

## 3.3 The Endangered Species Act

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### Introduction

The goal of the Endangered Species Act (ESA) is to protect and recover species that are endangered or threatened to the point where protection under the ESA is no longer necessary. This requires the removal or reduction of threats to the species and the ecosystems on which they depend. Control of native and nonnative nuisance aquatic vegetation, even when the intent is to improve aquatic habitat, can result in harm to ESA-listed species and trigger the need for careful planning and permitting under the ESA. This section first provides an overview of how species and habitats are protected under the ESA, then discusses how to pursue aquatic vegetation control activities in compliance with the ESA.

### Listing species as endangered or threatened species and designating critical habitat

The United States Fish and Wildlife Service (USFWS) and National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries) (taken together: the Services) share responsibility for implementing the ESA. The Services identify those species that need protection, or “listing”, under the ESA based on the best available scientific and commercial data. Species are listed through a rulemaking process that invites public input. The Services encourage protection of candidate species or species of concern through proactive conservation programs to educate the public, stimulate research to fill information gaps and foster voluntary efforts to conserve species before they require listing.

Generally, the USFWS is responsible for terrestrial and freshwater species while NOAA Fisheries is responsible for most marine species and fish species that use both marine and freshwaters (e.g., Pacific salmonids, Atlantic sturgeon). The USFWS does have jurisdiction for certain marine mammal species, including walrus, sea otters, manatees and polar bears. The Services also share responsibility for certain species such as sea turtles, which nest on land, and some fish species that use both marine and freshwater habitats (Atlantic salmon and Gulf sturgeon, for example). At the time of this writing, approximately 1,600 species that occur within the US (including US territories and the Commonwealth of the Northern Marianas) are listed as endangered or threatened under the ESA.

The ESA requires that listing determinations be based solely on the best scientific and commercial information available. Other factors, including economic impacts, cannot be considered when making species listing determinations under the ESA. Critical habitat is designated, to the maximum extent prudent and determinable, concurrently with the species' listing. Unlike the listing determination, economic impacts, national security impacts and any other relevant impacts are considered when designating critical habitat.

Section 9 of the ESA prohibits the “take” of listed species and Section 4(d) allows for protective regulations, including the application of Section 9 take prohibitions for threatened species. “Harm” is defined by a 1999 modification to the regulations by both Services as any act which actually kills or injures fish or wildlife, and emphasizes that such acts may include significant habitat modification or degradation that significantly impairs essential behavioral patterns of fish or wildlife. Take resulting from a pesticide application includes potentially adverse impacts to a listed species in the area where physical, chemical and biological changes may occur as a result of that application, not just the immediate footprint of the application.

### Complying with the Endangered Species Act

The ESA Section 9 prohibition on take applies to all individuals, organizations and agencies subject to United States jurisdiction. However, there are two mechanisms in the ESA where take may be exempted or authorized. A Section 10 incidental take permit may be sought by a non-federal entity for take of ESA-protected species resulting incidental to, but not for the purpose of, carrying out the covered activity. Permits are not required for activities that are authorized, funded or undertaken by a federal agency when take has been evaluated through Section 7 consultation and described in the Incidental Take Statement of a Biological Opinion (see below).



Staff at the Services field and regional offices will provide technical assistance in determining whether an aquatic plant control effort may result in take of ESA-protected species and identify ways to prevent or minimize take so that a permit may be granted. If take of some USFWS and some NOAA Fisheries species may occur, a permit will be required from each agency to cover take of species under their respective jurisdictions. The types of permits a non-federal entity may apply for include:

**Permits for scientific research or enhancement of the survival of an ESA-listed species.** Permits issued under Section 10(a)(1)(A) of the ESA are for activities resulting in intentional take that involve research designed to increase our knowledge of an ESA-listed species or activities that increase survival through reducing threats, improving habitat or a breeding program. Enhancement of survival permits are issued by the Services to non-federal landowners participating in Safe Harbor Agreements or Candidate Conservation Agreements with Assurances. These agreements encourage landowners to take actions to benefit species while also providing assurances that they will not be subject to additional regulatory restrictions as a result of their conservation actions. Section 10(a)(1)(A) permits issued by the USFWS also include recovery and interstate commerce permits. Recovery permits allow for take as part of activities intended to foster the recovery of listed species, including research to better understand the species' long-term survival needs, whereas interstate commerce permits issued by the USFWS allow transport and sale of listed species across state lines for purposes such as a breeding program.

