



**The National Agricultural Law Center's Endangered
Species Act Manual:**
A Practical Guide to the ESA for Agricultural Producers

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Acronym Glossary:

BiOp – Biological Opinion

CWA – Clean Water Act

EPA – Environmental Protection Agency

ESA – Endangered Species Act

FWS – Fish and Wildlife Service

HCP – Habitat Conservation Plan

ITP - Incidental Take Permit

NEPA - National Environmental Policy Act

NMFS - National Marine Fisheries Service

SHA – Safe Harbor Agreement

I. Introduction

In 1973, Congress passed what would come to be regarded as one of the nation's most powerful tools to protect wildlife.¹ Known as the Endangered Species Act ("ESA"), this statute is recognized as granting the federal government broad powers to conserve those species it identifies as endangered or in threat of becoming endangered.² While the ESA is frequently recognized as the nation's most effective law for protecting species³, it also places restrictions on certain activities carried out by the federal government and private landowners.⁴ It is therefore important that any landowner who may have an endangered or threatened species on their property, or anyone who will be working with the federal government on an activity that may impact endangered or threatened species, understand how the ESA functions.

This manual will provide an in-depth look at the ESA by examining the text of the statute, its implementing regulations, and case law that has impacted how the ESA is carried out. Additionally, this manual will provide a thorough discussion on how the ESA impacts private landowners, and will explore the various ESA programs available to private landowners. Finally, this manual will conclude by discussing some real-life examples of how the ESA affects agriculture, and how agricultural producers can be critical to achieving the statute's conservation goals.

a. What is the ESA?

The Endangered Species Act of 1973 is considered the primary wildlife protection law in the United States. The purposes of the ESA are two-fold: to prevent imperiled wildlife species from becoming extinct, and to recover species at-risk of extinction to the point where the ESA's protections are no longer needed.⁵ To achieve these goals, the ESA has created a framework for protecting both at-risk species and their habitats. Crucial to that framework is the Federal List of Endangered and Threatened Wildlife and Plants

¹ Fish & Wildlife Service, *History of the U.S. Fish and Wildlife Service*, USFWS (Oct. 18, 2022), <https://www.fws.gov/history-of-fws>.

² U.S. Congressional Research Service. *The Endangered Species Act: Overview and Implementation* (R46677; February 9, 2021). Text in: CRS Web; Accessed: October 17, 2022, <https://crsreports.congress.gov/product/pdf/R/R46677/1>.

³ *Tennessee Valley Authority v. Hill*, 437 U.S. 153, 180 (1978).

⁴ *The Endangered Species Act: Overview and Implementation* at 1.

⁵ 16 U.S.C. § 1531.

(“the Federal List”).⁶ That list is central to the function of the ESA because only those species added to the list receive the Act’s protections.⁷



Two of the main protections granted to species listed under the ESA are the prohibition against “take” of any listed species, and the designation of “critical habitat.” The term “take” is broadly defined as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.”⁸ A taking of even one individual of a listed species can amount to a violation of the ESA.⁹ Additionally, when a species is listed under the ESA, it may require a designation of critical habitat,¹⁰ which is generally identified as the habitat necessary to conserve the species.¹¹ Just as it is a violation of the ESA to take a species, it is also a violation of the ESA for a federal agency to destroy or modify designated critical habitat.¹² This prohibition can also affect a

⁶ Fish & Wildlife Service, *Threatened & Endangered Species*, Environmental Conservation Online System (last visited Oct. 19, 2022), <https://ecos.fws.gov/ecp/>.

⁷ 16 U.S.C. § 1533(c).

⁸ 16 U.S.C. § 1532(19).

⁹ 16 U.S.C. § 1533(a).

¹⁰ 16 U.S.C. § 1533(a)(3)(A)(i).

¹¹ 16 U.S.C. § 1532(5).

¹² 16 U.S.C. § 1536(2).

private landowner who may be carrying out an activity that requires federal involvement.¹³ For example, a landowner who wants to clear and construct an animal feeding operation on his property may need to obtain federal permits. If a portion of the landowner's property has been designated as critical habitat, the federal agency issuing permits to the landowner will need to ensure that doing so will not destroy or modify designated critical habitat. By protecting both individual members of a listed species, and the habitat that species relies on, the ESA has become an important tool for wildlife conservation.

The Fish and Wildlife Service ("FWS") and the National Marine Fisheries Service ("NMFS") (collectively "the Services") are both responsible for administering the ESA.¹⁴ Each of the Services are required to identify species for listing under the ESA, and designate critical habitat for listed species. FWS is responsible for terrestrial and freshwater organisms, while NMFS is responsible for marine wildlife and anadromous fish.¹⁵ The Services also work with other federal agencies to ensure that their actions do not violate the ESA, and with private landowners who want to engage in endangered species conservation.¹⁶

The ESA has been referred to as the "pit bull" of environmental laws.¹⁷ In the past, courts have tended to interpret the ESA's requirements very strictly, citing Congress's intent to give species conservation the highest priority.¹⁸ Because of that, the ESA has the potential to impact almost any activity that affects wildlife.

b. Historical Background and Congressional Intent

Federal wildlife laws intended to conserve wildlife have existed since the beginning of the twentieth century. The Lacey Act of 1900 outlawed the commercial hunting and interstate trade of certain animals and plants.¹⁹ The Migratory Bird Treaty Act of 1918 made it illegal to pursue, hunt, capture, kill, or take any birds identified by FWS as a

¹³ U.S. Congressional Research Service. The Endangered Species Act (ESA) and Claims of Property Rights "Takings" (RL31796; Jan. 07, 2013), by Robert Meltz. Text in: CRS Web; Accessed: October 19, 2022, <https://sgp.fas.org/crs/misc/RL31796.pdf>.

¹⁴ The Endangered Species Act: Overview and Implementation at 1.

¹⁵ *Id.*

¹⁶ 16 U.S.C. § 1536; Fish & Wildlife Service, *Tools for Conservation Partnerships*, FWS (last visited Oct. 20, 2022), <https://fws.gov/library/collections/tools-conservation-partnerships>.

¹⁷ Holly Doremus, *The Purposes, Effects, and Future of the Endangered Species Act's Best Available Science Mandate*, 34 *Envtl. L.* 397, 399 (2004).

¹⁸ *Tennessee Valley Authority*, 437 U.S. at 174 ("[E]xamination 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.").

¹⁹ 16 U.S.C. § 3372.

migratory bird species.²⁰ The Bald and Golden Eagle Protection Act of 1940 also protected birds by prohibiting the “taking” of any bald or golden eagle.²¹ The Act defined “taking” to include pursuing, shooting, shooting at, poisoning, wounding, killing, capturing, rapping, collecting, molesting, or disturbing a bald or golden eagle.²²

In 1966, Congress passed the statute that would become the precursor to the ESA. That law, the Endangered Species Preservation Act of 1966, initiated a program to help conserve, protect, and restore certain wildlife species.²³ The Department of Interior was instructed to put together a federal list of endangered animals that would be protected under the 1966 Act.²⁴ Congress also directed the Department of Interior to acquire a limited amount of private land to help with the protection of listed species.²⁵ The 1966 Act was amended a few years later by the Endangered Species Conservation Act of 1969.²⁶ Under the 1969 law, protections for listed species were expanded and a new list was developed to identify species that were at risk of worldwide extinction.²⁷ The 1969 Act made it illegal to import or sell those species within the United States.²⁸

In 1972, President Nixon issued a message to Congress in which he declared that current federal laws addressing species conservation did not go far enough. He requested that Congress pass a “stronger law to protect endangered species of wildlife.”²⁹ Ultimately, this prompted Congress to pass the Endangered Species Act of 1973. The stated purpose of the ESA is to protect species and the ecosystems on which they depend.³⁰ To do that, the ESA expanded on the wildlife protection laws that had preceded it by making all plant and invertebrate species eligible for protection; applying “take” prohibitions to all endangered; and prohibiting federal agencies from authorizing, funding, or carrying out any action that would jeopardize a listed species or protected habitat.

Since 1973, Congress has passed two major amendments to the ESA, in 1982 and 1988.³¹ Those amendments have shaped the ESA into the statute that it is known as today by

²⁰ 16 U.S.C. § 703(a).

²¹ 16 U.S.C. § 668(a).

²² 16 U.S.C. § 668c.

²³ The Endangered Species Act: Overview and Implementation at 2.

²⁴ *Id.*

²⁵ Fish & Wildlife Service, *Endangered Species Act Milestones: Pre 1973*, USFWS (last visited Oct. 18, 2022), <https://fws.gov/node/266462>.

²⁶ *Id.*

²⁷ *Id.*

²⁸ Endangered Species Conservation Act, Pub. L. No. 91-135, 83 Stat. 275 (1969).

²⁹ United States., & Nixon, R. (1972). *Special Message to the Congress Outlining the 1972 Environmental Program*, <https://www.presidency.ucsb.edu/documents/special-message-the-congress-outlining-the-1972-environmental-program>.

³⁰ 16 U.S.C. § 1531(b).

³¹ Endangered Species Act Amendments of 1982, Pub. L. No. 97-305, 96 Stat. 1411 (1982); Endangered Species Act Amendments of 1988, Pub. L. No. 100-478, 102 Stat. 2306 (1988).

introducing habitat conservation plans,³² refining processes related to species recovery,³³ and broadening protections for endangered plants.³⁴

c. What Does the ESA Mean to Agriculture?

There are many ways in which the ESA can impact agriculture. If a species listed under the ESA is located on agricultural land, that may affect the activities that can be carried out on that property. Any action that a farmer or rancher carries out that could cause a “take” of a listed species may put them in violation of the ESA.³⁵ Critical habitat designations can also impact agriculture. Although critical habitat designations do not directly affect private actions on private land or non-federal public property, federal agencies are required to ensure that their actions will not jeopardize designated critical habitat. This can cover a variety of agriculture-related actions including pesticide registrations, grazing permits on federal land, and even projects on private land that require a federal permit or funding. Therefore, even though private landowners are not explicitly prohibited from modifying critical habitat under the ESA, if the landowner carries out a project with a federal nexus, they may face limitations from any critical habitat located on their property. However, there are also ways in which the ESA allows farmers and landowners to work with the Services in order to reach conservation goals while removing some risk of unintentional ESA violations.

Because the ESA can have a variety of impacts to agriculture, it is important that people within the agricultural industry understand the Act and how it may affect them. This document will serve as a manual to help members of the agriculture industry navigate the ESA.

II. How Does the ESA Work?

As already mentioned, the ESA has two main goals: to protect species in danger of extinction, and to recover those species to the point where they no longer need federal protection. These goals are accomplished through several key sections of the Act that outline the process for listing species, the responsibilities of federal agencies, the activities prohibited by the ESA, and more. Understanding what these provisions of the ESA do is critical for understanding how the Act impacts land management activities.

The following is an overview of the relevant sections of the ESA.

³² 16 U.S.C. § 1539(a)(2).

³³ 16 U.S.C. § 1533(f).

³⁴ 16 U.S.C. § 1538.

³⁵ 16 U.S.C. § 1538 (a)(1)(B) (“[I]t is unlawful for any person subject to the jurisdiction of the United States to [...] take any such species[.]”).

a. Section 4

For a species to be protected under the ESA, it must first be listed as either “threatened” or “endangered.” Once a species is listed, it may receive designated critical habitat which is regarded as the habitat essential to conserving the species. Section 4 of the ESA establishes both the processes by which species are listed, and critical habitat is designated.

Under the ESA, FWS and NMFS are tasked with maintaining a list of endangered and threatened species. The species on those lists receive ESA protection. Those lists are available to the public, and may be found [here](#).

According to section 4 of the ESA, a species may be listed as either threatened or endangered due to any of the following factors:

- (1) The present or threatened destruction, modification, or curtailment of its habitat or range;
- (2) Overutilization 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 its continued existence.³⁶

While any of the above factors may serve as the basis for listing a species, the ESA specifically states that making a listing determination shall rely “solely on the basis of the best scientific and commercial data available.”³⁷

A species may be listed in one of two ways. The Services may decide to list a species on their own initiative, or a private party may petition one of the Services to list a species.³⁸ Either way, once the Services decide that listing is warranted for a particular species, they must engage in notice and comment rulemaking in order to formally list the species. If a species is being listed directly by one of the Services, then the listing Service must publish a general notice and the complete text of the proposed listing regulation in the Federal Register at least 90 days before the effective date of the regulation.³⁹ The listing Service must allow adequate time for public comment. Within one year of publishing the proposed regulation, the listing Service is required to publish in the Federal Register either a final determination on whether the species will be listed, a notice extending the amount of time needed to make a final determination, or a notice

³⁶ 16 U.S.C. § 1533(a)(1).

³⁷ 16 U.S.C. § 1533(b)(1)(A).

³⁸ 16 U.S.C. § 1533(b)(3)(A).

³⁹ 16 U.S.C. § 1533(b)(5)(A).

that the proposed regulation is being withdrawn.⁴⁰ If the proposed regulation is withdrawn, then the species will not be listed.

A similar process, with the addition of a few extra steps, is followed if a third party petitions one of the Services to list a species. Before publishing a proposed regulation in the Federal Register, the petitioned Service has 90 days after receiving the petition to determine whether it presents “substantial scientific or commercial information” showing that the petitioned action may be warranted.⁴¹ If the petitioned Service concludes that the action is may be warranted, it will conduct a review of the species.⁴² Then, twelve months after receiving the petition, the Service shall make a finding on whether to undertake the action.⁴³ If the Service does decide to proceed with the action, it will publish a proposed rule for listing in the Federal Register to begin the formal rulemaking process.⁴⁴

A species may be listed under the ESA as either “threatened” or “endangered.” A threatened species is defined as “any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.”⁴⁵ An “endangered species” is defined as “any species which is in danger of extinction throughout all or a significant portion of its range.”⁴⁶ A species that is listed as threatened may have its status changed to endangered and vice versa.⁴⁷ If a species that was originally listed as threatened has its listing changed to endangered, that change is referred to as “uplisting.”⁴⁸ Similarly, a species that was listed as endangered but has its status changed to threatened is referred to as being “downlisted.”⁴⁹ FWS or NMFS may decide to directly change the status of a listed species, or a third party may petition the Services to do so. The Services may also remove a species from the Federal List, but only if the species has gone extinct or recovered to the point of no longer being threatened or endangered.⁵⁰ Removing a species from the Federal List is referred to as “delisting.”⁵¹

A species listed as endangered will automatically receive all protections provided by the ESA. Most of those protections are also available to threatened species. Under the ESA,

⁴⁰ 16 U.S.C. § 1533(b)(6)(A).

⁴¹ 16 U.S.C. § 1533(b)(3)(A).

⁴² *Id.*

⁴³ 16 U.S.C. § 1533(b)(3)(B).

⁴⁴ *Id.*

⁴⁵ 16 U.S.C. § 1532(20).

⁴⁶ 16 U.S.C. § 1532(6).

⁴⁷ 16 U.S.C. § 1533(a)(3)(A)(ii).

⁴⁸ Fish & Wildlife Service, *Listing and Classification*, USFWS (last visited Oct. 20, 2022), <https://www.fws.gov/program/listing-and-classification>.

⁴⁹ *Id.*

⁵⁰ 50 C.F.R. § 424.11(e).

⁵¹ *Listing and Classification*.

the Services have the discretion to determine which protections will be provided to each threatened species.⁵² This allows the Services to tailor protections for a threatened species according to its conservation needs. However, tailoring ESA protections for every species listed as threatened can be time consuming. In order to more efficiently provide protections to threatened species, FWS adopted what is known as the “Blanket 4(d) rule” which automatically applies the same protections to threatened species that are applied to endangered species.⁵³ The option for species-specific protection is still available under this rule, and is still utilized by NMFS for the species it lists as threatened. However, for the most part, FWS uses the Blanket 4(d) rule to automatically provide protections to threatened species.⁵⁴

The Blanket 4(d) rule was rescinded by the ESA regulations adopted by the Trump administration in 2020,⁵⁵ but in 2021 the Biden administration announced its intent to reinstate the rule.⁵⁶ During 2022, a federal district court issued an opinion formally overturning the 2020 ESA regulations, including the regulation rescinding the Blanket 4(d) rule.⁵⁷ However, shortly afterward an appellate court overruled the lower court’s decision and reinstated the 2020 rules.⁵⁸ The 2020 regulations will be discussed further below. Currently, if a species is listed as threatened instead of endangered, the listing Service will need to specify which ESA protections the species will receive.

Section 4 also governs the designation of critical habitat. Under the ESA, critical habitat is defined as:

- (i) the specific areas within the geographical area occupied by the species, at the time it is listed [...] on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and
- (ii) specific areas outside the geographical area occupied by the species at the time it is listed [...] that are essential for the conservation of the species.⁵⁹

⁵² 16 U.S.C. § 1533(d).

⁵³ 50 C.F.R. § 17.31.

⁵⁴ The Endangered Species Act: Overview and Implementation at 17.

⁵⁵ Endangered and Threatened Wildlife and Plants; Regulations for Prohibitions to Threatened Wildlife and Plants, 84 Fed. Reg. 44753 (Aug. 27, 2019).

⁵⁶ Fish & Wildlife Service. (June 4, 2021). *U.S. Fish and Wildlife Service and NOAA Fisheries to Propose Regulatory Revisions to Endangered Species Act* [Press release]. https://www.fws.gov/press-release/2021-06/us-fish-and-wildlife-service-and-noaa-fisheries-propose-regulatory-revisions?ref=u.s.-fish-and-wildlife-service-and-noaa-fisheries-to-propose-regulatory-&_ID=36925.

⁵⁷ *Ctr. for Biological Diversity v. Haaland*, No. 19-CV-05206 (N.D. Cal. July 5, 2022).

⁵⁸ *In re: Washington Cattlemen’s Ass’n*, No. 22-70194 (9th Cir. Sept. 21, 2022).

⁵⁹ 16 U.S.C. § 1532(5).

In other words, critical habitat is those areas either within or outside of a listed species' current geographic range that are necessary for conserving that species. While the term "habitat" itself is not defined under the ESA, the United States Supreme Court has noted that at the very least, in order for an area to be designated as critical habitat for a species, the area must be capable of supporting that species.⁶⁰ Critical habitat may be designated for either endangered or threatened species.⁶¹

Finally, section 4 of the ESA directs the Services to develop recovery plans for each listed species.⁶² These plans are intended to provide specific steps that can be taken in order to recover and ultimately delist a species. Recovery plans are required to incorporate "objective, measurable criteria" which will result in successful species recovery, as well as estimates of the time and cost needed to complete the recovery process.⁶³ Importantly, these plans are not regulatory documents. They are guidance documents that may be followed, but no agency or entity is required by the ESA to implement a recovery plan.⁶⁴

b. Section 7

Section 7 of the ESA requires all federal agencies to ensure that any actions they take will not jeopardize the existence of any listed species or destroy critical habitat.⁶⁵ If an agency determines that its action may jeopardize a listed species or destroy critical habitat, it is required by section 7 to consult with the Services on how that potential harm could be avoided.⁶⁶ The consultation process federal agencies must go through in order to comply with the ESA is discussed below.

⁶⁰ *Weyerhaeuser Co. v. U.S. Fish and Wildlife Serv.*, 139 S. Ct. 361 (2018).

⁶¹ 16 U.S.C. § 1533(a)(3)(A)(i).

⁶² 16 U.S.C. § 1355(f).

⁶³ 16 U.S.C. § 1533(f)(1)(B).

