2020, 60 species have been recovered and delisted. Approximately two-thirds of those delistings occurred during the last decade. The large percentage of recent delistings is partly because many species have been listed for long enough to fully recover. Another reason is the strong emphasis during the Obama and Trump administrations to prioritize the delisting of species that had already met all of their recovery criteria. In the coming years, many species are expected to be downlisted and delisted. At the same time, many species continue to decline in status after listing, often because of inadequate attention and funding.

In August 2019, the Trump administration finalized major changes to the regulations for listing, critical habitat, and section 7 consultations. The changes affect the process and standards for critical habitat designation, the publication of economic data alongside listing decisions, the standards for delisting species, and other aspects of the listing and critical habitat functions. Several lawsuits immediately challenged the revised regulations and Congress has proposed two bills to revoke all the revisions. Further, in the winter of 2020, the Trump administration finalized a new definition of "habitat" under the ESA and then adopted changes to when and how FWS decides to exclude areas from critical habitat designation. The fate of those rules, however, is in question considering the pressure that environmental organizations will put on the Biden administration to rescind all of the rule changes. Throughout this book, the authors have noted the recently proposed or finalized ESA rules that the Biden administration may modify or rescind. We encourage you to seek the latest updates on the rules by researching their status on your own.

The Duty to Consult and Avoid Jeopardy and Adverse Modification

In addition to the prohibitions on take of any animal species set forth in section 9, the ESA prohibits federal agencies from jeopardizing any listed species or destroying or adversely modifying its critical habitat.[28] This prohibition is carried out through section 7(a)(2) consultations, in which a federal agency proposing an action must consult with the Service on the effects of the action to ensure against jeopardy and adverse modification.[29] Because these prohibitions can be far-reaching, section 7 consultations have been the subject of many lawsuits and controversies.

As part of the consultation process, if a federal agency determines that its proposed action "may affect" a listed species or critical habitat, the agency begins informal consultation with the Service to evaluate the effects of the action in greater detail and to adopt any conservation measures to minimize adverse effects to the species. From 2008 to 2015, FWS alone completed

28. *Id.* § 1536(a)(2).
29. *Id.*

nearly 90,000 consultations, 93 percent of which ended with a determination that an action is not likely to adversely affect a species or its critical habitat.[30] If adverse effects are likely, then the federal agency must formally consult with the Service.[31] After formal consultation, the Service will issue a biological opinion on the effects of the proposed action.[32] If the Service finds jeopardy or adverse modification, it must propose reasonable and prudent alternatives to minimize or offset the harmful effects of the action, if such alternatives are available.[33] Consultations almost never end in a jeopardy determination for which no alternatives are available—in fact, no such outcome has occurred in well over a decade.[34] In the extremely rare case where an action agency rejects the alternatives, it may seek an exemption from a Cabinet-level committee or run the legal risk of proceeding with the proposed action in the face of the jeopardy finding. If the action will result in the incidental take of a listed species, the biological opinion must be accompanied by an incidental take statement that includes conservation measures to minimize the effects of the action on the species. Section 7 consultation is discussed in Chapter 5 (Taylor and Sayers).

Section 7 also offers some protections for species the Service has proposed for listing and for proposed critical habitat. A federal agency must confer with the Service if its proposed action is likely to jeopardize a proposed species or adversely modify proposed critical habitat. The conference results in recommendations to minimize the effects of the action, but those recommendations are nonbinding.[35]

In addition to the consultation requirements of section 7, federal agencies must also consult with qualifying tribes potentially affected by ESA-related determinations. Under an order issued during the Clinton administration by the Secretaries of Commerce and the Interior, federal agencies that administer the ESA must also consult with any federally recognized tribe whose lands, trust resources, or treaty rights may be affected by any decision, determination, or activity implementing the ESA.

A federal action can avoid jeopardy and adverse modification, and still leave species and their critical habitat in an impaired state. To address this problem, section 7(a)(1) requires every federal agency to use its legal authorities to help recover listed species.[36] In practice, however, this proactive obligation has rarely been followed and is difficult to enforce.

30. Jacob W. Malcom & Ya-Wei Li, *Data Contradict Common Perceptions About a Controversial Provision of the US Endangered Species Act*, 112 Proc. Natl. Acad. Sci. U.S.A. 15844–49 (2015).

31. 50 C.F.R. § 402.14(a).

32. 16 U.S.C. § 1536(a)(3)(A); 50 C.F.R. § 402.14(g)(4).

33. 16 U.S.C. § 1536(a)(3)(A); 50 C.F.R. § 402.14(g)(5).