**Incidental take permits** are issued by the Services under Section 10(a)(1)(B) of the ESA. If a non-federal entity believes their otherwise lawful activities may result in take of endangered or threatened species, they may choose to apply for an incidental take permit and develop a Habitat Conservation Plan (HCP). An applicant is required to develop a HCP as part of their incidental take permit application to demonstrate how they will meet the permit issuance criteria. For instance, the HCP typically describes the covered activity, impacts to the species, minimization and mitigation measures, funding assurances and plans for monitoring the effectiveness of the HCP.

If aquatic vegetation control activities will occur in waters occupied by ESA-listed species and no other federal permits are required, consult the appropriate NMFS or USFWS field office for assistance and guidance before choosing to seek an incidental take permit. Other permits may be appropriate for efforts that are intended to restore or improve habitat used by ESA-listed species.

### **Permits for scientific research or enhancement of survival**

Enhancement of survival permits are provided to non-federal landowners who have entered into Safe Harbor or Candidate Conservation Agreements with Assurances. In a Safe Harbor Agreement, the landowner agrees to maintain, create, restore or improve habitat for endangered or threatened species. Working with the landowner, the Services will establish a baseline condition for each species and determine whether the proposed actions will result in a net conservation benefit. The landowner may then incidentally take listed species, as long as baseline conditions are maintained. Taking below the baseline is sometimes permitted if the taking does not have a significant adverse effect on the baseline and is likely to provide a long-term benefit on the baseline.

A Candidate Conservation Agreement with Assurances is a formal agreement between the Services and one or more parties to address the conservation needs of proposed or candidate species (or species likely to become candidates) before they become listed as endangered or threatened. Landowners voluntarily commit to conservation actions that will help stabilize or restore the species with the goal that listing will become unnecessary. If the conservation actions are not sufficient to prevent ESA-listing of the species, the Agreement automatically becomes a permit authorizing the landowner incidental take of the species. Thus, the agreements provide landowners with assurances that their conservation efforts will not result in future regulatory obligations in excess of those they adopt at the time they enter into the Agreement. The Agreement also provides an avenue to potential federal or state cost-share programs for those landowners who want to conserve the species or want to manage habitat on their land.

### **Incidental take permits**

To avoid potential violation of Section 9 of the ESA, a non-federal entity may voluntarily apply for an incidental take permit in cases where their actions may result in take that is incidental to, and not the purpose of, an otherwise lawful activity. It is up to the party responsible for a planned activity to decide whether to seek an incidental take permit. If an

incidental take permit is not obtained and take occurs, the responsible party is liable for that take under the enforcement provisions of the ESA.

Before deciding to pursue an incidental take permit, a prospective applicant should request assistance from the appropriate NMFS or USFWS field office because there are many options for applicants to consider. Once they decide to seek a permit, the applicant should allow adequate time to complete an application and develop the HCP. It is important to fill out the entire application to provide a complete description of the planned activity. For example, if a section of the permit form is not applicable to a proposed activity, the applicant will need to explain why the section is not applicable on the form. Once an application is submitted, the Services may request additional information. The Services cannot process an application until all required information is provided.

Once an application for an incidental take permit has been accepted, it will be posted on-line and a notice soliciting public comment within a 30-day period is published in the Federal Register. The Services review comments submitted by the public and provide the permit applicant the opportunity to respond to substantive comments. The decision to issue or deny a permit is based on the permit application, public and expert comments, the permit applicant's responses to those comments and the environmental analyses of the requested activities. Once a permit is issued, it is valid until the specified expiration date. All permits require annual reports on incidental take and some permits require additional reporting.

Incidental take permit applications must include a conservation plan or an HCP. HCPs can provide for partnerships between the Services and non-federal parties to conserve the ecosystems upon which listed species depend, ultimately contributing to their recovery. An HCP is designed to offset the harmful effects a proposed activity might have on listed species and provide additional conservation benefits. It also provides flexibility for the landowner by including planning for unlisted species and species that are proposed for listing under the ESA. This proactive approach advances the goals of the ESA by possibly preventing the need to list a species. It also can be effective in moderating future conflicts by fostering strong partnerships.

In order to obtain a permit, the applicant's application and HCP must meet the following permit issuance criteria by demonstrating that:

- i) the taking will be incidental;
- ii) the applicant will, to the maximum extent practicable, minimize and mitigate the impacts of the taking;
- iii) the applicant will ensure that adequate funding for the plan will be provided;
- iv) the taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild; and
- v) other necessary measures will be met.