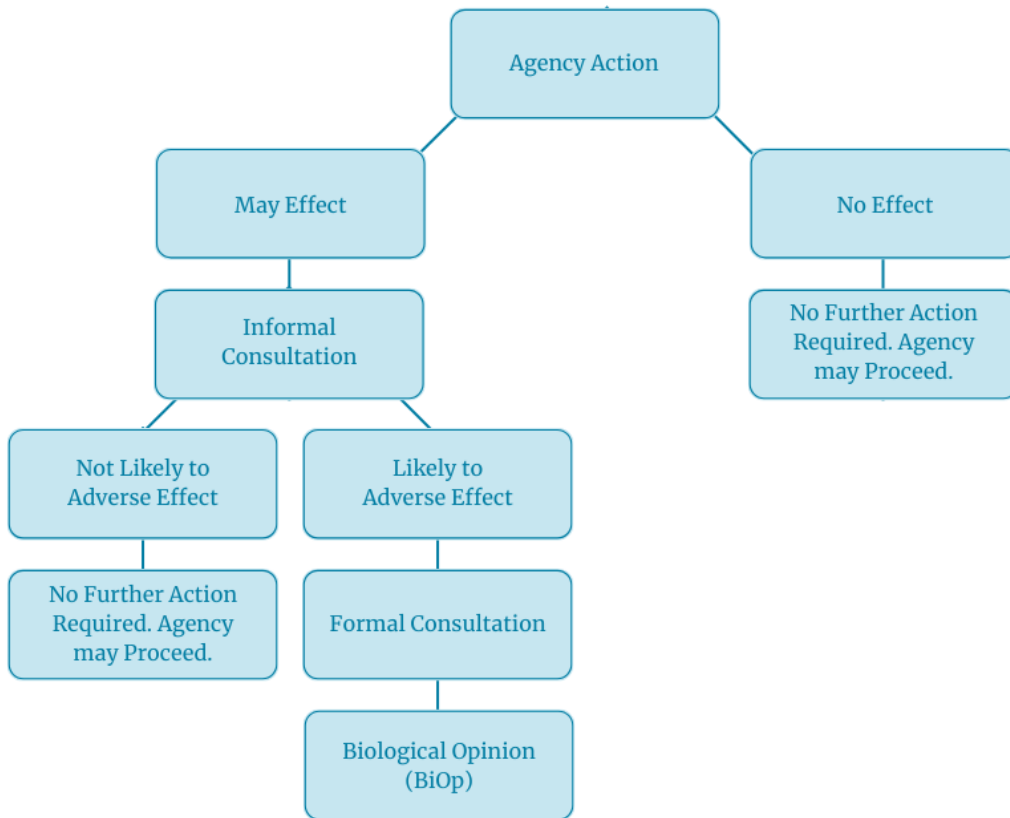
⁶⁴ National Oceanic and Atmospheric Administration, *Recovery of Species Under the Endangered Species Act*, NOAA Fisheries (last visited October 21, 2022).

<https://www.fisheries.noaa.gov/national/endangered-species-conservation/recovery-species-under-endangered-species-act>.

⁶⁵ 16 U.S.C. § 1536(a)(2).

⁶⁶ 50 C.F.R. § 402.14(g).

Section 7 Flowchart



Informal Consultation

In order to begin ESA consultation, a federal agency must first determine if consultation is even necessary. The text of the ESA states that consultation is required for any action an agency has “authorized, funded, or carried out[.]”⁶⁷ Examples of agency actions given in the ESA’s regulations include, but are not limited to: promulgation of regulations; granting a license, contract, lease, or permit; or actions directly or indirectly causing modification to the environment.⁶⁸ If an agency engages in any of those activities, or any other activity that constitutes an agency action, it can engage in informal consultation to determine whether the action will jeopardize a listed species or destroy critical habitat.⁶⁹

⁶⁷ 16 U.S.C. § 1536(a)(2).

⁶⁸ 50 C.F.R. § 402.02.

⁶⁹ 50 C.F.R. § 402.13(a).

When an agency is in the planning stage of a project, it can reach out to FWS to engage in informal ESA consultation.⁷⁰ At this point, the agency taking the proposed action (otherwise known as the “action agency”) and FWS will engage in discussions about what types of listed species occur in the proposed action area, and the possible effect the proposed action may have on those species.⁷¹ It is during informal consultation when the action agency will determine whether its proposed action “may affect” any listed species or critical habitat.⁷² A may affect finding includes actions that are “not likely to adversely affect” as well as actions that “are likely to adversely affect” listed species or critical habitat.⁷³ If the agency finds that the proposed action will have no effect, then informal consultation is the end of the road and no further action is needed.⁷⁴ If an agency determines that its proposed action may affect listed species or habitat, but that it is not likely to adversely affect species or habitat, and FWS agrees with that conclusion, then no further action is required.⁷⁵ However, if an agency concludes that its proposed action is likely to adversely affect listed species or critical habitat, then it is required to begin formal consultation.⁷⁶

Formal Consultation

Formal consultation is a mandatory process for any proposed federal agency action that may adversely affect listed species or critical habitat.⁷⁷ The process begins with a written request from the action agency and concludes with the issuance of a biological opinion (“BiOp”) from the consulting Service.⁷⁸ During the consultation period, the action agency and the Service will share information about the proposed action and the species or critical habitat likely to be affected.⁷⁹ This period can last up to 90 days, after which the consulting Service will prepare a BiOp.⁸⁰

The ultimate goal of the formal consultation process is to ensure that the proposed agency action will neither jeopardize the continued existence of a listed species, or destroy or adversely modify critical habitat.⁸¹ To reach that goal, the consulting Service

⁷⁰ *Id.*; U.S. Fish & Wildlife Serv. & Nat’l Marine Fisheries Serv., *Endangered Species Consultation Handbook* 3-1 (1998), https://media.fisheries.noaa.gov/dam-migration/esa_section7_handbook_1998_opr5.pdf.

⁷¹ *Endangered Species Consultation Handbook* at 3-1.

⁷² 50 C.F.R. § 402.14(a).

⁷³ Fish & Wildlife Service, *Section 7 Consultation Technical Assistance*, USFWS Midwest (last visited Nov. 16, 2021), <https://www.fws.gov/midwest/endangered/section7/s7process/step4.html>.

⁷⁴ 50 C.F.R. § 402.13(c).

⁷⁵ *Id.*

⁷⁶ 50 C.F.R. § 402.14(a).

⁷⁷ *Id.*

⁷⁸ 50 C.F.R. § 402.14(c), (m)(1).

⁷⁹ 50 C.F.R. § 402.14(d).

⁸⁰ 50 C.F.R. § 402.14(e).

⁸¹ 16 U.S.C. § 1536(a)(2).

will: (1) identify how and the extent to which the proposed action will affect listed species and critical habitat; (2) identify reasonable and prudent alternatives, if any, when a proposed action is likely to result in either jeopardy or adverse modification; (3) provide for certain levels of “incidental take”; (4) provide mandatory reasonable and prudent measures to minimize the impacts of incidental take; (5) identify ways that the action agency can conserve species or critical habitat; and (6) provide an administrative record of expected impacts to species that can help establish the species’ environmental baseline for future BiOps.⁸²

Jeopardy & Adverse Modification

Ultimately, the BiOp will result in either a “jeopardy” or “no jeopardy” / “adverse modification” or “no adverse modification” conclusion.⁸³ Under the ESA, jeopardy is defined as “an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species.”⁸⁴ Any agency action that negatively impacts that ability of a listed species to reproduce, significantly reduces the population of the species, or affects the geographical distribution of that species may receive a jeopardy finding.

Destruction or adverse modification of critical habitat is defined to mean “a direct or indirect alteration that appreciably diminishes the value of critical habitat as a whole for the conservation of a listed species.”⁸⁵ Any agency action that significantly reduces the usefulness of critical habitat to conserve a listed species, such as by making the critical habitat no longer capable of supporting the species it was designated for, can result in a finding of adverse modification.

If the Services find that a proposed agency action will result in jeopardy, adverse modification of critical habitat, or both, then the BiOp will include a selection of reasonable and prudent alternatives.⁸⁶

Reasonable and Prudent Alternatives

Reasonable and prudent alternatives are alternative methods of project implementation that would avoid the likelihood of jeopardy or adverse modification.⁸⁷ The consulting Service will include all proposed reasonable and prudent alternatives in the BiOp, and

⁸² 50 C.F.R. § 402.14(h).

⁸³ 50 C.F.R. § 402.14(h)(1)(iv).

⁸⁴ 50 C.F.R. § 402.02.

⁸⁵ 50 C.F.R. § 402.02.

⁸⁶ 50 C.F.R. § 402.14(h)(2).

⁸⁷ 50 C.F.R. § 402.02.

will work with the action agency to develop them.⁸⁸ The ESA limits reasonable and prudent alternatives to: (1) alternatives the consulting Service believes will avoid the likelihood of jeopardy or adverse modification; (2) alternatives that can be implemented in a manner consistent with the intended purpose of the action; (3) alternatives that can be implemented within the scope of the action agency’s legal authority and jurisdiction; and (4) alternatives that are economically and technologically feasible.⁸⁹ In other words, the reasonable and prudent alternatives must be actions that will accomplish the purpose of the originally proposed action, that the agency can reasonably carry out in a legal and economic fashion, and which will also avoid jeopardy and adverse modification.

Once reasonable and prudent alternatives have been proposed, the action agency may determine how to proceed. The action agency may decide to: (1) adopt the reasonable and prudent alternatives; (2) decide not to carry on with the proposed action; (3) request an exemption from the Endangered Species Committee;⁹⁰ (4) reinstate consultation due to a modification of the action or the development of a reasonable and prudent alternative that was not previously considered; or (5) choose to take an entirely different action if it believes that doing so would satisfy its ESA requirements.⁹¹

Whatever the action agency chooses to do, it must notify the consulting Service of its final decision.⁹²

Incidental Take

Every BiOp includes an incidental take statement.⁹³ One of the main prohibitions of the ESA is “take” of any listed species. Under the ESA, “take” is broadly defined to mean “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to

⁸⁸ 50 C.F.R. § 402.14(g)(5), (h)(2).

⁸⁹ 50 C.F.R. § 402.02.

⁹⁰ The Endangered Species Committee (“Committee”), sometimes referred to colloquially as the God Squad, has the power to grant federal projects an exemption from ESA requirements. The Committee is composed of seven members, including: the Secretary of Agriculture; the Secretary of the Army; the Chairman of the Council of Economic Advisors; the Administrator of the EPA; the Secretary of the Interior; the Administrator of the National Oceanic and Atmospheric Administration; and the one individual from each affected State who will be appointed by the President for each project the Committee considers. In order to request an exemption from the Committee, a federal agency must submit an application to either the Secretary of Commerce or the Secretary of the Interior depending on the species that will be impacted. An exemption will be granted if five of the seven Committee members vote in favor of the exemption.

⁹¹ Fish & Wildlife Service, *Consultation | Frequently Asked Questions*, Endangered Species (Nov. 16, 2021), <https://www.fws.gov/endangered/what-we-do/faq.html#:~:text=Reasonable%20and%20prudent%20alternatives%20are%20alternative%20method%20of%20project%20implementation,adverse%20modification%20of%20critical%20habitat>.

⁹² *Id.*

⁹³ 16 U.S.C. § 1536(b)(4); 50 C.F.R. § 402.14(i)(1).

engage in any such conduct.”⁹⁴ While a proposed agency action may not jeopardize the continued existence of a listed species, it could still result in the take of individual members of that species. Incidental take statements exempt federal agencies from the prohibition against take when carrying out an agency action, provided the agency complies with the proposed reasonable and prudent measures, as well as the implementing terms and conditions of the incidental take statement.⁹⁵

In order to be exempted by an incidental take statement, any taking associated with an agency’s action must meet the following requirements. The taking must: (1) not be likely to jeopardize the continued existence of any listed species, or destroy or modify any designated critical habitat; (2) be the result of an otherwise lawful activity; and (3) be incidental to the purpose of the agency action.⁹⁶ The first criteria will generally be considered met if the reasonable and prudent alternatives described in the BiOp are expected to eliminate the likelihood of jeopardy or adverse modification, or if the consulting Service has concluded that the proposed action will not result in jeopardy or adverse modification.⁹⁷

An incidental take statement will include a statement of the anticipated incidental take the proposed project is likely to generate, and any reasonable and prudent measures the Service has identified to minimize such take.⁹⁸ The statement will also clarify that the action agency will be exempt from the ESA’s prohibition on take only when the agency is able to comply with those reasonable and prudent measures.⁹⁹

Reasonable and Prudent Measures

Reasonable and prudent measures are nondiscretionary actions identified in the incidental take statement that are meant to minimize the impact of incidental take.¹⁰⁰ If an agency does not comply with the reasonable and prudent measures identified in a BiOp, then any incidental take that results from the agency’s action will not be exempt from the ESA prohibition on take, and the agency may be held responsible for an ESA violation.¹⁰¹

⁹⁴ 16 U.S.C. § 1532(19).

⁹⁵ 50 C.F.R. § 402.14(i).

⁹⁶ 50 C.F.R. § 222.307(c)(2); U.S. Fish & Wildlife Serv. & Nat’l Marine Fisheries Serv., *Endangered Species Consultation Handbook* 4-45 (1998), <https://www.fws.gov/endangered/esa-library/pdf/CH4.PDF>.

⁹⁷ *Id.*

⁹⁸ 50 C.F.R. § 402.14(i)(1).

⁹⁹ *Endangered Species Consultation Handbook* at 4-45.

¹⁰⁰ 50 C.F.R. § 402.14(i)(1)(ii).

¹⁰¹ *Endangered Species Consultation Handbook* at 4-53.

However, there are limits on what actions may be identified as reasonable and prudent measures. According to the ESA, reasonable and prudent measures “cannot alter the basic, design, location, scope, duration, or timing of the [proposed] action and may involve only minor changes.”¹⁰² In other words, reasonable and prudent measures must minimize the impact of any incidental take while not causing more than a minor change to the proposed project.

Next Steps

Once the action agency completes consultation with either a finding from the Services that the action will not result in jeopardy or adverse modification, or a completed BiOp, the agency can go forward with its proposed action. In certain circumstances, reinitiation of ESA consultation may be required as the project progresses.

Circumstances requiring reinitiation include: (1) the amount of taking specified in the incidental take statement is exceeded; (2) new information reveals effect of the action that may affect listed species or critical habitat in a way not previously considered; (3) the action is modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the BiOp; or (4) if a new species is listed or critical habitat designated that may be affected by the action.¹⁰³ Should any of those things occur, the action agency will reach out to the Services to reinitiate consultation.

c. Section 9

Section 9 of the ESA outlines many of the specific prohibitions that apply to threatened and endangered species. According to section 9 of the ESA, it is unlawful for any person to “take” any member of an endangered species.¹⁰⁴ As previously mentioned, the term “take” means “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.”¹⁰⁵ While some of the actions included in the definition of take, such as kill or trap, are clear, other terms are not. Importantly, the terms “harass,” and “harm” do not have the same meaning under the ESA as they do in a standard dictionary. For purposes of the ESA, “harass” is defined as “an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding feeding or sheltering.”¹⁰⁶ Additionally, “harm” is further defined to mean “an act which actually kills or injures fish or wildlife. Such an act may include significant habitat modification or degradation which actually kills or injures

¹⁰² 50 C.F.R. § 402.14(i)(2).

¹⁰³ 50 C.F.R. § 402.16(a).

¹⁰⁴ 16 U.S.C. § 1538(a).

¹⁰⁵ 16 U.S.C. § 1532(19).

¹⁰⁶ 50 C.F.R. § 17.3.

fish or wildlife by significantly impairing essential behavioral patterns, including breeding, spawning, rearing, migrating, feeding or sheltering.”¹⁰⁷ In other words, the ESA term “take” prohibits a wide range of actions from killing a member of an endangered species to altering the habitat of an endangered species in such a way that its ability to eat or reproduce is affected.

Violations of section 9 can result in either civil or criminal penalties.¹⁰⁸ The ESA allows civil penalties of up to \$25,000 per violation, and criminal penalties of up to \$50,000 and one year in prison per violation.¹⁰⁹ It is therefore important for farmers and landowners to be aware if a listed species is present on or near their property in order to avoid causing unlawful take.

There are certain instances in which activities may be exempted from section 9 prohibitions. As discussed above, an incidental take statement can exempt a federal agency from take prohibitions so long as the agency is otherwise operating according to the terms of the statement.¹¹⁰ Section 10 of the ESA authorizes the Services to issue permits allowing actions otherwise prohibited by section 9 specifically for scientific purposes or to enhance the survival of the species.¹¹¹ The Services may also issue permits authorizing take of listed species that is incidental to otherwise lawful activities upon submission of a habitat conservation plan.¹¹² However, in the absence of an incidental take statement or permit exempting certain actions from section 9 prohibitions, any take of a listed species will be considered an ESA violation.

d. Section 10

Under section 10 of the ESA, the Services may issue permits authorizing activities that would otherwise be prohibited under the ESA.¹¹³ Section 10 creates three main types of permits: Recovery and Interstate Commerce Permits, Enhancement of Survival Permits, and Incidental Take Permits.¹¹⁴ Recovery and Interstate Commerce Permits, and Enhancement of Survival Permits are both issued under the same provision of section 10, but are generally issued to different types of permittees.¹¹⁵ Recovery and Interstate Commerce Permits are typically issued to someone engaged in scientific activity, while Enhancement of Survival Permits are usually granted as part of a larger conservation

¹⁰⁷ 50 C.F.R. § 222.102.

¹⁰⁸ 16 U.S.C. § 1540.

¹⁰⁹ 16 U.S.C. § 1540(a), (b).

¹¹⁰ 50 C.F.R. § 402.14(i)(5).

¹¹¹ 16 U.S.C. § 1539(a)(1)(A).

¹¹² 16 U.S.C. § 1539(a).

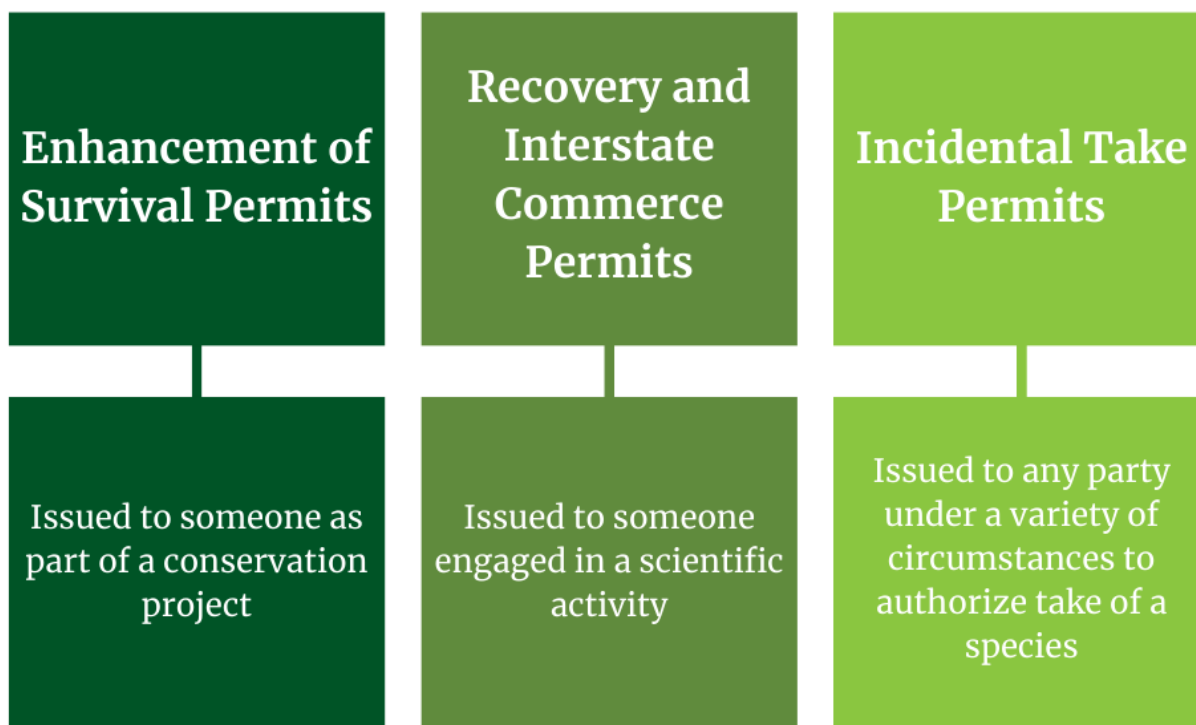
¹¹³ *Id.*

¹¹⁴ 50 C.F.R. § 17.22.