34. Malcom & Li, *supra* note 30. Michael J. Evans, Jacob W. Malcom & Ya-Wei Li, *Novel Data Show Expert Wildlife Agencies Are Important to Endangered Species Protection*, 10 Nature Commc'ns 3467 (2019).

35. 16 U.S.C. § 1536(a)(4); 50 C.F.R. § 402.10.

36. 16 U.S.C. § 1536(a)(1).

The Take Prohibition and Its Exemptions

The jeopardy and adverse modification prohibitions in section 7 apply only to federal agency actions. For nonfederal actions, the section 9 take prohibition helps protect listed animal species (but not plants).[37] Because of its breadth and the potential consequences of violating it, the take prohibition is both a strength of the ESA and a source of much controversy. Section 9 also prohibits the export, import, possession, transportation, or sale of listed species in certain circumstances.[38]

Under section 9, to "take" means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct."[39] The U.S. Supreme Court has upheld regulations defining "harm" to include certain forms of habitat modification.[40] The requirements of section 9 are set forth in Chapter 6 (Quarles, Weiland, and Ferrasci-O'Malley). The ESA's protections for listed plants are discussed in Chapter 9 (Wheeler). International trade restrictions and other international aspects of ESA implementation are discussed in Chapter 11 (Wheeler, Young, and Husen).

To enforce the take prohibition, the federal government can initiate a civil action to enjoin an activity that may result in a take (e.g., halting an ongoing forest practice), obtain civil penalties for a past take, or initiate a criminal action if the take is carried out "knowingly."[41] These prohibitions can also be enforced in a civil action initiated by citizen groups under section 11(g) of the ESA.[42] Citizen suits are discussed in Chapter 10 (Glitzenstein).

The section 9 take prohibition is not ironclad; the ESA sets forth important exceptions. As noted earlier, federal actions that cause incidental take are regularly authorized through an incidental take statement included in a biological opinion issued under section 7(a)(2). This exception is discussed in Chapter 5 (Taylor and Sayers).

Additional exceptions to the take prohibition are set forth in section 10 of the ESA, which is discussed in Chapters 6, 7, and 8. These exceptions include those for specimens acquired before 1973, economic hardship, subsistence and handicraft use by certain Alaskan residents, and for scientific purposes or propagation.[43] Section 10 also establishes an exemption for "experimental populations."[44] Under section 10(j), the Service may adopt less restrictive ESA prohibitions to help pave the way for reintroducing a population of a listed species.

In 1982, Congress amended the ESA to allow a private applicant to commit a take that would otherwise be prohibited if such taking was "incidental to,

37. *Id.* § 1538(a)(1)(B), (c).
38. *Id.* § 1538(a)(1).
39. *Id.* § 1532(19).
40. *Babbitt*, 515 U.S. 687.
41. 16 U.S.C. § 1540(a), (b).
42. *Id.* § 1540(g).
43. *Id.* § 1539(a)(1), (b), (e), (f), (h).
44. *Id.* § 1539(a)(1).

and not [for] the purpose of, the carrying out of an otherwise lawful activity."[45] Under section 10 of the ESA, incidental take is currently authorized through a variety of voluntary agreements to conserve or minimize and mitigate impacts to listed species. These agreements include candidate conservation agreements with assurances (CCAAs), safe harbor agreements, and habitat conservation plans (HCPs). Using these tools to enlist landowners in ESA conservation has increasingly been recognized as important by the environmental and regulated communities alike. HCPs are discussed in Chapter 7; other ESA voluntary conservation agreements are discussed in Chapter 8.

A continuing source of controversy under the ESA is the relationship between the enforcement of the law's take prohibition and private property rights. The tension between the ESA and the Constitution's Fifth Amendment takings clause is discussed in Chapter 18 (Echeverria and Sugameli).

Conclusion

After nearly 50 years, the ESA continues to be one of our most important but controversial conservation laws. Efforts to reauthorize the ESA over the past 30 years have foundered as each side of the debate blocks the other's legislative initiatives while failing to reach consensus on what measures are necessary to enhance the ESA's effectiveness and usefulness. Although the text of the ESA remains in place, the rules and policies that implement the law have changed with each presidential administration. The Trump administration had undertaken the most comprehensive rewrite of the rules in decades, but the Biden administration is likely to modify or rescind at least some of those changes.

For anyone who cares about saving endangered wildlife and their habitat; for landowners, businesses, and government agencies whose activities are affected by the ESA's requirements; and for attorneys representing all of these interests, a thorough knowledge of how the law has been interpreted and applied is essential. We hope that the third edition of this book will continue to provide that knowledge, and that you, as readers, will use that knowledge to further the farsighted and noble purposes for which the ESA was enacted.

45. *Id.* § 1539(a)(1)(B).