¹¹⁵ 16 U.S.C. § 1539(a)(1).

project.¹¹⁶ Incidental Take Permits are issued under a different provision of section 10 and can be granted to any party.¹¹⁷ While all three permits may be issued for different reasons, each one authorizes otherwise prohibited take of listed species.

Section 10 Permit Types



As mentioned above, Recovery and Interstate Commerce Permits are issued to allow the take of listed species in relation to scientific activities or activities aimed at enhancing the propagation or survival of listed species.¹¹⁸ Generally, such permits are granted to parties conducting scientific research on a listed species in order to better understand the species' long-term survival needs.¹¹⁹ Because Recovery and Interstate Commerce Permits are largely issued for the purposes of scientific research, they are usually not very relevant to landowners. Of greater interest to landowners are Enhancement of

¹¹⁶ Fish & Wildlife Service, *Permits for Native Endangered and Threatened Species*, FWS (last visited Oct. 27, 2022), <https://www.fws.gov/library/collections/permits-native-endangered-and-threatened-species>.

¹¹⁷ 16 U.S.C. § 1539(a)(1)(B).

¹¹⁸ The Endangered Species Act: Overview and Implementation at 38; 16 U.S.C. § 1539(a)(1)(A).

¹¹⁹ *Id.*

Survival Permits. Such permits are typically issued as part of a Safe Harbor Agreement (“SHA”) between a landowner and FWS.¹²⁰ Under a SHA, a landowner agrees to maintain or improve habitat for endangered or threatened species in exchange for both an Enhancement of Survival Permit that authorizes incidental take of listed species, and written assurances from FWS that additional land use restrictions will not be required.¹²¹ SHAs will be discussed in more detail below.

Incidental Take Permits (“ITP”) authorize any taking normally prohibited by section 9 of the ESA so long as the taking is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity.¹²² Any party or individual can apply to either FWS or NMFS for an ITP, although such a permit is only needed in situations where a non-federal project is likely to result in the take of a listed species.¹²³ In order to apply for an incidental take permit, an applicant must fill out Form 3-200-56¹²⁴ and submit a document known as a Habitat Conservation Plan (“HCP”).¹²⁵ The HCP must include the following: information about the likely impact of the proposed taking; the steps the applicant will take to “monitor, minimize, and mitigate” those impacts; the funding that will be available to carry out those steps; any procedures that will be used to deal with unforeseen circumstances that could not reasonably have been anticipated at the time the conservation plan is submitted; the alternative actions the applicant considered and the reasons why those alternative actions will not be utilized; and any other information that FWS or NMFS may require.¹²⁶ After reviewing an application for an ITP, the Services will generally grant the permit if they conclude that the proposed taking will be incidental, the applicant will work to mitigate the impact of the taking, there is adequate funding for the conservation plan, and the taking will not “appreciably reduce the likelihood of the survival and recovery of the species in the wild[.]”¹²⁷

SHAs and HCPs are essential components of the ESA that allow private landowners the ability to partner with the Services on wildlife conservation. Both programs will be explored in more depth later in this manual.

¹²⁰ *Permits for Native Endangered and Threatened Species.*

¹²¹ Fish & Wildlife Service, *Safe Harbor Agreements for Private Landowners*, FWS (last visited Oct. 27, 2022), <https://www.fws.gov/sites/default/files/documents/safe-harbor-agreements-fact-sheet.pdf>.

¹²² 16 U.S.C. § 1539(a)(1)(B).

¹²³ *Permits for Native Endangered and Threatened Species.*

¹²⁴ Form 3-200-56 is available online through the Fish and Wildlife Service official website. Click [here](#) to access the form,

¹²⁵ 50 C.F.R. § 17.22(b)(1).

¹²⁶ 50 C.F.R. § 17.22(b)(1)(iii).

¹²⁷ 50 C.F.R. § 17.22(b)(2)(i).

III. Influential Case Law

Along with statutory language and regulations, implementation of the ESA has been heavily influenced by case law. Since the ESA was originally enacted, there have been a handful of landmark cases which affect how the ESA is carried out. The following is a brief overview of some of the most important ESA cases.

a. TVA v. Hill

Tennessee Valley Authority v. Hill, 437 U.S. 153 (1978) is considered the seminal ESA case.¹²⁸ It was decided only five years after the ESA was initially enacted, and is regarded as setting the tone for how courts enforce the statute.¹²⁹

When the Supreme Court issued its decision in *Tennessee Valley Authority v. Hill*, the Little Tennessee River was a stream that began in the hills of Georgia and ran to meet the Big Tennessee River near Knoxville.¹³⁰ The Tennessee Valley Authority had (“TVA”) proposed turning the Little Tennessee River into a reservoir by building the Tellico Dam.¹³¹ According to TVA, the Tellico Dam would generate hydroelectricity for thousands of homes, and create opportunities for recreation and shoreline development.¹³² In 1967, Congress authorized funding for the project.¹³³

In 1973, four months before the ESA was passed, a small fish known as the snail darter was discovered in the Little Tennessee.¹³⁴ The population of snail darter fish located in the Little Tennessee River was genetically distinct from other darter fish, and the only population of its kind known to exist.¹³⁵ This led to the snail darter being listed as endangered in 1975, and the portion of the Little Tennessee River which would be completely inundated by the Tellico Dam was listed as the snail darter’s critical

¹²⁸ Hannah Gosnell, *Section 7 of the Endangered Species Act and the Art of Compromise: the Evolution of a Reasonable and Prudent Alternative for the Animas-La Plata Project*, 41 Nat. Resources J. 561, 569 (2001). (“In fact, the case had such ramifications for implementation protocol that some have characterized the political history of the ESA as divided into two eras: before and after *Tennessee Valley Authority v. Hill*.”)

¹²⁹ *Id.*

¹³⁰ *Tennessee Valley Authority v. Hill*, 437 U.S. 153, 156 (1978).

¹³¹ *Id.* at 157.

¹³² *Id.*

¹³³ *Id.*

¹³⁴ *Id.* at 158-159.

¹³⁵ *Id.* at 161; Amendment Listing the Snail Darter as an Endangered Species, 40 Fed. Reg. 47,505 (October 9, 1975), https://archives.federalregister.gov/issue_slice/1975/10/9/47492-47511.pdf#page=14.

habitat.¹³⁶ At that point, the Tellico Dam was almost complete, and TVA intended to complete the project.¹³⁷

The plaintiffs in *Tennessee Valley Authority v. Hill* filed suit in 1976 seeking to prevent completion of the dam on the grounds that doing so would violate the ESA by directly causing the extinction of an endangered species.¹³⁸ In response, TVA argued that the ESA could not apply to a project that had begun before the Act became effective, and was largely completed before the snail darter was listed as an endangered species.¹³⁹ The district court that first heard the case agreed with TVA.¹⁴⁰ It recognized that completing the Tellico Dam would likely lead to extinction of the snail darter, but interpreted Congress's decision to continue funding the dam after the snail darter was listed as Congress's intention to exempt Tellico Dam from ESA requirements.¹⁴¹

The plaintiffs appealed the district court's decision to the Sixth Circuit Court of Appeals. The appellate court reversed the lower court's decision and granted an injunction, finding that construction of the Tellico Dam was a direct violation of the ESA.¹⁴² That decision was then appealed to the Supreme Court.

The Supreme Court issued a 6-3 decision affirming the Sixth Circuit's conclusion that completing the Tellico Dam would violate the ESA because the completion would result in the likely extinction of an endangered species.¹⁴³ Although the Supreme Court recognized the hardship of halting a nearly completed dam that had cost tens of millions of dollars in public funds for a small, only recently discovered fish, the justices interpreted the plain language of section 7 of the ESA as Congress's decision "to halt and reverse the trend toward species extinction, whatever the cost."¹⁴⁴ Because the Tellico Dam would likely result in extinction of the snail darter, the project could not be completed. The Supreme Court's conclusion that the language of section 7 represented Congress's decision to grant such a high priority to the protection of endangered species has been the foundation of future ESA case law.

¹³⁶ *Tennessee Valley Authority* at 162.

¹³⁷ *Id* at 158; 162.

¹³⁸ *Id* at 164.

¹³⁹ *Id* at 165.

¹⁴⁰ *Id* at 165-166.

¹⁴¹ *Id*. ("The District Court found that closure of the dam and the consequent impoundment of the reservoir would "result in the adverse modification, if not complete destruction, of the snail darter's critical habitat," making it "highly probable" that "the continued existence of the snail darter" would be "jeopardize[d]." 419 F. Supp. 753, 757 (ED Tenn.). Despite these findings, the District Court declined to embrace the plaintiffs' position on the merits: that once a federal project was shown to jeopardize an endangered species, a court of equity is compelled to issue an injunction restraining violation of the Endangered Species Act.")

¹⁴² *Id* at 168.

¹⁴³ *Id* at 172.

¹⁴⁴ *Id* at 184.

b. Babbitt v. Sweet Home

The ESA prohibits “take” of a listed species, which is defined to include “harm” to species.¹⁴⁵ The term “harm” is itself broadly defined to mean “an act which actually kills or injures fish or wildlife,” and includes “significant habitat modification or degradation.”¹⁴⁶ In the 1990s, a group of small landowners and logging companies filed a lawsuit challenging the statutory validity of the regulation defining “harm,” particularly focusing on the inclusion of habitat modification and degradation in the definition.¹⁴⁷ The plaintiffs alleged that the definition of “harm” as applied to the listed cockaded woodpecker and northern spotted owl had injured them economically by preventing them from engaging in logging activities where those species were located.¹⁴⁸ They argued that Congress did not intend for the word “take” to include habitat modification.¹⁴⁹

The district court disagreed with the plaintiffs, concluding that Congress had intended for an expansive interpretation of the word “take” which could include habitat modification.¹⁵⁰ On appeal, the Court of Appeals for the District of Columbia reversed the district court’s decision, concluding that “harm” should be interpreted to apply only to a direct application of force taken against a listed species.¹⁵¹ The Department of Interior appealed that decision to the Supreme Court.

Ultimately, the Supreme Court issued a 6-3 decision, concluding that the definition of “harm” was valid.¹⁵² According to the Court, “harm” requires hurt, damage, or injury, without regard for whether the injury was direct or indirect.¹⁵³ Additionally, the Court recognized that the broad purpose of the ESA described in *Tennessee Valley Authority v. Hill* supported the decision to interpret “harm” broadly to include habitat modification.¹⁵⁴ Finally, the Court noted that Congress had chosen not to modify the definition of “harm” when it amended the ESA in 1982 despite the regulatory definition of “harm” being in place since 1975.¹⁵⁵ Based on that evidence, the Supreme Court found

¹⁴⁵ 16 U.S.C. § 1538(a)(1)(B).

¹⁴⁶ 50 C.F.R. § 222.102.

¹⁴⁷ *Babbitt v. Sweet Home Chapter of Cmty. for a Great Oregon*, 515 U.S. 687, 692 (1995).

¹⁴⁸ *Id.*

¹⁴⁹ *Id.* at 693.

¹⁵⁰ *Id.* (“The District Court considered and rejected each of respondents’ arguments, finding ‘that Congress intended an expansive interpretation of the word ‘take,’ an interpretation that encompasses habitat modification.’” *Sweet Home Chapter of Cmty. for a Great Oregon v. Lujan*, 806 F.Supp. 279, 285 (1992).)

¹⁵¹ *Id.* at 694.

¹⁵² *Id.* at 687.

¹⁵³ *Id.* at 697-698.

¹⁵⁴ *Id.* at 698.

¹⁵⁵ *Id.* at 701-702.

that “harm” could encompass indirect and direct action, as well as habitat modification.¹⁵⁶

The concept of incidental take – aka, indirect “harm” – and habitat modification continue to remain prohibited actions under the ESA.

c. Nat’l Ass’n of Home Builders v. Defenders of Wildlife

A major component of the ESA is the section 7 requirement that federal agencies consult with the Services on agency actions which may affect listed species.¹⁵⁷ By requiring consultation, the ESA makes federal agencies responsible for ensuring that their actions cause the least possible harm to listed species. The consultation requirement is also regarded as granting the Services a certain amount of oversight of actions carried out by other federal agencies.¹⁵⁸ In *Nat’l Ass’n of Home Builders v. Defenders of Wildlife*, 551 U.S. 644 (2007), the Supreme Court considered the boundaries of section 7 authority.¹⁵⁹

The Clean Water Act (“CWA”) requires anyone who discharges a pollutant into a protected water to obtain a discharge permit from the Environmental Protection Agency (“EPA”).¹⁶⁰ Under the CWA, EPA is authorized to transfer permitting authority to states who meet certain requirements.¹⁶¹ The provision requires that EPA “shall” allow the transfer of authority provided that those requirements are met.¹⁶² Because transferring authority is an agency action, the ESA requires EPA to engage in consultation prior to transfer.

The dispute at the heart of *Nat’l Ass’n of Home Builders v. Defenders of Wildlife* involved EPA’s transfer of CWA permitting authority to the state of Arizona.¹⁶³ When Arizona first submitted its proposal that EPA transfer permitting authority, the EPA regional office raised concerns that the transfer may violate section 7 of the ESA.¹⁶⁴ EPA initiated consultation with FWS, however FWS responded that the ESA consultation requirement was inapplicable because EPA had no authority to consider any additional

¹⁵⁶ *Id.* at 704, 708.

¹⁵⁷ 16 U.S.C. § 1536(a)(1).

¹⁵⁸ Laurence Michael Bogert, *Even Heroes Have the Right to Bleed: The Endangered Species Act and Categorical Statutory Commands After National Association of Home Builders v. Defenders of Wildlife*, 44 Idaho L. Rev. 543, 545 (2008). (“[T]hirty-plus years of experience under the ESA has proven that the outcome of the section 7 consultation process is exceptionally dispositive of federal (and, in certain circumstances, private) activity interfacing with species listed under the ESA.”)

¹⁵⁹ *Nat’l Ass’n of Home Builders v. Defenders of Wildlife*, 551 U.S. 644 (2007).

¹⁶⁰ 33 U.S.C. § 1342.

¹⁶¹ 33 U.S.C. § 1342(b).

¹⁶² *Id.*

¹⁶³ *Nat’l Ass’n of Home Builders* at 644.

¹⁶⁴ *Id.* at 653.

factors beyond the CWA criteria prior to transferring permitting power to Arizona.¹⁶⁵ In other words, so long as Arizona met the requirements outlined in the CWA, EPA had to transfer permitting authority regardless of what the impacts to listed species would be.

Environmental groups filed suit, arguing that the ESA imposed an independent consultation requirement on EPA's decision to approve the transfer.¹⁶⁶ In response, EPA argued that the ESA only imposed consultation requirements on discretionary decisions of federal agencies.¹⁶⁷ Because the transfer of authority was non-discretionary, the ESA consultation requirement did not apply.

Ultimately, the case landed before the Supreme Court. In a 5-4 decision, the Court upheld the determination from FWS that the ESA section 7 consultation requirement only applies to "actions in which there is discretionary Federal involvement or control."¹⁶⁸ Because the CWA required that EPA "shall" transfer permitting power if a state met the statutory criteria, it was a non-discretionary action that EPA was not required to consult over.¹⁶⁹

The Supreme Court's finding that federal agencies do not need to initiate ESA consultation over non-discretionary actions remains a limitation on section 7 authority.

d. Weyerhaeuser Co. v. U.S. Fish and Wildlife Serv.

At the heart of the Supreme Court decision, *Weyerhaeuser Co. v. U.S. Fish and Wildlife Serv.*, 139 S. Ct. 361 (2018), was a 1544-acre parcel of land in Louisiana ("Unit 1") that FWS designated as critical habitat for the endangered dusky gopher frog in 2012.¹⁷⁰ Unit 1 contained dusky gopher frog breeding sites, though by 2012 it had been decades since any frogs had occupied the land.¹⁷¹ Additionally, changes would have had to been made to the area before the dusky gopher frog could occupy Unit 1 as habitat.¹⁷² Under the ESA, any time a species is listed as endangered, the listing agency is required to designate critical habitat for the species.¹⁷³ The definition of critical habitat includes areas that are both occupied and unoccupied by the species at the time of listing.¹⁷⁴ According to the ESA, areas that are unoccupied by members of an endangered species

¹⁶⁵ *Id.* at 654-655.

¹⁶⁶ *Id.* at 655.

¹⁶⁷ *Id.*

¹⁶⁸ *Id.* at 661.

¹⁶⁹ *Id.* at 656.

¹⁷⁰ *Weyerhaeuser Co. v. U.S. Fish and Wildlife Serv.*, 139 S. Ct. 361, 366 (2018); Designation of Critical Habitat for Dusky Gopher Frog, 77 Fed. Reg. 35129-35131 (2012).

¹⁷¹ *Weyerhaeuser Co.* at 366.

¹⁷² *Id.*

¹⁷³ 16 U.S.C. § 1533(a)(3)(A)(i).

¹⁷⁴ 16 U.S.C. § 1532(5)(A).

at the time of listing may still be designated as critical habitat if the listing agency finds that the area is “essential for the conservation of the species.”¹⁷⁵

The owners of Unit 1, who had intended to use the area for commercial purposes, filed suit challenging FWS’s decision to designate the land as critical habitat. In their lawsuit, the landowners argued that FWS had failed to appropriately weigh the benefits of designating Unit 1 as critical habitat against the economic impact that would result from the designation.¹⁷⁶ While both the district court and the Fifth Circuit Court of Appeals declined to review FWS’s decision, the Supreme Court disagreed and ultimately ruled in favor of the landowners.¹⁷⁷

In its decision, the Supreme Court concluded that an area can only be eligible for designation as critical habitat if it is habitat for the species.¹⁷⁸ The Court began by reviewing the phrase “critical habitat.” It found that whenever FWS lists a species as endangered, the text of the ESA requires the Service to “designate any *habitat of such species* which is then considered to be critical habitat.”¹⁷⁹ According to the court, the plain text of the ESA “does not authorize [FWS] to designate the area as *critical* habitat unless it is also *habitat* for the species.”¹⁸⁰ In other words, if an area is incapable of supporting a species, it cannot be listed as critical habitat.

In its decision, the Supreme Court also noted that while the term “critical habitat” was defined in the ESA, the term “habitat” had no formal definition.¹⁸¹ The Court declined to adopt one, leaving interpretation up to the Services.¹⁸² During the Trump Administration, FWS adopted a final regulation in late 2020 defining “habitat” as “the abiotic and biotic setting that currently or periodically contains the resources and conditions necessary to support one or more life processes of a species.”¹⁸³ However, the Biden Administration formally rescinded that rule in 2022, leaving the term “habitat” once again undefined.¹⁸⁴

¹⁷⁵ 16 U.S.C. § 1532(5)(A)(ii).

¹⁷⁶ *Weyerhaeuser Co.* at 367.

¹⁷⁷ *Id.* at 367-368.

¹⁷⁸ *Id.* (“Even if an area otherwise meets the statutory definition of unoccupied critical habitat because the Secretary finds the area essential for the conservation of the species, Section 4(a)(3)(A)(i) does not authorize the Secretary to designate the area as *critical* habitat unless it is also *habitat* for the species.”)

¹⁷⁹ *Id.*

¹⁸⁰ *Id.*

¹⁸¹ *Id.*

¹⁸² *Id.* at 368-369.

¹⁸³ 50 C.F.R. § 424.02.

¹⁸⁴ Endangered and Threatened Wildlife and Plants; Regulations for Listing Endangered and Threatened Species and Designating Critical Habitat, 87 Fed. Reg. 37757 (June 24, 2022).

IV. 2019 and 2020 Regulations

In both 2019 and 2020, the Services issued a series of regulations that represented the most substantial overhaul of the ESA since the Act was originally passed in 1973. The new regulations affected various elements of the ESA, from how to determine whether a species should be listed, to the definition of “habitat.” Ultimately, many of the changes proved to be controversial, and in 2021 the Services began taking steps to rescind several of the 2019 and 2020 regulations.

a. Regulatory Changes

As mentioned above, the 2019 and 2020 ESA regulations affected multiple components of the ESA. The following is a brief overview of the changes made by those regulations, and the developing situation as those regulations are challenged in court and rescinded by the Services.

Designation of Species as “Threatened” or “Endangered”

Section 4 of the ESA outlines the process by which species are added to the Federal List of Threatened and Endangered Species.¹⁸⁵ The regulations that became effective on September 26, 2019 altered that process.¹⁸⁶

When determining whether to list a species, the ESA requires that the decision be made “solely on the basis of the best scientific and commercial data available.”¹⁸⁷ Prior to the 2019 regulations, this language was regarded as specifically barring the Services from considering economic impacts when making a listing decision.¹⁸⁸ The pre-2019 regulations specifically stated that the Services were to make listing decisions “without reference to possible economic or other impacts.”¹⁸⁹ However, the 2019 regulations eliminated that pre-existing regulatory language, effectively allowing the Services to take the economic impacts of listing a species when making a listing decision.¹⁹⁰

¹⁸⁵ 16 U.S.C. § 1533.

¹⁸⁶ Endangered and Threatened Wildlife and Plants; Regulations for Listing Species and Designating Critical Habitat, 84 Fed. Reg. 45020-45053 (Aug. 27, 2019).

¹⁸⁷ 16 U.S.C. § 1533(b)(1)(A).

¹⁸⁸ U.S. Congressional Research Service. The Endangered Species Act: Consideration of Economic Factors (RL30792; April 15, 2003). Text in: CRS Web; Accessed: November 17, 2021, https://www.everycrsreport.com/files/20030415_RL30792_9024220cc4c191142efcf5d549642bd3d24c2886.pdf.

¹⁸⁹ U.S. Congressional Research Service. Final Rules Changing Endangered Species Act Regulations (IF10944; Sept. 25, 2019), by Pervaze A. Sheikh et al. Text in: CRS Web; Accessed: November 17, 2021, <https://sgp.fas.org/crs/misc/IF10944.pdf>.

¹⁹⁰ Endangered and Threatened Wildlife and Plants; Regulations for Listing Species and Designating Critical Habitat at 45052; Final Rules Changing Endangered Species Act Regulations.

The 2019 regulations also addressed the factors that the Services could consider when determining whether to classify a species as “threatened.” Under the ESA, a threatened species is defined as one that is “likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.”¹⁹¹ The 2019 regulations clarified that the “foreseeable future” extends in time only as far as the Services “can reasonably determine that both the future threats and the species’ responses to those threats are likely.”¹⁹² In other words, the 2019 regulations require the Services to consider only those threats that are “likely” to occur within a reasonable period of time.

Finally, the 2019 regulations altered the listing process by clarifying the criteria that the Services could use to delist a species.¹⁹³ According to the Services, this clarification was meant to address concerns that the standard for delisting a species was higher than the standard for listing a species.¹⁹⁴ Under the 2019 regulations, the same criteria used to list a species will be used to delist a species.¹⁹⁵ If a listed species no longer meets the definition of either an endangered or threatened species, then it should be delisted.¹⁹⁶

Designation of Critical Habitat

The 2019 regulations affected the designation of critical habitat by clarifying when the Services could designate unoccupied areas – areas that do not contain any members of the listed species – as critical habitat.¹⁹⁷ Under the 2019 rules, the Services could only designate uninhabited areas as critical habitat if those areas are “essential” to the conservation of the species.¹⁹⁸ Unoccupied habitat is only essential if: (1) the occupied habitat of the species is inadequate to ensure conservation; (2) the Services are reasonably certain that the uninhabited area will contribute to the conservation of the species; and (3) the area contains at least one of the physical or biological features essential to the conservation of the species.¹⁹⁹ The 2019 regulations go on to define “physical or biological features essential to the conservation of the species” as features that are essential to support the overall needs of the species, including water characteristics, soil type, geological features, prey, and vegetation.²⁰⁰

¹⁹¹ 16 U.S.C. § 1532(20).

¹⁹² 50 C.F.R. § 424.11(d).

¹⁹³ Endangered and Threatened Wildlife and Plants; Regulations for Listing Species and Designating Critical Habitat at 45052.

¹⁹⁴ Final Rules Changing Endangered Species Act Regulations.

¹⁹⁵ *Id.*

¹⁹⁶ 50 C.F.R. § 424.11(e).

¹⁹⁷ *Id.*

¹⁹⁸ Endangered and Threatened Wildlife and Plants; Regulations for Listing Species and Designating Critical Habitat at 45053.

¹⁹⁹ *Id.*

²⁰⁰ 50 C.F.R. § 424.02.

An additional rule published by FWS on December 18, 2020 further amended the process for designating critical habitat by establishing criteria for excluding certain areas from critical habitat designations.²⁰¹ Section 4 of the ESA requires that when designating critical habitat, the Services must take several considerations into account, including the economic impact of designation.²⁰² The 2020 rule established a non-exhaustive list of impacts that could be considered economic, including the economy of a particular area and the opportunity costs arising from critical habitat designation.²⁰³ Section 4 of the ESA goes on to say that areas may be excluded from critical habitat designation if the benefits of exclusion outweigh the benefits of designation.²⁰⁴ According to the 2020 rule, the Services should conduct an exclusion analysis if one is requested during the public comment period on the critical habitat designation.²⁰⁵

Amount of Protection Granted to Threatened Species

Perhaps one of the more controversial revisions adopted by the 2019 regulations is the elimination of the blanket 4(d) rule.²⁰⁶ As previously discussed, the purpose of the blanket 4(d) rule was to automatically grant threatened species the same statutory protections given to endangered species, including the prohibition against “take.”²⁰⁷ Without the blanket 4(d) rule, the Services must determine which protections a threatened species will receive on a case-by-case basis.²⁰⁸

Although this change was controversial, it only applied to those species listed as threatened after September 26, 2019.²⁰⁹ Additionally, only FWS had adopted the blanket 4(d) rule, so eliminating the rule brought FWS in-line with how NMFS approached granting protections for threatened species.²¹⁰

Consultation with Federal Agencies

²⁰¹ Endangered and Threatened Wildlife and Plants; Regulations for Designating Critical Habitat, 85 Fed. Reg. 82376-82389 (Dec. 18, 2020).

²⁰² 16 U.S.C. § 1533(b)(2).

²⁰³ 50 C.F.R. § 17.90(a).

²⁰⁴ 16 U.S.C. § 1533(b)(2).

²⁰⁵ 50 C.F.R. § 17.90(c)(2)(i).

²⁰⁶ M. Benjamin Cowan & Andrew Davitt, *A Closer Look at the New Endangered Species Act Regulations*, Locke Lord, LLP, (September 2019), https://www.lockelord.com/-/media/files/newsandevents/publications/2019/09/article20190920overviewanewregulationscowandavit.pdf?sc_lang=en.

²⁰⁷ U.S. Congressional Research Service. The Endangered Species Act: Overview and Implementation (R46677; February 9, 2021). Text in: CRS Web; Accessed: October 17, 2022, <https://crsreports.congress.gov/product/pdf/R/R46677/1>.

²⁰⁸ *Id* at 17.

²⁰⁹ Endangered and Threatened Wildlife and Plants; Regulations for Prohibitions to Threatened Wildlife and Plants, 84 Fed. Reg. 44753, 44760 (Sept. 26, 2019).

²¹⁰ The Endangered Species Act: Overview and Implementation at 17.

The last element of the ESA that the 2020 regulations addressed was agency consultation.²¹¹ Under section 7 of the ESA, all federal agencies are required to ensure that any actions they authorize, fund, or carry out will not jeopardize the existence of any listed species or destroy critical habitat.²¹² To do so, federal agencies will consult with either FWS or NMFS on the potential impact of the proposed action. The 2019 regulations made several changes to the consultation process, both by revising the definitions of key terms, and by establishing new standards and procedures.

Definition changes include:

- “*Effects of the action*”: When federal agencies consult with the Services over the impact of a proposed project, they should only consider those impacts which are “caused by the proposed action.”²¹³ Prior to the change, the Services were required to consider indirect effects, as well as those directly caused by the action.²¹⁴
- “*Environmental baseline*”: Under the 2019 regulations, this term refers to “the condition of the listed species or its designated critical habitat in the action area, without the consequences to the listed species or designated habitat caused by the proposed action.”²¹⁵ The Services will refer to this baseline when evaluating the effects of an agency’s proposed action.²¹⁶ Prior to the 2019 regulation, “environmental baseline” did not have a stand-alone definition, instead it was included under “effects of the action.”²¹⁷ Along with developing a definition for the term, the 2019 regulations also clarified that the environmental baseline would include the effects from any on-going agency action that that were not within the action agency’s discretion to modify.²¹⁸

Criteria and procedural changes include:

- *Initiation of formal consultation*: The 2019 regulations specified what is necessary to initiate formal consultation by outlining the information that the action agency must provide to the Services.²¹⁹ The rule also allows the Services

²¹¹ Endangered and Threatened Wildlife and Plants; Regulations for Interagency Cooperation, 84 Fed. Reg. 44976-45018 (Sept. 26, 2019).

²¹² 16 U.S.C. § 1536(a)(2).

²¹³ 50 C.F.R. § 402.02.

²¹⁴ Final Rules Changing Endangered Species Act Regulations.

²¹⁵ 50 C.F.R. § 402.02.

²¹⁶ 50 C.F.R. § 402.14(g)(2).

²¹⁷ Final Rules Changing Endangered Species Act Regulations.

²¹⁸ 50 C.F.R. § 402.02.

²¹⁹ 50 C.F.R. § 402.14(c).

to adopt either some or all of the information provided by the action agency in the resulting biological opinion.²²⁰

- *Re-initiation of consultation*: The 2019 regulations do not require that re-initiation of consultation in response to new circumstances or information result in a new *formal* consultation process.²²¹ This opens the door for providing less formal consultation procedures.
- *Informal consultation*: Under the 2019 rules, the Services have 60 days to complete the informal consultation process, which can be extended to 120 days if all parties agree.²²²

Definition of “Habitat”

The final rule issued by FWS on December 15, 2020 added a definition of “habitat” to the regulations that implement section 4 of the ESA.²²³ Prior to that rule, the term “habitat” had not been formally defined.²²⁴ The decision to add a definition was made in response to *Weyerhaeuser Co. v. FWS*, where the Supreme Court found that in order for an area to be designated as critical habitat, it must first be habitat.²²⁵ Therefore, the definition of “habitat” must be broader than the definition of “critical habitat.” Under the 2020 rule, “habitat” is defined as “the abiotic and biotic setting that currently or periodically contains the resources and conditions necessary to support one or more life processes of a species.”²²⁶

As of August 2022, this rule has been formally rescinded.²²⁷

b. Plans to Rescind

On January 20, 2021, the Biden Administration issued Executive Order 13990 which directed federal agencies to review a variety of rules, including the ESA regulations adopted by the Services in 2019 and 2020.²²⁸ Pursuant to that order, the Services announced on June 4, 2021 that they had finished reviewing the regulations, and had

²²⁰ 50 C.F.R. § 402.14(h)(3)(i).

²²¹ 50 C.F.R. § 402.16.

²²² 50 C.F.R. § 402.13(c)(2).

²²³ Endangered and Threatened Wildlife and Plants; Regulations for Listing Endangered and Threatened Species and Designating Critical Habitat, 85 Fed. Reg. 81411-81421 (Dec. 16, 2020).

²²⁴ *Id* at 81411. (“The Services have not previously adopted a definition of the term “habitat” through regulations or policy; rather, we have traditionally applied the criteria from the definition of “critical habitat” based on the implicit premise that any specific area satisfying that definition was habitat.”).

²²⁵ *Weyerhaeuser Co. v. U.S. Fish and Wildlife Serv.*, 139 S. Ct. 361, 367-368 (2018).

²²⁶ Endangered and Threatened Wildlife and Plants; Regulations for Listing Endangered and Threatened Species and Designating Critical Habitat at 81421.

²²⁷ Endangered and Threatened Wildlife and Plants; Regulations for Listing Endangered and Threatened Species and Designating Critical Habitat, 87 Fed. Reg. 37757-37771 (June 24, 2022).

²²⁸ Exec. Order 13990, 86 Fed. Reg. 7037 (Jan. 25, 2021).

made a series of decisions on how to proceed.²²⁹ After review, the Services have decided to: rescind regulations that revised the FWS' process for considering exclusions from critical habitat designations; rescind the regulatory definition of habitat; revise regulations for listing species and designating critical habitat; revise regulations for interagency cooperation; and reinstate the blanket 4(d) rule.²³⁰

Since that announcement, the Services begun rulemaking procedures in order reach their stated goals. As previously mentioned, the definition for "habitat" has been formally rescinded by a final rule.²³¹ Once again, the term "habitat" is undefined for purposes of the ESA. The Services have also published a final rule rescinding the regulations adopted in December 2020 addressing how areas are excluded from critical habitat designations.²³² That 2020 rule has been entirely rescinded, and the Services have resumed using their previous approach to exclusions.²³³

Many of the ESA rules adopted by the Trump administration have also been challenged in court. In *Ctr. for Biological Diversity v. Haaland*, No. 19-cv-05206 (N.D. Cal. July 5, 2022), the plaintiffs filed suit asking the court to vacate several Trump administration ESA regulations including: the rule modifying how the Services add, remove, and reclassify endangered or threatened species; the rule which eliminated the blanket 4(d) rule; and the rule altering the interagency consultation process.²³⁴ The district court granted the plaintiffs' request, formally overturning all three challenged rules.²³⁵ In reaching that decision, the court noted that the Services had expressed no intent to keep the rules in place, and had instead announced that all three rules would be rescinded.²³⁶ However, shortly after the district court issued that order, the Ninth Circuit Court of Appeals overturned the ruling.²³⁷ According to the Ninth Circuit, the lower court had inappropriately vacated the regulations without considering the legal validity of the

²²⁹ U.S. Fish & Wildlife Serv. (June 4, 2021). *U.S. Fish and Wildlife Service and NOAA Fisheries to Propose Regulatory Revisions to Endangered Species Act* [Press release]. https://www.fws.gov/news/ShowNews.cfm?ref=u.s.-fish-and-wildlife-service-and-noaa-fisheries-to-propose-regulatory-&_ID=36925.

²³⁰ *Id.*

²³¹ Endangered and Threatened Wildlife and Plants; Regulations for Listing Endangered and Threatened Species and Designating Critical Habitat, 87 Fed. Reg. 37757-37771 (June 24, 2022).

²³² Endangered and Threatened Wildlife and Plants; Regulations for Designating Critical Habitat, 87 Fed. Reg. 43433-43447 (Aug. 22, 2022).

²³³ U.S. Fish & Wildlife Serv. (July 20, 2022). *U.S. Fish and Wildlife Service Rescinds Endangered Species Act Critical Habitat Exclusion Regulations* [Press release]. <https://fws.gov/press-release/2022-07/service-rescinds-endangered-species-act-critical-habitat-exclusion>.

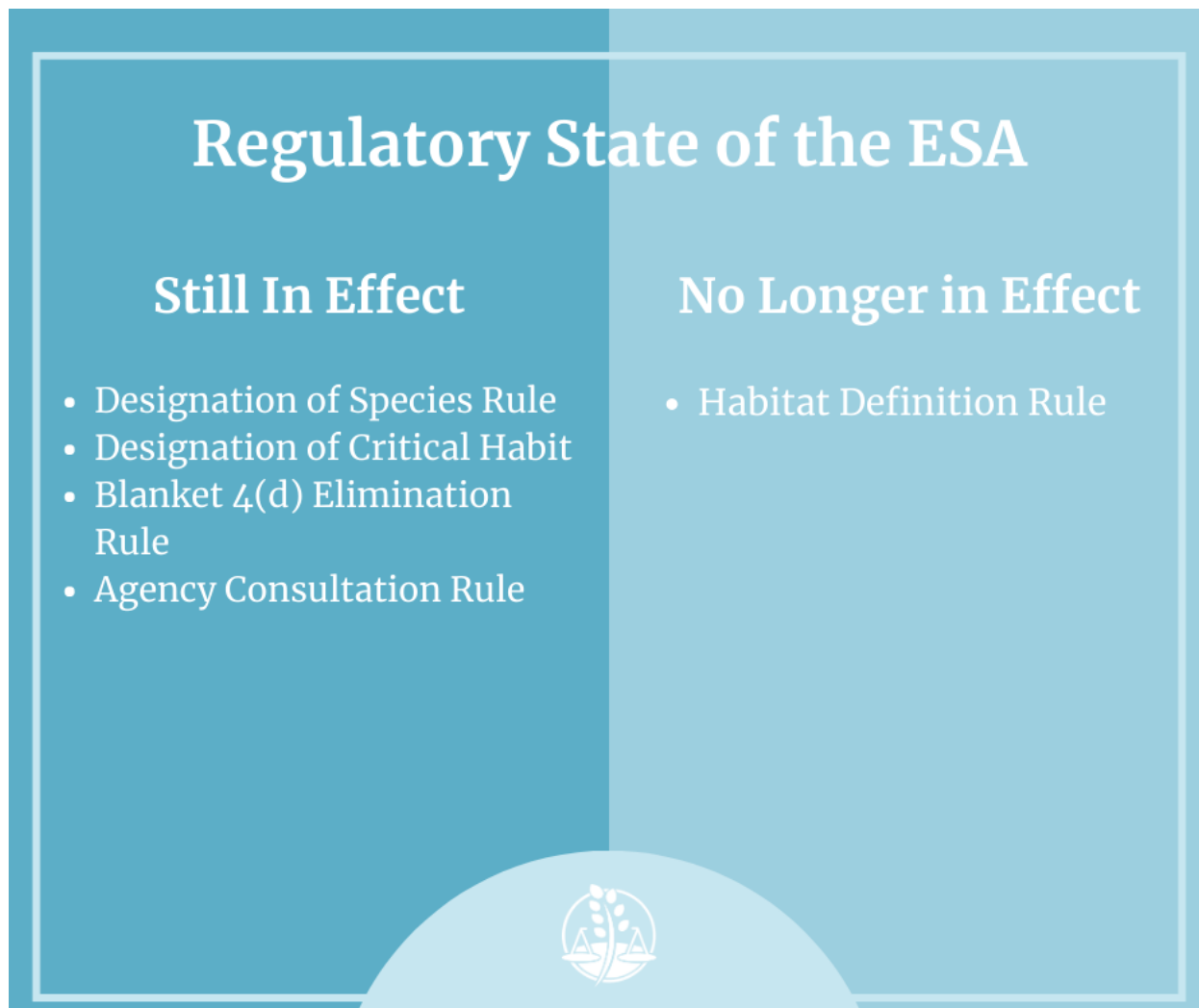
²³⁴ *Ctr. for Biological Diversity v. Haaland*, No. 19-CV-05206-JST, 2022 WL 2444455, at *2 (N.D. Cal. July 5, 2022).

²³⁵ *Id.* at *5.

²³⁶ *Id.*

²³⁷ *In re Washington Cattlemen's Ass'n*, No. 22-70194, 2022 WL 4393033, at *1 (9th Cir. Sept. 21, 2022).

challenged rules.²³⁸ As a result, the three challenged rules have been reinstated, and the lawsuit has been sent back to the district court for further litigation.²³⁹ The regulations will remain in place while the lawsuit continues, unless the Services publish a formal rule officially rescinding them.



As the lawsuits continue, and the Services proceed with their rulemaking processes, this manual will be updated as necessary to reflect the current state of the ESA regulations.

V. ESA Impacts on Private Land

Up to this point, this manual has covered how the ESA functions through statutory text, regulatory actions, and relevant case law. In doing so, this manual has also explained

²³⁸ *Id.*

²³⁹ *Id.*

how federal agencies must ensure that their actions comply with the ESA, and briefly discussed steps that private landowners can take to avoid ESA violations. The rest of this manual will go into greater detail on how private landownership is affected by the ESA, and how private landowners can work with the Services to protect listed species while maintaining flexible land use.

a. Limitations on Private Land

According to the Congressional Research Service, the federal government manages about 640 million acres, or roughly 28% of the land in the United States.²⁴⁰ Private landowners, on the other hand, own about 60% of the nation's land which amounts to about 1.3 billion acres.²⁴¹ Threatened and endangered species are found throughout the country, regardless of whether their habitat is privately or publicly managed. Because private landowners own a majority of the nation's acreage, they play an essential role in species conservation.

However, while private landowners are important for species conservation, they can also face some unwelcome impacts from ESA implementation. In particular, the prohibition on incidental take of species, and the challenges posed by critical habitat designations are common concerns.²⁴²

“Taking”

One of the primary limitations that the ESA places on private land is the prohibition on take of listed species. As has been previously discussed, the ESA prohibition on take applies to a broad range of activities. The ESA defines take as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in such conduct.”²⁴³ The term harm is further defined under the ESA's implementing regulations as “an act which actually kills or injures fish or wildlife. Such an act may include significant habitat modification or degradation which actually kills or injures fish or wildlife by significantly impairing essential behavioral patterns, including breeding, spawning, rearing, migrating, feeding or sheltering.”²⁴⁴ Finally, the ESA

²⁴⁰ U.S. Congressional Research Service. Federal Land Ownership: Overview and Data (R42346; February 21, 2020), by Carol Hardy Vincent, et al. Text in: CRS Web; Accessed: November 22, 2021, <https://sgp.fas.org/crs/misc/R42346.pdf>.

²⁴¹ Gene Wunderlich, U.S. Dep't of Agriculture, Agriculture Information Bulletin No. 422: *Facts About U.S. Landownership* (1978), <https://naldc.nal.usda.gov/download/CAT87209991/PDF>.

²⁴² Robert Meltz, *Where the Wild Things Are: The Endangered Species Act and Private Property*, 24 *Envtl. L.* 369, 372-373 (1994).

²⁴³ 16 U.S.C. § 1532(19).

²⁴⁴ 50 C.F.R. § 222.102.

makes it clear that even an unintentional take is a violation of the Act, and can result in civil penalties.²⁴⁵

A look at the definitions of both “take” and “harm” make it clear that the ESA’s prohibition on take impacts private landowners in two primary ways – by limiting actions that cause members of a listed species to be killed or injured, and by limiting actions that cause significant habitat modification or degradation. For example, Farmer McDonald owns a small soybean operation and routinely applies pesticides to his fields for the purpose of controlling common pests that would otherwise damage his crop. Unbeknownst to him, a hive of endangered rusty-patched bumble bees is located near one of his soybean fields. Despite applying the pesticide according to its label, some of it drifts off target and kills several of the bumblebees. Even though Farmer McDonald did not intend to cause a taking of the bumblebees, he would still be liable for violating the ESA because the Act prohibits both intentional and unintentional take of listed species. Similarly, Farmer McDonald would be liable for a taking if he went out to clear several trees from one of his fields and in doing so cut down the tree where the hive of rusty-patched bumblebees was located. By significantly modifying the habitat where the bumblebees were located, he committed a harm that would amount to a taking.

Critical Habitat

Private landowners also face challenges if their land becomes designated as critical habitat for a listed species. Although the ESA’s prohibitions on modifying or destroying critical habitat are only applied to federal agencies,²⁴⁶ private landowners still face restrictions if their land is designated as critical habitat.

For example, Farmer McDonald has a small marshy area on his property that he would like to drain in order to build a new barn. To do so, he needs to obtain a permit from the United States Army Corps of Engineers (“Corps”) in order to dredge and drain the marshy area. Because the Corps is a federal agency, it must go through the ESA interagency consultation process whenever it issues a permit. In going through the consultation process, the Corps discovers that the marshy area in Farmer McDonald’s field has been designated as critical habitat for the endangered tiger salamander. Because draining the area and constructing a barn would destroy the critical habitat, the Corps denies Farmer McDonald’s permit application. Without the permit, Farmer McDonald will be unable to build his barn where he wants to and must find another location.

²⁴⁵ 16 U.S.C. § 1540(a), (b).

²⁴⁶ 16 U.S.C. § 1536(a)(2).

From the above examples, it is clear that the ESA presents a variety of challenges to private landowners. Due to the seriousness of the penalties that can accompany ESA violations, some landowners feel disincentivized to manage their land for the benefit of listed species.²⁴⁷ With so much privately owned land in the United States, this can present a problem for conserving listed species. To address that issue, Congress and the Services have come up with multiple voluntary programs that allow private landowners to engage in activities that would otherwise be prohibited by the ESA (like incidental take) in exchange for wildlife conservation efforts on the part of the landowner.²⁴⁸ A couple of these programs were briefly discussed in the previous portion of this manual that covered section 10 of the ESA. The following provides a more in-depth exploration of the voluntary ESA programs available to private landowners.

Section 10 Programs for Non-Federal Landowners



²⁴⁷ Megan E. Hansen et al., *Cooperative Conservation: Determinants of Landowner Engagement in Conserving Endangered Species* (Center for Growth and Opportunity at Utah State University, Policy Paper No. 2018.003, 2018).

²⁴⁸ *Id.*

b. Habitat Conservation Plans

Prior to 1982, the ESA did not have a function that would exempt any activities from the section 9 prohibitions on take, except for permits that authorized take for scientific research or certain conservation activities.²⁴⁹ Recognizing that this caused a hardship for private landowners, Congress amended section 10 in 1982 to add an exemption for incidental take of listed species that resulted from lawful, non-federal activities.²⁵⁰ The amendment allows private landowners to apply to FWS or NMFS for an Incidental Take Permit (“ITP”) which grants the permit holder permission to engage in limited take of listed species that is incidental to, and not the purpose of, carrying out otherwise legal activities.²⁵¹ In order to obtain an ITP, applicants must develop a conservation plan, referred to as a Habitat Conservation Plan (“HCP”), that meets specific requirements.²⁵² Under this scheme, private landowners are able to engage in activities that could result in incidental take without fearing ESA violations, while also undertaking conservation efforts that help to promote the overall goals of the ESA.²⁵³

In 1998, the Services further adapted the HCP program to add what is known as the “no surprises” rule.²⁵⁴ The idea behind the no surprises rule is essentially that a deal is a deal. So long as a landowner with an ITP properly implements the accompanying HCP, the Services will not impose additional requirements or restrictions.²⁵⁵ Even if an unforeseen circumstance arises, the Services will not require the landowner to commit to any additional conservation measures beyond those agreed to in the HCP unless the landowner agrees.²⁵⁶ By adding the no surprises rule, the Services further demonstrated that the purpose of the HCP program was to facilitate agreements between themselves and private landowners whereby private landowners could engage in activities on their land without violating the ESA, and the Services could continue to further the ESA’s wildlife conservation goals.

Who Should Seek an HCP

While the HCP program is a useful tool, it will not be the right fit for all situations. Both FWS and NMFS have noted that they typically try to avoid processing unnecessary ITP

²⁴⁹ H.R. Rep. No. 567, 97th Cong., 2d Sess. 15 (1982). (Authorizing the Services to grant a permit for the take of species incidental to carrying out otherwise lawful activities).

²⁵⁰ 16 U.S.C. § 10(a)(1)(B); Fish & Wildlife Service, *Habitat Conservation Plans*, FWS (last visited Nov. 03, 2022), <https://www.fws.gov/service/habitat-conservation-plans>.

²⁵¹ 16 U.S.C. § 10(a)(1)(B).

²⁵² 50 C.F.R. § 17.22(b)(1).

²⁵³ *Habitat Conservation Plans*.

²⁵⁴ 50 C.F.R. § 17.22(b)(5).

²⁵⁵ Fish & Wildlife Service, *Habitat Conservation Plans and “No Surprises” Assurances: Frequently Asked Questions*, FWS (last visited Nov. 03, 2022), <https://www.fws.gov/node/265320#no-surprises-assurances>.

²⁵⁶ *Id.*

applications.²⁵⁷ It is therefore important for potential applicants to know when going through the HCP process would be appropriate.

To start, an ITP is only needed in situations where a non-federal project is likely to result in take of a listed species of fish or wildlife.²⁵⁸ FWS has noted that an ITP is only needed if a non-federal party's activities "in an area where ESA-listed species are known to occur and where their activity or activities are reasonably certain to result in incidental take."²⁵⁹ If the project is federal, or if it is unlikely to result in the take of any listed fish or wildlife species, then an ITP is not needed and initiating the HCP process would be unnecessary. Therefore, the HCP program is best suited for non-federal activities that are likely to result in an incidental take of listed fish or wildlife species.

Along with his agricultural operation, Farmer McDonald owns several dozen acres of forest land. At the moment, he is not managing the forest land in any particular way, but would like to start logging some of the land to supplement his income. However, Farmer McDonald knows that his forest land is home to a few endangered species and that the logging activity he would like to carry out is likely to result in some illegal take. The HCP program would be a good option for Farmer McDonald. In exchange for agreeing to some management activity in his forest land, Farmer McDonald should be able to carry out his desired logging activities without being liable for any take that results.

On the other hand, an HCP would not be appropriate for Farmer McDonald's proposal to build a barn that would require obtaining a federal permit to drain and dredge the marshy area that is designated as critical habitat for an endangered salamander. That is because Farmer McDonald needs a federal permit to construct his barn, and the HCP program is not appropriate for projects that include federal activity.

The ITP Application Process and Developing an HCP

The application process for an ITP was briefly discussed earlier in this document. There, it was noted that the ITP application process is seemingly straightforward – applicants fill out Form 3-200 and submit an HCP document for review. Typically, the Services are expected to grant ITP applications if they find that the proposed taking will be incidental to the overall action, the applicant will mitigate the impact of the taking, and the taking will not "appreciably reduce the likelihood of the survival and recovery of the species in

²⁵⁷ U.S. Fish & Wildlife Serv. & Nat'l Marine Fisheries Serv., *Habitat Conservation Planning and Incidental Take Permit Processing Handbook 3-2* (2016), <https://www.fws.gov/sites/default/files/documents/habitat-conservation-planning-handbook-entire.pdf>.

²⁵⁸ U.S. Fish & Wildlife Serv. (2018) *Guidance on trigger for an incidental take permit under section 10 (a)(1)(B) of the Endangered Species Act where occupied habitat or potentially occupied habitat is being modified*. <https://www.fws.gov/endangered/esa-library/pdf/Guidance-on-When-to-Seek-an-Incidental-Take-Permit.pdf>

²⁵⁹ *Id.*

the wild[.]”²⁶⁰ This section will go into greater detail on the steps an applicant must take to get an ITP.

In general, the process of applying for an ITP and developing an HCP (collectively referred to as “the HCP process”) can be divided into four phases: (1) preapplication; (2) development of the HCP and other environmental compliance documents; (3) processing the application, making a permit decision, and issuing the ITP; and (4) implementation of the HCP and compliance monitoring.²⁶¹ Applicants will usually work with the Services throughout the process to ensure that each step is properly completed.²⁶²

The first step in the HCP process is preapplication. During this phase, potential applicants are encouraged to meet with the Services to receive guidance on whether an ITP is appropriate, and if so, the type and scale of HCP that would best suit the applicant’s needs.²⁶³ The Services will also make sure the potential applicant understands the HCP process; discuss compliance with other environmental laws; and begin planning how the HCP will be developed by identifying the goals of the applicant, mapping out a realistic timeline for preparing the HCP, and determining key milestones in the planning process.²⁶⁴ The two main goals of the preapplication phase are for the potential applicant to determine whether they would like to proceed with the HCP process, and to take time upfront to thoroughly plan how the HCP will be developed if the applicant chooses to proceed.²⁶⁵

During phase two, the applicant and the Services begin working through the timeline developed during the phase one to draft the HCP itself.²⁶⁶ The goal of this step is for the applicant, with the guidance of the Services, to draft an HCP that will satisfy both statutory and regulatory requirements.²⁶⁷ The draft of the HCP will need to include a variety of things, such as: an assessment of impacts likely to result from the proposed taking of listed species; measures the applicant will take to minimize and mitigate such impacts; alternative actions to the proposed taking that the applicant considered and reasons why those alternative actions were not taken; and any additional measures that the Services may require.²⁶⁸ The Services will help the applicant to ensure that the draft HCP meets those requirements.

²⁶⁰ 50 C.F.R. § 17.22(b)(2)(i).

²⁶¹ *Habitat Conservation Planning and Incidental Take Permit Processing Handbook* at 2-1.

²⁶² *Id.*

²⁶³ *Id.*

²⁶⁴ *Id.*

²⁶⁵ *Id.* at 2-3.

²⁶⁶ *Id.* at 2-2.

²⁶⁷ *Id.*

²⁶⁸ 50 C.F.R. § 17.22(b)(1)(iii).

At the same time, the Services will also begin developing the compliance documents that are needed for any other applicable environmental statute.²⁶⁹ Most often, this means conducting intra-agency consultation and drafting a Biological Opinion as required by section 7 of the ESA, and completing a National Environmental Policy Act (“NEPA”) analysis. NEPA is an environmental statute that requires federal agencies to assess the environmental effects of their proposed actions.²⁷⁰ Because decisions on permit applications are an agency action that requires NEPA review, the Services must complete a NEPA analysis any time they approve an ITP.²⁷¹

During phase three, the applicant formally submits the application to the Services for review.²⁷² The application will consist of Form 3-200, a complete description of the proposed activity, details about the species sought to be covered by the permit, and a completed draft of the HCP.²⁷³ Following submission, the Services will review the application to make sure it meets statutory requirements. Once the reviewing Service is satisfied, it will publish the application, the HCP, and the NEPA analysis in the Federal Register for public review.²⁷⁴ The length of time given for public review and comment will vary according to the complexity of the HCP and NEPA analysis, but usually lasts from 30 to 60 days.²⁷⁵ For an HCP that is exceptionally long or precedent-setting, public review could last 90 days.²⁷⁶

After the public comments are received, the applicant’s HCP is revised and finalized as necessary. At this point, if all the HCP criteria are met, and there are no disqualifying factors, the Services must issue the ITP. Prior to issuing an ITP, the Services must ensure that the proposed taking will be incidental to otherwise lawful activity, that the applicant will take reasonable measures to mitigate the impacts of the taking, that the applicant has adequate funding to carry out the conservation plan, and that the taking will not significantly reduce the likelihood of the survival and recovery of the species.²⁷⁷ Disqualifying factors that could prevent an ITP from being issued include: knowledge of an applicant’s civil penalty or criminal conviction relating to the activity for which they are requesting an ITP; failure of the applicant to provide all required information; failure to the applicant to provide truthful information in the application; or a

²⁶⁹ *Habitat Conservation Planning and Incidental Take Permit Processing Handbook* at 2-2. (“During phase 2, the results of all of the upfront planning under phase 1 are applied while assisting the applicant with developing their HCP, as well as concurrently developing the environmental compliance documents (e.g., NEPA, NHPA, and intra-service section 7 consultation)[.]”).

²⁷⁰ 42 U.S.C. § 4332.

²⁷¹ *Habitat Conservation Planning and Incidental Take Permit Processing Handbook* at 13-1.

²⁷² *Id.* at 2-2.

²⁷³ 50 C.F.R. § 17.22(b)(1)(iii).

²⁷⁴ *Habitat Conservation Planning and Incidental Take Permit Processing Handbook* at 14-13.

²⁷⁵ *Id.* at 14-14.

²⁷⁶ *Id.*

²⁷⁷ 16 U.S.C. § 1539(a)(2)(A).

conviction or entry of a guilty plea for a felony violation of the Lacey Act, the Migratory Bird Treaty Act, or the Bald and Golden Eagle Protection Act.²⁷⁸

Implementation is the final step of the HCP process.²⁷⁹ It is during this phase that the permittee may begin to simultaneously carry out the conservation activities agreed to in the HCP, as well as any activity authorized by the ITP.²⁸⁰ During this time, the Services will continue to work with the permittee to ensure that the permittee meets the terms and conditions of both the ITP and the HCP.²⁸¹ Typically, the permittee is required to prepare an annual report to submit to the Services who will then review accordingly.²⁸² If, during the implementation of the HCP, there is a change in circumstances that could be addressed with new or altered conservation measures, the Services may suggest those measures to the permittee.²⁸³ However, it is ultimately up to the permittee whether or not they would like to adopt new measures. The No Surprises assurances allow permittees to implement the HCP originally agreed to even if unforeseen circumstances arise.²⁸⁴

ITPs are generally only valid for a certain amount of time.²⁸⁵ Some may have a term of years, or even decades, but eventually an ITP is likely to expire.²⁸⁶ At that point, the permittee can seek to have the ITP renewed. To renew an ITP, a permittee must submit a renewal request to either FWS or NMFS at least 30 days before the ITP expires.²⁸⁷ Once the request is submitted, the Services and the permittee can review the HCP to see if any revisions are warranted.²⁸⁸ After a renewal agreement is reached, the plan will be published in the Federal Register.²⁸⁹

Applying for an ITP requires a landowner to work closely with the Services. From drafting the initial HCP to public review to implementation, the landowner and the Services work together every step of the way. The process is completely voluntary, and while getting the permit may take time, once a landowner becomes a permittee with a valid HCP, the No Surprises assurances prevent the landowner from needing to take on any additional conservation measures that they did not agree to. By providing a landowner with formal permission to make an incidental take of listed species, and

²⁷⁸ *Habitat Conservation Planning and Incidental Take Permit Processing Handbook* at 16-6.

²⁷⁹ *Id.* at 2-3.

²⁸⁰ *Id.*

²⁸¹ *Id.* at 17-1.

²⁸² *Id.* at 17-3.

²⁸³ 50 C.F.R. § 17.22(b)(5).

²⁸⁴ *Id.*

²⁸⁵ 50 C.F.R. § 17.22(b)(4).

²⁸⁶ *Habitat Conservation Planning and Incidental Take Permit Processing Handbook* at 12-8.

²⁸⁷ 50 C.F.R. § 13.22(a).

²⁸⁸ *Habitat Conservation Planning and Incidental Take Permit Processing Handbook* at 17-8.

²⁸⁹ *Id.*

assurances that additional conservation measures will not be forced upon the landowner later on, the HCP process furthers the conservation goals of the ESA by enabling private landowners to engage in activities on their property without being concerned about possible statutory violations.

c. Safe Harbor Agreements

A Safe Harbor Agreement (“SHA”) is a voluntary agreement between a private or other non-federal property owner, and FWS or NMFS.²⁹⁰ The Services created the SHA program in the late 1990s as a way to work with private landowners who were interested in conserving listed species.²⁹¹ Under an SHA, the property owner agrees to engage in actions that contribute to the recovery of listed species on non-federal land.²⁹² In return, the Services provide formal assurances that the property owner will not be required to take on any additional or different management practices without the property owner’s consent.²⁹³ Once the SHA expires, the property owner may return the land to the baseline conditions that existed at the beginning of the SHA.²⁹⁴ Additionally, property owners who enter into an SHA will also be granted an Enhancement of Survival Permit that authorizes the incidental take of listed species that may result from actions taken by the property owner pursuant to the SHA, including returning the property to its baseline conditions after the SHA expires.²⁹⁵ The length of an SHA can vary, with some lasting only a few years and others for decades.²⁹⁶

Who should apply for an SHA?

While the HCP program is aimed at non-federal landowners who are looking to carry out an activity that is likely to result in the incidental take of listed species, the SHA program is aimed at non-federal landowners interested in land management actions that contribute to the recovery of listed species.²⁹⁷ Therefore, the only requirement for entering into an SHA is that the potential applicant be a non-federal landowner. This includes local governments, state agencies, businesses, tribal governments, conservation organizations, and private individuals.²⁹⁸

²⁹⁰ Fish & Wildlife Service, *Safe Harbor Agreements for Private Landowners*, FWS (last visited Nov. 14, 2022), <https://www.fws.gov/sites/default/files/documents/safe-harbor-agreements-fact-sheet.pdf>.

²⁹¹ Announcement of Final Safe Harbor Policy, 64 Fed. Reg. 32,717 (June 17, 1999), <https://www.fws.gov/policy/library/1999/99fr32717.pdf>.

²⁹² *Safe Harbor Agreements for Private Landowners*.

²⁹³ *Id.*

²⁹⁴ *Id.*

²⁹⁵ *Id.*

²⁹⁶ *Id.*

²⁹⁷ Announcement of Final Safe Harbor Policy at 32,717.

²⁹⁸ *Safe Harbor Agreements for Private Landowners*.

After learning that an endangered salamander species is present on his property, Farmer McDonald decides that he would like to better manage his property to promote conservation of the salamander. However, he is worried that doing so could increase the population of endangered salamanders located on his property which could lead to more ESA restrictions on his farming operation. In this case, an SHA would be a good fit for Farmer McDonald. An SHA would allow him to carry out conservation efforts for the salamander, while also granting him assurances that he will not be required to adopt any additional or different conservation measures or face any additional restrictions if his efforts increase the salamander population.

The SHA application process

In general, there are six basic steps an applicant will take to enter into an SHA.²⁹⁹

First, the applicant will need to contact either their nearest FWS Ecological Services field office or NMFS office depending on the type of species the applicant would like the SHA to cover.³⁰⁰ For terrestrial and freshwater species, applicants will work with the FWS.³⁰¹ For marine wildlife and anadromous fish, applicants will work with NMFS.³⁰²

After reaching out to the appropriate Service, the applicant will then begin to gather the general information needed for an SHA.³⁰³ The Services will work with the applicant to put together information such as a map of the applicant's property, information related to the listed species present on the property, potential management actions, and other relevant information.³⁰⁴

The third step requires the Services and the landowner to make a series of determinations that will be used to develop the draft SHA. Those determinations include the current baseline conditions for the property, voluntary actions that will provide a net conservation benefit for the species covered by the SHA, and any anticipated incidental take.³⁰⁵ "Baseline conditions" refers to "population estimates and distribution and/or habitat characteristics and determined area of the enrolled property that sustain seasonal or permanent use by the covered species at the time the Safe Harbor Agreement is executed between the Services and the property owner."³⁰⁶ In

²⁹⁹ Fish & Wildlife Service, *Safe Harbor Agreements*, FWS (last visited Nov. 14, 2022), <https://www.fws.gov/service/safe-harbor-agreements>.

³⁰⁰ *Id.*

³⁰¹ *Safe Harbor Agreements for Private Landowners*.

³⁰² *Id.*

³⁰³ *Safe Harbor Agreements*.

³⁰⁴ Fish & Wildlife Service, *Safe Harbor Agreements | Frequently Asked Questions*, Endangered Species (last visited Nov. 22, 2021), <https://www.fws.gov/endangered/landowners/landowners-faq.html>.

³⁰⁵ *Safe Harbor Agreements*.

³⁰⁶ Announcement of Final Safe Harbor Policy at 32,722.

other words, the baseline conditions refer to the state of listed species and their habitat on the applicant's property at the time the SHA begins. The Services will use the baseline conditions to discuss land use goals with the property owner, assess habitat quality, and identify other information needed to develop the SHA.³⁰⁷ Additionally, "net conservation benefits" refers to "the cumulative benefits of the management activities identified in a [SHA] that provide for an increase in a species' population and/or the enhancement, restoration, or maintenance of covered species' suitable habitat within the enrolled property[.]"³⁰⁸ In order to draft the SHA, the Services must determine what voluntary actions the landowner can take that will either increase species population or enhance species habitat.

The Services will work with the property owner to draft the SHA so that it complies with the Services' Safe Harbor Policy.³⁰⁹ In order to be in compliance, the SHA must do the following: (1) specify the species, habitat, and property covered by the Agreement; (2) include a complete description of the baseline conditions for each of the covered species; (3) identify the management actions that will be taken by the property owner to achieve the expected net conservation benefits, and the agreed upon timeline for carrying out those actions; (4) describe any incidental take associated with the management actions; (5) incorporate a notification requirement to provide the Services or appropriate State agencies with an opportunity to remove individuals of a covered species before any authorized incidental take occurs; (6) describe what activities are expected to return the covered property to its baseline conditions and the expected amount of incidental take that would result from doing so; (7) satisfy other requirements of section 10 of the ESA; and (8) identify a schedule for monitoring the implementation of the SHA.³¹⁰ The Services will not approve an SHA unless it fulfills these requirements.³¹¹ In particular, the Services will not approve an SHA that fails to achieve any net conservation benefits.³¹² In other words, the Services will only approve an SHA if the conservation activities the landowner agrees to undertake will contribute to the recovery of listed species.

Once the SHA is drafted, the Services work with the property owner to prepare the application for the Enhancement of Survival Permit.³¹³ These permits are issued under Section 10 of the ESA, and they allow the property owner to make incidental take of the species covered by the SHA while carrying out the management activities outlined in the

³⁰⁷ *Id* at 32,723.

³⁰⁸ *Id* at 32,722.

³⁰⁹ *Id*.

³¹⁰ *Id* at 32,723.

³¹¹ 50 C.F.R. § 17.22(c)(2)(ii).

³¹² *Id*.

³¹³ Announcement of Final Safe Harbor Policy at 32,722.

agreement, and while returning the property to its baseline conditions after the SHA has ended.³¹⁴ The application for the Enhancement of Survival Permit must include a copy of Form 3-200, the common and scientific names of the listed species to be covered by the Permit, a description of how incidental take is likely to occur under the SHA, and a copy of the SHA that is in compliance with the requirements of FWS' Safe Harbor policy.³¹⁵

After the property owner has submitted the application for the Enhancement of Survival Permit, the Services begin their review.³¹⁶ This includes an internal review process, opportunity for public comment, ESA consultation, and NEPA analysis.³¹⁷ Internal review of the Permit application requires the Services to consider whether the application meets the general issuance criteria.³¹⁸ If the criteria are not met, then the Enhancement of Survival Permit may not be issued.³¹⁹ Those criteria require the Services to find that: (1) the proposed take will be incidental to otherwise lawful activity; (2) implementation of the SHA is expected to provide a net conservation benefit to the covered species; (3) the probable effects of the authorized take will not reduce the likelihood of survival of any listed species; (4) implementation of the SHA is consistent with all applicable laws and regulations; (5) implementation of the SHA will not be in conflict of any ongoing conservation programs for the species covered by the Agreement; and (6) the applicant has shown capability for and commitment to implementing the SHA.³²⁰ The Services will also make the Permit application and SHA available for public comment.³²¹ Typically, the comment period will last 30 days, but can last up to 60 days for more complex Agreements.³²² Finally, the Services will use this time to engage in section 7 consultation to ensure that granting the Enhancement of Survival Permit will not jeopardize any listed species, and will perform NEPA analysis to determine the environmental impact of approving the Permit application.³²³

The sixth and final step of the SHA process occurs when the Services issue an Enhancement of Survival Permit to the property owner and the SHA is finalized.³²⁴ At this point, the property owner can begin to undertake the management activities agreed to in the SHA, and will also be protected by the assurances provided to them under the

³¹⁴ 16 U.S.C. § 10(a)(1)(A).

³¹⁵ 50 C.F.R. § 17.22(c)(1).

³¹⁶ NOAA Fisheries, *Safe Harbor Agreements for Private Landowners*, NOAA (last visited Nov. 14, 2022), https://media.fisheries.noaa.gov/dam-migration/6102019_safe-harbor-agreements-faq_508.pdf.

³¹⁷ *Safe Harbor Agreements*.

³¹⁸ 50 C.F.R. § 17.22(c)(2).

³¹⁹ *Id.*

³²⁰ *Id.*

³²¹ Announcement of Final Safe Harbor Policy at 32,726.

³²² *Id.*

³²³ *Id.* at 32,725.

³²⁴ *Safe Harbor Agreements*.

SHA that no additional conservation measures will be required unless the property owner agrees.³²⁵

Once an SHA is in place, it is considered to run with the land.³²⁶ If a property owner decides to sell land covered by an SHA before the term of the Agreement is up, the Services will approach the new owner to ask if they would like to become party to the original SHA and Enhancement of Survival Permit.³²⁷ If they agree, then the Services will regard the new owner as having all the rights and obligations as the original property owner.³²⁸

Overall, an SHA can be a useful tool for private property owners who would like to engage in wildlife conservation activities without worrying about ESA violations.

d. Candidate Conservation Agreement with Assurances

In 1999, FWS introduced its Candidate Conservation Agreement with Assurances (“CCAA”) program.³²⁹ Under the CCAA program, private landowners can enter into voluntary agreements with the Services to adopt conservation measures to protect candidate species in exchange for assurances from the Services that the landowner will not be required to take on additional conservation practices in the future.³³⁰ The program is similar to the Candidate Conservation Agreement (“CCA”) program which also allows entities to enter into voluntary agreements with the Services to adopt conservation measures for candidate species, but does not provide assurances against additional future conservation measures and is therefore used more often by federal agencies, states, and local governments than by private landowners.³³¹

A candidate species is one that has been identified by FWS or NMFS as a candidate for listing under the ESA.³³² Typically, the Services will have enough information regarding the biological status of the species to determine that listing it as either threatened or endangered is likely appropriate, but are putting off formally listing the species in favor of higher priority listing activities.³³³ Because these candidate species are not listed

³²⁵ *Id.*

³²⁶ Fish & Wildlife Service, *Safe Harbor Agreements for Private Landowners*, FWS (last visited Nov. 22, 2021), <https://www.fws.gov/endangered/esa-library/pdf/harborqa.pdf>.

³²⁷ Announcement of Final Safe Harbor Policy at 32,725.

³²⁸ *Id.*

³²⁹ Candidate Conservation Agreements with Assurances Policy, 81 Fed. Reg. 95,164 (December 27, 2016), <https://www.govinfo.gov/content/pkg/FR-2016-12-27/pdf/2016-31061.pdf>.

³³⁰ Fish & Wildlife Service, *Candidate Conservation Agreements*, FWS (last visited Nov. 16, 2022), <https://fws.gov/service/candidate-conservation-agreements>.

³³¹ *Id.*

³³² Candidate Conservation Agreements with Assurances Policy at 95,171.

³³³ Fish & Wildlife Service, *Candidate Species*, FWS (last visited Nov. 22, 2021), https://www.fws.gov/endangered/esa-library/pdf/candidate_species.pdf.

under the ESA, they receive none of the Act's legal protections. However, taking proactive conservation efforts to protect candidate species can, in some cases, speed the overall recovery time of the species, cause it to be listed as threatened instead of endangered, or even eliminate the need to list the species at all.³³⁴

Similar to an SHA, a property owner who enters into a CCAA will be granted an Enhancement of Survival permit under section 10 of the ESA.³³⁵ The Permit authorizes incidental take of the species covered by the CCAA in the event that the species become listed.³³⁶ While the Services recognize that the actions of a single property owner are usually not enough to eliminate the need to list a species, they also acknowledge that the collective result of conservation measures taken by multiple property owners may result in not needing to list the species.³³⁷ Accordingly, the Services will enter into a CCAA when they can determine that the conservation measures will result in a net conservation benefit to improve the status of the covered species.³³⁸

Who Should Apply for a CCAA?

Any private landowner is potentially eligible to enter into a CCAA.³³⁹ However, the CCAA program is best suited for private landowners that have a candidate species living on or near their property. A CCAA could be a good option for a landowner who knows of a particular candidate species that is present on or near their property and would like to take proactive steps to prevent the species from being listed while also receiving assurances that if the listing does occur, the landowner will not need to alter their land use behavior.

The blue-bellied bumblebee is a native species of pollinator that faces threats to its habitat and has been identified by FWS as a candidate for listing. Farmer McDonald is aware that the blue-bellied bumblebee is located in his area, and has even seen a hive of them on his property in the past. He would like to help conserve the bumblebee, but is also concerned that if the species is listed as endangered, he could face further ESA restrictions on his property. A CCAA would be a good option for Farmer McDonald. With a CCAA he can carry out conservation efforts for the blue-bellied bumblebee on his property, but will not face any additional regulation if the bee is ever officially listed.

The CCAA Application Process

³³⁴ *Candidate Conservation Agreements*.

³³⁵ Candidate Conservation Agreements with Assurances Policy at 95,171.

³³⁶ *Id.*

³³⁷ *Id.* at 95,170.

³³⁸ *Id.* at 95,165.

³³⁹ Fish & Wildlife Service, *Candidate Conservation Agreements with Assurances*, FWS (last visited Nov. 16, 2022), <https://fws.gov/service/candidate-conservation-agreements-assurances>.

The CCAA process is known for its flexibility, which makes it well-suited to address both the needs of the candidate species and the landowner.³⁴⁰ CCAAs can vary significantly in size, scope, complexity, and the types of management activities adopted by landowners.³⁴¹ As a result, a CCAA could look like an SHA, an HCP, or something completely different depending on the needs of the species and the needs of the landowner.

As with an HCP or an SHA, the first step in the CCAA process is for an interested landowner to contact their nearest FWS Field Office to discuss the possibility of entering into an agreement.³⁴² One of the first things the landowner and the Services will discuss is whether a CCAA is the appropriate tool for the particular situation.³⁴³ In general, a CCAA will be most appropriate when the Services know enough about candidate species at issue to determine what conservation measures are likely to meet the CCAA standard that the conservation measures implemented by a property owner have the potential to contribute to removing the need to list the candidate species.³⁴⁴ A CCAA will generally not be appropriate if the Services do not have enough information about the candidate species to determine what conservation measures would meet the CCAA standard.³⁴⁵ CCAAs may also be inappropriate if the candidate species is so highly imperiled that any amount of take would increase its likelihood of extinction.³⁴⁶

If the Services and landowner agree that a CCAA would be appropriate, the Services must then evaluate the existing situation on the landowner's property in order to determine the proper approach.³⁴⁷ Potential existing situations could include a property that already meets the CCAA standard, property that needs improvement to meet the CCAA standard, or property where there is already on-going take of the candidate species.³⁴⁸

Once the Services have determined the existing situation on the property, the parties can begin to draft the CCAA.³⁴⁹ As previously mentioned, these agreements are extremely flexible and no two are exactly alike. However, each CCAA will contain the following components: a description of the parties involved in implementing the agreement; a description of the property that will be covered by the agreement;

³⁴⁰ *Candidate Conservation Agreements*.

³⁴¹ U.S. Fish & Wildlife Serv., *Candidate Conservation Agreements with Assurances Handbook*, 5 (2003), https://esadocs.defenders-cci.org/ESAdocs/misc/FWS_CCAA_draft_handbook.pdf.

³⁴² *Candidate Conservation Agreements with Assurances*.

³⁴³ *Candidate Conservation Agreements with Assurances Handbook* at 8.

³⁴⁴ *Id.* at 9.

³⁴⁵ *Id.* at 11.

³⁴⁶ *Id.*

³⁴⁷ *Id.* at 9; *Candidate Conservation Agreements with Assurances*.

³⁴⁸ *Candidate Conservation Agreements with Assurances Handbook* at 9-11.

³⁴⁹ *Candidate Conservation Agreements with Assurances*.

language describing the purpose of the agreement; information identifying the candidate species covered by the CCAA; current population levels of the covered species at the time of negotiation, and a description of the existing habitat on the landowner's property; the conservation measures and management activities the landowner agrees to implement; the expected benefits to the candidate species; the expected level of take should the candidate species be listed; the assurances provided to the landowner by the Services regarding future conservation activities; description of future monitoring activities; provisions allowing for amendment of the CCAA; the duration of the CCAA; procedures for how the CCAA may be terminated; and, where necessary, provisions concerning adaptive management strategies that the landowner can employ when implementing the CCAA.³⁵⁰

After the agreement has been drafted, the landowner can formally submit their application for a CCAA.³⁵¹ The application consists of the Enhancement of Survival Permit application Form 3-200-45, and a copy of the proposed CCAA.³⁵² Once the application is submitted, the Services will move onto the permit processing phase.³⁵³ At this time they will conduct an intra-Service ESA consultation, go through NEPA analysis, and determine whether the CCAA meets the issuance criteria.³⁵⁴

During the ESA consultation, the Services will consider the potential impacts to both the candidate species that would be covered by the CCAA as well as already listed species.³⁵⁵ Because candidate species have yet to be listed under the ESA, the law does not require the Services to consult over them. However, it is the policy of the Services to do so anyway because the species could be listed in the future.³⁵⁶ Typically, the ESA consultation will not be a significant impediment to issuing a CCAA because the expected result is that a CCAA will benefit the candidate species.³⁵⁷ Similarly, the NEPA analysis tends to find that a CCAA will have a positive effect on the environment, meaning that lengthy review is unnecessary.³⁵⁸

Finally, in order to grant the Enhancement of Survival Permit, the Services must make a written finding that the following criteria are met: the proposed take would be incidental to otherwise lawful activity; implementation of the CCAA is reasonably expected to provide a net conservation benefit to the candidate species; the probable effects of the

³⁵⁰ *Id* at 11-20.

³⁵¹ *Candidate Conservation Agreements with Assurances*.

³⁵² *Candidate Conservation Agreements with Assurances Handbook* at 20.

³⁵³ *Id* at 21.

³⁵⁴ *Id*.

³⁵⁵ *Id* at 24-25.

³⁵⁶ *Id*.

³⁵⁷ *Id* at 25.

³⁵⁸ *Id* at 23.

take will not significantly reduce the likelihood of survival of any species; implementation of the CCAA is consistent with all federal, state, and local law; implementation of the CCAA will not be in conflict with any other authorized conservation activities; and the applicant has shown a capacity for and commitment to implementing all terms of the CCAA.³⁵⁹ In this capacity, the Services have defined “net conservation benefit” to mean “the cumulative benefits of the CCAA’s specific conservation measures designed to improve the status of a covered species by removing or minimizing threats so that populations are stabilized, the number of individuals is increased, or habitat is improved.”³⁶⁰

After the Services have gone through the necessary analysis and made the required findings, they will publish the application for the Enhancement of Survival Permit, and all the accompanying documents in the Federal Register for public review.³⁶¹ Typically, review lasts for 30 days.³⁶² After the review closes, the Services will address any comments they received, and prepare to issue the final permit and approve the CCAA.³⁶³ Once the CCAA is approved and the Permit issued, the landowner can begin to implement the agreed upon conservation activities.³⁶⁴

The Services will monitor the landowner’s implementation of the CCAA according to the monitoring terms set out in the agreement.³⁶⁵ Usually the Services will monitor both for compliance, and to assess the response of the covered species to the conservation measures.³⁶⁶ If, prior to the end of the CCAA, the property owner transfers ownership of their land to a new property owner, the new owner has the option of becoming a party to the original CCAA.³⁶⁷ If the new owner does so, the Services will regard them as having the same rights, assurances, and obligations as the original property owner.³⁶⁸

Overall, the CCAA process can be useful for landowners who are aware of candidate species on or near their property and want to take steps to prevent the species from being listed while also receiving assurances that if the species is listed, the landowner will not be required to adopt any additional land management activities.

³⁵⁹ 50 C.F.R. 17.22(d)(2).

³⁶⁰ Candidate Conservation Agreements with Assurances Policy at 95,171.

³⁶¹ *Id.* at 95,173.

³⁶² *Id.*; 50 C.F.R. 17.22(d)(2).

³⁶³ *Candidate Conservation Agreements with Assurances Handbook* at 29.

³⁶⁴ *Candidate Conservation Agreements with Assurances*.

³⁶⁵ Candidate Conservation Agreements with Assurances Policy at 95,173.

³⁶⁶ *Id.*

³⁶⁷ *Id.*

³⁶⁸ *Id.*

VI. Agriculture and the ESA

The last section of this manual will focus on how the ESA specifically impacts agriculture beyond the issues of private landownership that were discussed in the previous section. In particular, this section will take a closer look at a few key issues involving agriculture and the ESA.

a. ESA & Pesticides

One of the main ways that the ESA impacts agriculture is through its effects on pesticide registration and use.³⁶⁹ In the United States, a pesticide is not available for legal use until it has been registered by the Environmental Protection Agency (“EPA”) under the Federal Insecticide, Fungicide, and Rodenticide Act (“FIFRA”).³⁷⁰ When EPA registers a pesticide under FIFRA, it approves a label that will be affixed to each pesticide container that provides instructions for how the pesticide should be used.³⁷¹ Each pesticide label approved by EPA carries the full force of law, meaning that violating the use instructions is a violation of federal law.³⁷² Because registering a pesticide under FIFRA is a federal action, EPA is required to engage in ESA consultation with the Services prior to making a final registration decision.³⁷³ If the consultation results in a finding that registering the pesticide for use will jeopardize a listed species or destroy designated critical habitat, EPA may need to adopt mitigation measures that can affect the use instructions included in the label. Mitigation measures for pesticide use may be localized to a specific area or broad enough to be in place anywhere the pesticide is used.³⁷⁴

When EPA registers a pesticide for use under FIFRA, it must show that use of the pesticide will not cause “unreasonable adverse effects on the environment.”³⁷⁵ The term “unreasonable adverse effects on the environment” is defined to mean “any unreasonable risk to man or the environment taking into account the economic, social,

³⁶⁹ Emily Unglesbee, *What the Endangered Species Act Means for Ag Pesticide Use*, Progressive Farmer (Jan. 21, 2022), <https://www.dtnpf.com/agriculture/web/ag/blogs/production-blog/blog-post/2022/01/21/endangered-species-act-means-ag-use>.

³⁷⁰ 7 U.S.C. § 136j(a)(1).

³⁷¹ United States Env'tl. Protection Agency, *About Pesticide Registration*, Pesticide Registration Home (last visited Nov. 17, 2022), <https://www.epa.gov/pesticide-registration/about-pesticide-registration>.

³⁷² *Id.*

³⁷³ United States Env'tl. Protection Agency, *About the Endangered Species Protection Program*, Endangered Species Home, (last visited Nov. 17, 2022), <https://www.epa.gov/endangered-species/about-endangered-species-protection-program>.

³⁷⁴ United States Env'tl. Protection Agency, *Assessing Pesticides under the Endangered Species Act*, Endangered Species Home, (last visited Nov. 22, 2021), <https://www.epa.gov/endangered-species/assessing-pesticides-under-endangered-species-act>.

³⁷⁵ 7 U.S.C. § 136a(c)(5).

and environmental costs and benefits of the use of any pesticide[.]”³⁷⁶ In other words, EPA will only register a pesticide for use under FIFRA if it determines that the pesticide will not cause an unreasonable risk to either human beings or the environment. In addition, EPA must also consider whether registering a pesticide “may affect” any threatened or endangered species.³⁷⁷ An agency action may affect listed species if the agency taking the action concludes that it is “likely to adversely affect” listed species or critical habitat.³⁷⁸ In that case, the action agency must reach out to either FWS or NMFS to begin formal ESA consultation.³⁷⁹

Because EPA must satisfy both FIFRA and the ESA in order to register a pesticide, pesticide registrations are essentially subject to two levels of environmental review. In general, the FIFRA prohibition on “unreasonable adverse effects” is considered to be relatively narrow while the ESA “may affect” standard is broad and easy to trigger.³⁸⁰ Accordingly, EPA is tasked with implementing FIFRA in a way that complies with the ESA to the fullest extent possible without unnecessarily burdening pesticide users. In order to accomplish this task, EPA developed the Endangered Species Protection Program (“ESPP”) which allows EPA to balance its responsibilities under both FIFRA and the ESA.³⁸¹

i. Endangered Species Protection Program

The main purpose of the ESPP is to allow EPA to carry out the requirements of both FIFRA and the ESA with the overall intention of providing appropriate protection to listed species while avoiding unnecessary burdens to pesticide users.³⁸² Under the ESPP, EPA will consider a pesticide’s impacts to listed species and critical habitat during the pesticide registration process.³⁸³ To do so, EPA develops an ecological risk assessment which includes a determination on whether use of the pesticide being evaluated for registration is likely to affect listed species or critical habitat.³⁸⁴ If EPA ultimately finds that use of the pesticide is likely to harm either listed species or critical habitat, then

³⁷⁶ 7 U.S.C. § 136(bb).

³⁷⁷ 50 C.F.R. § 402.14(a).

³⁷⁸ 50 C.F.R. § 402.14(b).

³⁷⁹ 50 C.F.R. § 402.14(a); *About Pesticide Registration*.

³⁸⁰ Mary Jane Angelo, *The Killing Fields: Reducing the Casualties in the Battle Between U.S. Species Protection Law and U.S. Pesticide Law*, 32 Harv. Envtl. L. Rev. 95, 128 (2008). (“[...] ESA section 7 and its implementing regulations require consultation of some form whenever an action “may affect” a listed species, not only when a likely to adversely affect determination is made by the action agency.”)

³⁸¹ *About the Endangered Species Protection Program*.

³⁸² Endangered Species Protection Program Field Implementation, 70 Fed. Reg. 66,392 (November 2, 2005), <https://www.govinfo.gov/content/pkg/FR-2005-11-02/pdf/05-21838.pdf>.

³⁸³ *Id.* at 66,399.

³⁸⁴ *Id.*

EPA will adopt mitigation measures on a county-by-county basis.³⁸⁵ EPA issues Endangered Species Protection Bulletins (“Bulletins”) through the ESPP that provide use limitations for pesticides on a county level.³⁸⁶ By tailoring use limitations, EPA can implement geographically-specific mitigation measures to protect listed species and critical habitat without unduly burdening pesticide users.³⁸⁷

If geographically specific use limitations are required to ensure that registering a pesticide meets ESA requirements, the pesticide label approved by EPA will contain language informing the user that the product may have a Bulletin available.³⁸⁸ All Bulletins are available through EPA’s “Bulletins Live! Two” portal which has a map showing where Bulletins are currently active.³⁸⁹ Because the Bulletins are incorporated into pesticide labels, failing to follow a Bulletin is a violation of federal law. Additionally, unless the Services have issued an incidental take statement authorizing take that may occur from using a pesticide consistently with its labeling, pesticide users could be found liable for violating the ESA if their use of a pesticide causes take of a species even if the label was appropriately followed.³⁹⁰ Typically, the Services will issue an incidental take statement if they conclude that use of the pesticide is likely to adversely affect a listed species, but will not result in jeopardy of the species.³⁹¹ However, if the Services conclude that jeopardy of a listed species could occur, they are unlikely to allow incidental take.³⁹²

By using the ESPP to develop Bulletins, EPA can efficiently adopt measures to protect endangered species. The geographic-specific nature of the Bulletins helps reduce the regulatory burden on pesticide users by ensuring that additional use restrictions are only in place in areas where listed species are present.

ii. EPA’s New FIFRA-ESA Policy

In 2022, EPA announced that it was adopting a new policy to help meet its ESA obligations when taking actions under FIFRA.³⁹³ The policy centers around a workplan which lays out the steps EPA plans to take to better meet its ESA responsibilities.³⁹⁴

³⁸⁵ *Id.* at 66,400.

³⁸⁶ *Id.*

³⁸⁷ *Id.*

³⁸⁸ *Id.*

³⁸⁹ United States Env’tl. Protection Agency, *Bulletins Live! Two – View the Bulletins*, Endangered Species, (last visited Nov. 22, 2021), <https://www.epa.gov/endangered-species/bulletins-live-two-view-bulletins>.

³⁹⁰ Endangered Species Protection Program Field Implementation at 66,397.

³⁹¹ *Id.*

³⁹² *Id.*

³⁹³ United States Env’tl. Protection Agency, *Implementing EPA’s Workplan to Protect Endangered and Threatened Species from Pesticides: Pilot Projects*, Endangered Species, (last visited Dec. 07, 2022),

According to EPA, the agency has long struggled to fulfill its ESA obligations related to FIFRA actions.³⁹⁵ Every year, EPA carries out numerous FIFRA actions that qualify as agency actions under the ESA. These actions include not only registering new pesticides for use, but also making decisions on pesticide registration review.³⁹⁶ Under FIFRA, EPA is tasked with reviewing each registered pesticide every 15 years to ensure that the pesticide continues to function as intended without creating unreasonably adverse effects to human health and the environment.³⁹⁷ Additionally, EPA also makes a number of other FIFRA decisions on already registered pesticides, such as approving new uses and granting emergency use exemptions.³⁹⁸ All three categories of FIFRA decision – registration of new pesticides, registration review, and other FIFRA decisions – require an ESA determination and possibly formal consultation with the Services.³⁹⁹ As of November 2022, EPA claims to have only met its ESA obligations for less than 5% of its FIFRA actions which has led to a large, and growing, backlog.⁴⁰⁰

As a result of its failure to meet its ESA obligations for FIFRA actions, EPA has been subject to numerous lawsuits.⁴⁰¹ Many of these lawsuits have resulted in settlements that require EPA to complete its ESA responsibilities by a particular date, which has further complicated EPA's ability to address its backlog of FIFRA actions that need ESA determinations.⁴⁰² These lawsuits have also resulted in instability for pesticide users because the orders from judges may mean that EPA has to quickly adopt new mitigation measures that were not included in the original pesticide label, or even have to pull the label entirely for failing to meet ESA standards.⁴⁰³ The new policy adopted by EPA is intended to help bring the agency's FIFRA actions into better ESA compliance, and create stronger pesticide labels that are more likely to withstand judicial scrutiny.⁴⁰⁴

<https://www.epa.gov/endangered-species/implementing-epas-workplan-protect-endangered-and-threatened-species-pesticides>.

³⁹⁴ *Id.*

³⁹⁵ United States Env'tl. Protection Agency, *Balancing Wildlife Protection and Responsible Pesticide Use: How EPA's Pesticide Program Will Meet its Endangered Species Act Obligations*, 4 (2022), https://www.epa.gov/system/files/documents/2022-04/balancing-wildlife-protection-and-responsible-pesticide-use_final.pdf.

³⁹⁶ *Id.*

³⁹⁷ 7 U.S.C. § 136a(g)(1)(A)(iii)(II).

³⁹⁸ *Balancing Wildlife Protection and Responsible Pesticide Use: How EPA's Pesticide Program Will Meet its Endangered Species Act Obligations* at 21.

³⁹⁹ *Id.*

⁴⁰⁰ *Id.*

⁴⁰¹ United States Env'tl. Protection Agency, *ESA Workplan Update: Nontarget Species Mitigation for Registration Review and Other FIFRA Actions*, 6 (2022), <https://www.epa.gov/system/files/documents/2022-11/esa-workplan-update.pdf>.

⁴⁰² *Balancing Wildlife Protection and Responsible Pesticide Use: How EPA's Pesticide Program Will Meet its Endangered Species Act Obligations* at 9.

⁴⁰³ *Id.*

⁴⁰⁴ *Id.*

The workplan released by EPA to help implement its new policy identifies four strategies that the agency will use to increase its ESA compliance, and steps EPA will take to fulfill each strategy.⁴⁰⁵ The first strategy identified by the workplan is for EPA to meet its ESA obligations for all FIFRA actions.⁴⁰⁶ To do so, EPA will prioritize its bringing its FIFRA actions into ESA compliance in the following order: actions with existing and future court-enforceable deadlines and the registrations of new conventional pesticide active ingredients; all remaining conventional pesticides up for registration review; and finally, all other FIFRA actions.⁴⁰⁷ The second strategy is for EPA to improve the way it approaches identifying and requiring ESA protections intended to address the effects of pesticides on listed species.⁴⁰⁸ According to EPA, these improvements will include: incorporating protections for listed species earlier in the FIFRA process; proactively adopting protections for species facing the greatest risk of harm from pesticides; identifying flexible options for pesticide users; coordinating species protection measures for pesticides that are used on the same crops and affect the same species; and creating opportunities to offset the residual effects on listed species through habitat restoration and other conservation measures.⁴⁰⁹ The third strategy outlined in the workplan is for EPA to improve the efficiency and timeliness of its ESA-FIFRA process by bettering its collaborations with the Services and the United States Department of Agriculture.⁴¹⁰ EPA notes that this could include assessing all pesticides intended for similar uses at the same time, and working more closely with FWS or NMFS regional staff to better incorporate more localized data on species.⁴¹¹ Finally, EPA's fourth strategy is to improve stakeholder engagement on ESA and FIFRA actions.⁴¹²

At the time of writing, it is unclear what the overall impact of EPA's new ESA-FIFRA strategy will be. It seems likely that pesticide labels could contain further restrictions that users must adhere to in order to protect listed species. It also seems likely that this new approach could increase the amount of time it takes EPA to register new pesticides and complete registration review for previously registered pesticides. On the other hand, if EPA is able to create pesticide labels that fully meet ESA requirements, then pesticide users should expect that those labels will not be as vulnerable to lawsuits and judicial review. As EPA has more time to fully implement its policy, the effects will become more clear.

⁴⁰⁵ *Id* at 38.

⁴⁰⁶ *Id* at 41.

⁴⁰⁷ *Id*.

⁴⁰⁸ *Id* at 53.

⁴⁰⁹ *Id*.

⁴¹⁰ *Id* at 61.

⁴¹¹ *Id*.

⁴¹² *Id* at 62.

b. ESA & water allocations

One of the other ways that the ESA can affect agriculture is by impacting water allocations in waterbodies where listed species are located.⁴¹³ This issue becomes more pronounced in arid regions, such as the Western United States, or during periods of drought when there is less water available for multiple uses.⁴¹⁴

In general, there are two primary methods for determining who has the right to use surface water in the United States: riparianism and prior appropriation.⁴¹⁵ Under a riparian system, the right to use surface water is typically limited to those landowners with land that is adjacent to a waterbody, otherwise known as riparian land.⁴¹⁶ A riparian water user has the right to use as much surface water as they need, so long as the water is put to a “reasonable use” and does not interfere with the reasonable use of downstream riparian users.⁴¹⁷ What is considered a reasonable use can vary from state to state, but will generally include agricultural uses.⁴¹⁸ Prior appropriation operates under the “first-in-time, first-in-right” rule which prioritizes water users depending on who was using the water first.⁴¹⁹ Generally, water users in a prior appropriation system will be required to put their water to a “beneficial use” in order to maintain their water right.⁴²⁰ Agricultural uses are typically recognized as beneficial uses.⁴²¹ In many prior appropriation states, water used for irrigation is provided to farmers by an irrigation district, a type of public corporation organized under state law to implement irrigation projects.⁴²² Irrigation districts hold water rights in order to deliver water to their irrigators.⁴²³

Riparian systems tend to be used in the Eastern United States where water is more abundant, while prior appropriation tends to be used in the Western United States which is more arid.⁴²⁴ However, some states, such as California and Oklahoma, have developed a hybrid system that uses both riparianism and prior appropriation to

⁴¹³ Michael R. Moore et. al., *Water Allocation in the American West: Endangered Fish Versus Irrigated Agriculture*, 36 Nat. Resources J. 319 (1996).

⁴¹⁴ *Id.* at 320.

⁴¹⁵ Frank J. Trelease, *Coordination of Riparian and Appropriative Rights to the Use of Water*, 33 Tex. L. Rev. 24 (1954).

⁴¹⁶ § 3:8. Justifications of riparian right, L. of Water Rights and Resources § 3:8.

⁴¹⁷ *Coordination of Riparian and Appropriative Rights to the Use of Water* at 26.

⁴¹⁸ § 3:60. Allocation—Reasonable use rule, L. of Water Rights and Resources § 3:60.

⁴¹⁹ Nisha D. Noroian, *Prior Appropriation, Agriculture and the West: Caught in A Bad Romance*, 51 Jurimetrics J. 181 (2011).

⁴²⁰ Restatement (Second) of Torts Ten 41 3 Intro. Note (1979).

⁴²¹ *Prior Appropriation, Agriculture and the West: Caught in A Bad Romance* at 183.

⁴²² *Id.* at 215.

⁴²³ *Id.*

⁴²⁴ Restatement (Second) of Torts Ten 41 3 Intro. Note (1979).

determine water rights.⁴²⁵ What remains consistent across jurisdictions is that water allocations are generally governed by states and state law with little federal intervention.⁴²⁶

Although the ESA only requires federal agencies to ensure that their actions do not put listed species in jeopardy or cause adverse modifications to critical habitat, that does not mean that state water rights are unaffected by the ESA. Any water use that results in the direct or incidental take of a listed species could fall within the statute's reach.⁴²⁷ Additionally, any water use that requires a federal permit or funding will be subject to the ESA's section 7 consultation requirements.⁴²⁸ The ESA does not directly address state water rights. However, the Act does provide that it is "the policy of Congress that Federal agencies shall cooperate with State and local agencies to resolve water resource issues in concert with conservation of endangered species."⁴²⁹

In *U.S.A. v. Glenn-Colusa Irrigation Dist.*, 788 F. Supp. 1126 (E.D. Cal. 1992), a federal court in the Eastern District of California ordered the Glenn-Colusa Irrigation District ("GCID") to stop pumping water in the Sacramento River due to on-going ESA violations.⁴³⁰ The GCID provides water to over 1000 landowner farms in the Sacramento Valley and has water rights on the Sacramento River that date back to 1883.⁴³¹ Over the course of GCID's history, it has installed various different fish screens to prevent fish, including listed salmonids, from being harmed by its operations.⁴³² In 1989, GCID applied to the United States Army Corps of Engineers ("Corps") for a permit that required ESA section 7 consultation with NMFS regarding the effects of the permit activity on listed salmon species.⁴³³ The consultation resulted in a BiOp which found that issuing the permit was likely to cause jeopardy of listed salmon, but that the harm could be avoided if GCID installed a new fish screen.⁴³⁴ The BiOp also included an incidental take statement providing an incidental take permit to GCID if an effective new fish screen were installed.⁴³⁵ Following consultation, NMFS notified GCID that without an incidental take permit, it was liable for the taking of listed salmon species

⁴²⁵ *Id.*

⁴²⁶ *Prior Appropriation, Agriculture and the West: Caught in A Bad Romance* at 190.

⁴²⁷ 16 U.S.C. § 1538(a)(1)(B). (Prohibits the "take" of any endangered or threatened species. This prohibition applies to all actions, even if they arise purely from state law.)

⁴²⁸ 16 U.S.C. § 1536(a)(2).

⁴²⁹ 16 U.S.C. § 1531(c)(2).

⁴³⁰ *U.S.A. v. Glenn-Colusa Irrigation Dist.*, 788 F. Supp. 1126, 1136 (E.D. Cal. 1992).

⁴³¹ Glenn-Colusa Irrigation District, *About Us*, GCID, (last visited Nov. 29, 2022), <https://www.gcid.net/about-us/>.

⁴³² *U.S.A. v. Glenn-Colusa Irrigation Dist.* at 1129, 1130.

⁴³³ *Id.* at 1130.

⁴³⁴ *Id.*

⁴³⁵ *Id.* at 1130, 1131.

under the ESA.⁴³⁶ GCID failed to apply for an incidental take permit, which caused the United States to file suit for ESA violations.⁴³⁷ The United States asked the court to prevent GCID from pumping water from the Sacramento River until it received an incidental take permit.⁴³⁸ Under the ESA, courts are required to enjoin any action that is in violation of the Act.⁴³⁹ Because it was undisputed that GCID was causing the take of listed species, the court granted the injunction. Additionally, the court found that the ESA should not yield to state water rights.⁴⁴⁰ According to the court:

the [ESA] provides that federal agencies should cooperate with state and local authorities to resolve water resource issues regarding the conservation of endangered species. This provision does not require, however, that state water rights should prevail over the restrictions set forth in the Act. Such an interpretation would render the Act a nullity. The Act provides no exemption from compliance to persons possessing state water rights, and thus [GCID's] state water rights do not provide it with a special privilege to ignore the [ESA]. Moreover, enforcement of the Act does not affect [GCID's] water rights but only the manner in which it exercises those rights.⁴⁴¹

The court's decision in *U.S.A. v. Glenn-Colusa Irrigation Dist.* is a good example of how the ESA can affect state water rights. Even though GCID was operating under state law, its take of listed salmon species brought it under the authority of the ESA. While GCID argued that its state law water rights should prevail, the court concluded that the ESA does not provide any exemption for possessors of state water rights. GCID was prevented from pumping water until it complied with the ESA.

While courts generally find that state water rights do not provide an exemption from ESA requirements, there are certain limitations on how the ESA may affect state water rights. In a more recent case from the Fifth Circuit Court of Appeals, the court considered whether the Texas Commission on Environmental Quality ("TCEQ") violated the ESA by issuing permits to divert water.⁴⁴² The plaintiffs in *Aransas Project v. Shaw*, 756 F.3d 801 (5th Cir. 2014), claimed that TCEQ committed a taking by issuing permits to use water which caused the deaths of several endangered whooping cranes.⁴⁴³ According to the plaintiffs, the water usage allowed by the permits coupled with drought conditions depleted the availability of water for the cranes' habitat which negatively

⁴³⁶ *Id* at 1131.

⁴³⁷ *Id.*

⁴³⁸ *Id.*

⁴³⁹ 16 U.S.C. § 1540(e)(6).

⁴⁴⁰ *U.S.A. v. Glenn-Colusa Irrigation Dist.* at 1134.

⁴⁴¹ *Id.*

⁴⁴² *Aransas Project v. Shaw*, 756 F.3d 801 (5th Cir. 2014).

⁴⁴³ *Id* at 805, 806.

impacted their food sources, ultimately leading to the deaths of multiple cranes.⁴⁴⁴ The lower court in this case agreed with the plaintiffs and issued an order prohibiting TCEQ from issuing water rights permits until they consulted with the Services.⁴⁴⁵ However, the Fifth Circuit disagreed with the lower court's conclusion. The Fifth Circuit found that TCEQ's issuance of water use permits was too far removed from the death of the whooping cranes to be the cause of the injury.⁴⁴⁶ While the permits allowed water users to make diversions of surface water that reduced the amount of freshwater available to support the ecosystem that whooping cranes rely on, the Fifth Circuit noted that other factors, such as the drought conditions, had also contributed to the reduction of freshwater.⁴⁴⁷ Ultimately, the Fifth Circuit concluded that there was both a lack of foreseeability or direct connection between TCEQ permitting and whooping crane deaths.⁴⁴⁸ Therefore, TCEQ had not violated the ESA and was not required to engage in ESA consultation before continuing with its permitting activities.⁴⁴⁹

Both *U.S.A. v. Glenn-Colusa Irrigation Dist.* and *Aransas Project v. Shaw* demonstrate how the ESA affects state water rights. The court in *U.S.A. v. Glenn-Colusa Irrigation Dist.* clearly stated that water rights are not exempt from the ESA just because they arise under state law.⁴⁵⁰ The prohibitions against taking apply to everyone, even state law water rights holders. However, the court in *Aransas Project v. Shaw* noted that there are limits to the ESA's reach. Simply issuing a permit to divert water is not enough to establish that a taking occurred. At the very least, there must be both foreseeability and a direct connection between issuing a water rights permit and the taking of a listed species for the ESA to apply.⁴⁵¹

i. The Bureau of Reclamation and the ESA

Along with the ESA impacts to water rights discussed above, water users in Western states may also be subject to ESA considerations if their water is delivered by the Bureau of Reclamation ("Reclamation"). Originally founded in 1902, Reclamation operates several large water projects in Western states, including various dams and reservoirs.⁴⁵² Because Reclamation is a federal agency, it is required to engage in ESA consultation with the Services prior to taking agency action. This includes reconsidering existing

⁴⁴⁴ *Id.* at 807.

⁴⁴⁵ *Id.* at 807, 808.

⁴⁴⁶ *Id.* at 823.

⁴⁴⁷ *Id.*

⁴⁴⁸ *Id.* at 824.

⁴⁴⁹ *Id.*

⁴⁵⁰ *U.S.A. v. Glenn-Colusa Irrigation Dist.* at 1134.

⁴⁵¹ *Aransas Project v. Shaw* at 817. ("Proximate cause and foreseeability are required to affix liability for ESA violations.")

⁴⁵² Glenn-Colusa Irrigation District, *About Us*, GCID, (last visited Nov. 29, 2022), <https://www.gcid.net/about-us/>.

contracts to deliver water, and reviewing existing water supply projects that have the potential to jeopardize listed species.⁴⁵³ Along with ensuring that its actions do not jeopardize listed species, Reclamation must also ensure that its actions do not adversely modify critical habitat.⁴⁵⁴ Over the years, courts have defined the extent of Reclamation's responsibilities under the ESA.⁴⁵⁵ Routinely, courts have concluded that ESA requirements will trump Reclamation's commitments to supply water when there is insufficient water available for both endangered species protection and other uses.⁴⁵⁶

Just a little over a decade after the ESA was originally adopted, the Ninth Circuit Court of Appeals considered whether the ESA required Reclamation to operate a reservoir in such a way that conservation of two listed fish species was given priority over agricultural and municipal water use.⁴⁵⁷ In *Carson-Truckee Water Conservancy Dist. v. Clark*, 741 F.2d 257 (9th Cir. 1984), the court noted that section 7 of the ESA requires federal agencies to prevent putting listed species into jeopardy, and to carry out programs for the conservation of listed species.⁴⁵⁸ The court concluded that section 7 of the ESA directs federal agencies to actively pursue species conservation.⁴⁵⁹ Therefore, the court found that the text of the ESA supported Reclamation's decision to manage the reservoir so that priority was given to the listed fish species over other uses.⁴⁶⁰

Carson-Truckee Water Conservancy Dist. v. Clark involved Reclamation's decision regarding the overall management of a reservoir. In *O'Neil v. United States*, 50 F.3d 677 (9th Cir. 1995), the Ninth Circuit considered whether an existing water contract between Reclamation and a water user obligated Reclamation to meet the full contractual amount of water when doing so would violate the ESA.⁴⁶¹ Ultimately, the court found that Reclamation had no such obligation.⁴⁶² If delivering the full contractual amount of water would violate the ESA by putting a listed species in jeopardy, Reclamation would not be required to supply the full amount.⁴⁶³

As the case law demonstrates, Reclamation's legal obligations to comply with the ESA has the potential to impact water allocations made for non-conservation purposes. This

⁴⁵³ *Natural Resources Defense Council v. Houston*, 146 F.3d 1118 (9th Cir. 1998); *Pacific Coast Federation of Fishermen's Associations v. U.S. Bureau of Reclamation*, 138 F.Supp. 2d 1228 (N.D. Cal. 2001).

⁴⁵⁴ 16 U.S.C. § 1536(a)(2).

⁴⁵⁵ Reed D. Benson, *Dams, Duties, and Discretion: Bureau of Reclamation Water Project Operations and the Endangered Species Act*, 33 Colum. J. Envtl. L. 1, 12 (2008).

⁴⁵⁶ *Id.* at 13.

⁴⁵⁷ *Carson-Truckee Water Conservancy Dist. v. Clark*, 741 F.2d 257 (9th Cir. 1984).

⁴⁵⁸ *Id.* at 261.

⁴⁵⁹ *Id.* at 262.

⁴⁶⁰ *Id.*

⁴⁶¹ *O'Neil v. United States*, 50 F.3d 677, 680 (9th Cir. 1995).

⁴⁶² *Id.*

⁴⁶³ *Id.* at 688, 689.

can be especially true during times of intense drought. In 2021, the West Coast of the United States experienced historic drought conditions.⁴⁶⁴ The conditions were particularly bad in Southern Oregon and Northern California where the Klamath River Basin is located.⁴⁶⁵ The basin includes Reclamation's Klamath Project, which delivers irrigation water to approximately 230,000 acres of farmland located in both Oregon and California.⁴⁶⁶ The Klamath Project has a history of conflicts associated with water deliveries.⁴⁶⁷ Along with providing water for agricultural uses, the Klamath Project also supplies water to nearby wildlife refuges which provide habitat for three listed fish species.⁴⁶⁸ Because listed species rely on water from the Klamath Project, Reclamation operates the Project according to recent Biological Opinions ("BiOps") which contain limitations meant to prevent the species from becoming jeopardized.⁴⁶⁹ In 2021, the drought conditions were so severe that Reclamation announced it would be unable to operate the Klamath Project in a manner consistent with its BiOps which require Reclamation to maintain a certain minimum level of water to protect the listed fish species.⁴⁷⁰ Releasing any water from the Klamath Project for other purposes would have made it effectively impossible for Reclamation to maintain the minimum levels required by the ESA.⁴⁷¹ Therefore, the agency decided not to release any water from the Klamath Project during 2021.⁴⁷² While this decision was in line with ESA requirements, it presented a significant hardship to farmers who rely on water from the Klamath Project.

c. Proactive Species Conservation: The Monarch Butterfly

When considering how agriculture and the ESA affect one another, there is a general idea that the two are always in conflict. That assumption is far from the truth. The goal of the ESA is to enable species and habitat conservation. Agriculture can be a powerful tool for achieving that goal. Along with managing land to help conserve already listed species, farmers and ranchers can play a key role in helping to prevent species from being added to the list of Threatened and Endangered Species. Doing so furthers the ESA's overall conservation goals, and reduces agricultural regulation.

⁴⁶⁴ Rachel Ramirez, *The drought in California this summer was the worst on record*, CNN (Nov. 22, 2021), <https://www.cnn.com/2021/10/14/us/california-summer-drought-worst-on-record/index.html>.

⁴⁶⁵ Sage Van Wing, et al., *Conversations about drought in the Klamath Basin*, OPB (Nov. 22, 2021), <https://www.opb.org/article/2021/07/26/conversations-drought-in-klamath-basin/>.

⁴⁶⁶ U.S. Congressional Research Service. *Drought in the Klamath River Basin* (IN11689; June 8, 2021). Text in: CRS Web; Accessed: November 22, 2021, https://www.everycrsreport.com/files/2021-06-08_IN11689_1bda2c8e4c91ead375650781c605cfaba869d3d1.pdf.

⁴⁶⁷ *Id.* at 3.

⁴⁶⁸ *Id.* at 2.

⁴⁶⁹ *Id.* at 3.

⁴⁷⁰ *Id.*

⁴⁷¹ *Id.*

⁴⁷² Bureau of Reclamation. (2021, May 12). *Extreme drought conditions force closure of Klamath Project's "A" Canal* [Press release]. <https://www.usbr.gov/newsroom/#/news-release/3850>.

A recent example of agriculture taking part in proactive species conservation is the case of the monarch butterfly. The monarch butterfly is a large, orange and black butterfly that is known for migrating back and forth between Canada and Mexico, where its populations overwinter.⁴⁷³ There are two populations of monarch butterfly, an Eastern one with a migratory path that covers much of the Midwest, and a Western one located west of the Rocky Mountains.⁴⁷⁴ Both populations depend on milkweed, the monarch butterfly's host plant and sole source of food, for survival.⁴⁷⁵ Over the past several decades, both the Eastern and Western monarch butterfly populations have experienced a steep decline.⁴⁷⁶ Some estimates suggest that the Eastern population of monarchs has dropped by 90 percent since 1995.⁴⁷⁷

In 2014, a coalition of environmental groups submitted to FWS a petition to list the monarch butterfly under the ESA.⁴⁷⁸ In their petition, the groups identified loss of milkweed habitat as the main threat to the monarch butterfly.⁴⁷⁹ They also stated that use of pesticides such as glyphosate, dicamba, and 2,4-D was one of the main reasons that milkweed was in decline.⁴⁸⁰ After receiving a listing petition, FWS has 90 days to determine whether listing “may be warranted.”⁴⁸¹ If FWS makes that conclusion, then it has twelve months to gather information and make a final listing decision.⁴⁸² Following submission of the 2014 petition to list the monarch, FWS determined within the 90-day window that listing may be warranted.⁴⁸³ However, it then failed to make a final listing decision within twelve months.⁴⁸⁴ The delay prompted the environmental groups who had submitted the petition to file a lawsuit against FWS seeking to compel a legally binding deadline by which the final listing decision would have to be made.⁴⁸⁵ That case, *Ctr. for Food Safety v. Jewell*, No. 4:16-cv-00145 (D. Ariz. March 3, 2016), was ultimately settled after all parties agreed that FWS would make a final listing decision

⁴⁷³ U.S. Fish & Wildlife Serv., *Monarch Butterfly Fact Sheet*, FWS, (last visited Nov. 22, 2021), [https://www.fws.gov/uploadedFiles/MonarchfactsheetSept152014%20\(1\).pdf](https://www.fws.gov/uploadedFiles/MonarchfactsheetSept152014%20(1).pdf).

⁴⁷⁴ *Id.*

⁴⁷⁵ *Id.*

⁴⁷⁶ *Id.*

⁴⁷⁷ *Id.*

⁴⁷⁸ Center for Biological Diversity, et al. (2014). “Petition to Protect The Monarch Butterfly (*Danaus Plexippus Plexippus*) Under The Endangered Species Act.” <https://afbeducation.org/wp-content/uploads/2015/01/monarch-esa-petition.pdf>.

⁴⁷⁹ *Id.* at 7.

⁴⁸⁰ *Id.* at 8.

⁴⁸¹ 16 U.S.C. § 1533(b)(3)(A).

⁴⁸² 16 U.S.C. § 1533(b)(3)(B).

⁴⁸³ Complaint at 3, *Ctr. for Food Safety v. Jewell*, No. 4:16-cv-00145 (D. Ariz. March 3, 2016).

⁴⁸⁴ *Id.*

⁴⁸⁵ *Id.*

for the monarch butterfly by June 30, 2019, although a later agreement extended the date to December 15, 2020.⁴⁸⁶

Since the monarch butterfly became a candidate for listing, efforts have been underway to conserve monarch habitat, and boost monarch populations in the hopes of preventing it from being listed.⁴⁸⁷ Much of these efforts have been voluntary, and have ranged from small scale efforts by individual landowners to projects that span across various states and involve several different state agencies all working together.⁴⁸⁸

From the beginning, agriculture played an important role in monarch butterfly conservation efforts. For example, in Iowa various agricultural groups such as the Iowa Farm Bureau Federation, and Iowa Cattlemen’s Association, came together with other community members and Iowa State University to form the Iowa Monarch Conservation Consortium (“the Consortium”).⁴⁸⁹ The mission of the Consortium is to “enhance monarch butterfly reproduction and survival in Iowa through collaborative and coordinated efforts of farmers, private citizens and their organizations.”⁴⁹⁰ The Consortium developed the Iowa Monarch Conservation Strategy, which provided “the information and resources needed to sustain and advance monarch butterfly conservation,” and put agriculture at the center of its approach.⁴⁹¹ Voluntary conservation efforts identified by the Iowa Monarch Conservation Strategy include: resources in farm bill programs to establish monarch habitat; establishing monarch habitat on farms in projects sponsored by the Consortium; using monarch-friendly weed management in ditches, roadsides, and other rights-of-way; and establishing monarch way stations in community gardens.⁴⁹² The Iowa Monarch Conservation Strategy recognizes that agriculture plays a key role in monarch butterfly conservation due to the potential for underutilized areas to be managed in a way that could increase monarch habitat without conflicting with agricultural production.⁴⁹³

⁴⁸⁶ U.S. Fish & Wildlife Serv., *Questions and Answers: Extension of deadline for 12-month finding on petition to list the monarch butterfly under the Endangered Species Act*, FWS, (last visited Nov. 23, 2021), https://www.fws.gov/savethemonarch/extension_faqs.html.

⁴⁸⁷ U.S. Fish & Wildlife Serv. (2020, December 15). *U.S. Fish and Wildlife Service Finds Endangered Species Act Listing for Monarch Butterfly Warranted but Precluded* [Press release]. https://www.fws.gov/news/ShowNews.cfm?_ID=36817.

⁴⁸⁸ *Id.*

⁴⁸⁹ Iowa Monarch Conservation Consortium, *Consortium Members*, Iowa State University, (last visited Nov. 23, 2021), <https://monarch.ent.iastate.edu/consortium-members>.

⁴⁹⁰ Iowa Monarch Conservation Consortium, *About the Iowa Monarch Conservation Consortium*, Iowa State University, (last visited Nov. 23, 2021), <https://monarch.ent.iastate.edu/about-iowa-monarch-conservation-consortium>.

⁴⁹¹ The Iowa Monarch Conservation Consortium, *Conservation Strategy for the Eastern Monarch Butterfly (Danaus plexippus) in Iowa* 8 (2018), <https://monarch.ent.iastate.edu/files/file/iowa-monarch-conservation-strategy.pdf>

⁴⁹² *Id.*

⁴⁹³ *Id.* at 41.

On December 15, 2020, FWS announced its listing decision for the monarch butterfly.⁴⁹⁴ Ultimately, FWS concluded that adding the monarch butterfly to the list of threatened and endangered species is “warranted but precluded by higher priority actions.”⁴⁹⁵ Essentially, FWS concluded that the monarch butterfly was a candidate for listing under the ESA, but that there were other species which FWS identified as higher priorities for listing. FWS will focus on using its resources to list those higher priority species, and will review the status of the monarch butterfly each year to determine whether it should remain a candidate.⁴⁹⁶ Although this is not the same as a finding that the monarch butterfly should not be listed under the ESA at all, it is a finding that concludes that while the monarch butterfly should be listed, it does not need to be listed immediately. In a press release accompanying its decision, FWS highlighted the voluntary conservation work and its role in restoring monarch habitat.⁴⁹⁷

While the monarch butterfly could still be listed under the ESA, the situation also demonstrates how agriculture can play a key role in species conservation.

VII. Conclusion

Any agricultural producer or private landowner who works in an area where threatened or endangered species are present should be familiar with the ESA and how it operates. The decades-old statute is critical to wildlife conservation in the United States, but can impact agriculture through limitations on both federal and private land use. Familiarity with the statute’s provisions, and the programs offered to private land owners by FWS and NMFS can help producers avoid ESA violations while also helping to forward wildlife conservation.

⁴⁹⁴ Endangered and Threatened Wildlife and Plants; 12-Month Finding for the Monarch Butterfly, 85 Fed. Reg. 81,813 (December 17, 2020), <https://www.govinfo.gov/content/pkg/FR-2020-12-17/pdf/2020-27523.pdf>.

⁴⁹⁵ *Id.* at 81,813.

⁴⁹⁶ *Id.*

⁴⁹⁷ *U.S. Fish and Wildlife Service Finds Endangered Species Act Listing for Monarch Butterfly Warranted but Precluded.*