To accomplish the above, an HCP must include a sufficient description of the anticipated impact of the proposed activity on ESA-listed species and its habitat. This includes:

- the estimated number of animals of the listed species and, if applicable, the subspecies or population group and range;
- the type of anticipated taking, such as harassment, predation, competition for space and food, etc.;
- the effects of the take on the listed species, such as descaling, altered spawning activities, potential for mortality, etc.;
- the anticipated impact of the proposed activity on the habitat of the species; and
- the likelihood of restoration of the affected habitat.

The HCP needs to identify the steps that will be taken to monitor, minimize and mitigate such impacts, including detailed monitoring plans, specialized equipment, methods of conducting activities or other means along with the funding available to implement measures taken to monitor, minimize and mitigate impacts. The HCP also needs to identify the alternative actions that would result in less take or no take that were considered and the reasons why those alternatives are not being used. A list of all sources of data and personal communications with recognized experts used in preparation of the plan must be included with the HCP.

### **Working with federal agencies**

Under Section 7 of the ESA, any federal agency proposing to authorize, fund or carry out an action that may affect ESA-listed species is required to consult with the Services. Since the outcome of Section 7 consultations can affect the activities of non-federal entities working for or with a federal agency or seeking authorization or funding from a federal agency, the federal agency is responsible for determining the status of that entity as an “Applicant” under Section 3(13) of the ESA. As an Applicant, the non-federal participant associated with the federal action has the opportunity to submit information for consideration in the consultation, review and comment on biological opinion drafts, contribute to the development of Reasonable and Prudent Alternatives (if needed) and reject extensions of the consultation period greater than 60 days.

During consultation, the Services determine whether the proposed action is likely to jeopardize the continued existence of ESA-protected species or adversely modify designated critical habitat. If the activity is likely to jeopardize a species or adversely modify designated critical habitat, the Services prescribe Reasonable and Prudent Alternatives to the proposed action to prevent jeopardy and adverse modification or destruction of designated critical habitat. If the action is likely to adversely affect, but not jeopardize species or adversely modify or destroy designated critical habitat, the Services prescribe Reasonable and Prudent Measures to reduce take incidental to the action. These prescriptions are mandatory if the action is to proceed in compliance with the ESA. The analyses that support these requirements are documented in Biological Opinions issued in completion of Section 7 consultation.

### **Summary**

The control of aquatic plants in waters where ESA-protected species and habitats occur may require permitting under Section 10 of the ESA or an exemption from the take prohibitions through an Incidental Take Statement issued pursuant to an ESA Section 7 consultation between the Services and a federal agency. Technical assistance from the Services will help determine whether take of ESA-listed resources may occur and identify ways to minimize or avoid take. It is up to the party responsible for a control activity to obtain the necessary permits or exemptions when take is anticipated. Incidental take permits issued to non-federal entities can cover take that occurs during aquatic plant control activities that are lawful, but not conducted to conserve ESA-protected resources. Enhancement of survival permits provide for safe harbor and candidate conservation agreements with assurances protecting the rights of landowners who are pursuing aquatic plant control activities intended to advance conservation of ESA-listed species. When working for or with a federal agency, take coverage is specified in the Incidental Take Statement of a Biological Opinion documenting an ESA Section 7 consultation between the federal agency and the Services.

### **For more information**

More information on the ESA and ESA-protected species and habitats is available online at:

<https://www.fws.gov/endangered/index.html> and  
<https://www.fisheries.noaa.gov/topic/endangered-speciesconservation>

While these sites include resources that help determine whether ESA-protected species are in your planned pesticide application area, it is always a good idea to check with local USFWS or NOAA Fisheries biologists during the planning phase for any aquatic plant control activity.



### Are USFWS ESA-listed species or designated critical habitat present?

Use the Information for Planning and Consultation tool (IPaC, <https://ecos.fws.gov/ipac/>) to identify whether ESA-protected species and critical habitat under jurisdiction of USFWS may be present or affected by work in your application area. While IPaC provides valuable information, in many cases it is still beneficial and, for federal agency actions, necessary (unless otherwise specified in your IPaC documents) to contact USFWS offices directly (<https://www.fws.gov/offices/index.html>). For example, while IPaC may provide project design recommendations and conservation measures that are likely to reduce the potential impacts of proposed activities, USFWS staff can provide additional and more specific recommendations for your particular project.



### US Fish and Wildlife Service Regions:

**Region 1 – Pacific:** <http://www.fws.gov/pacific/ecoservices/endangered/>

**Region 2 – Southwest:** <http://www.fws.gov/southwest/es/>

**Region 3 – Midwest:** <http://www.fws.gov/midwest/endangered/>

**Region 4 – Southeast:** <http://www.fws.gov/southeast/endangered-species-act/>

**Region 5 – Northeast:** <http://www.fws.gov/northeast/endangered/>

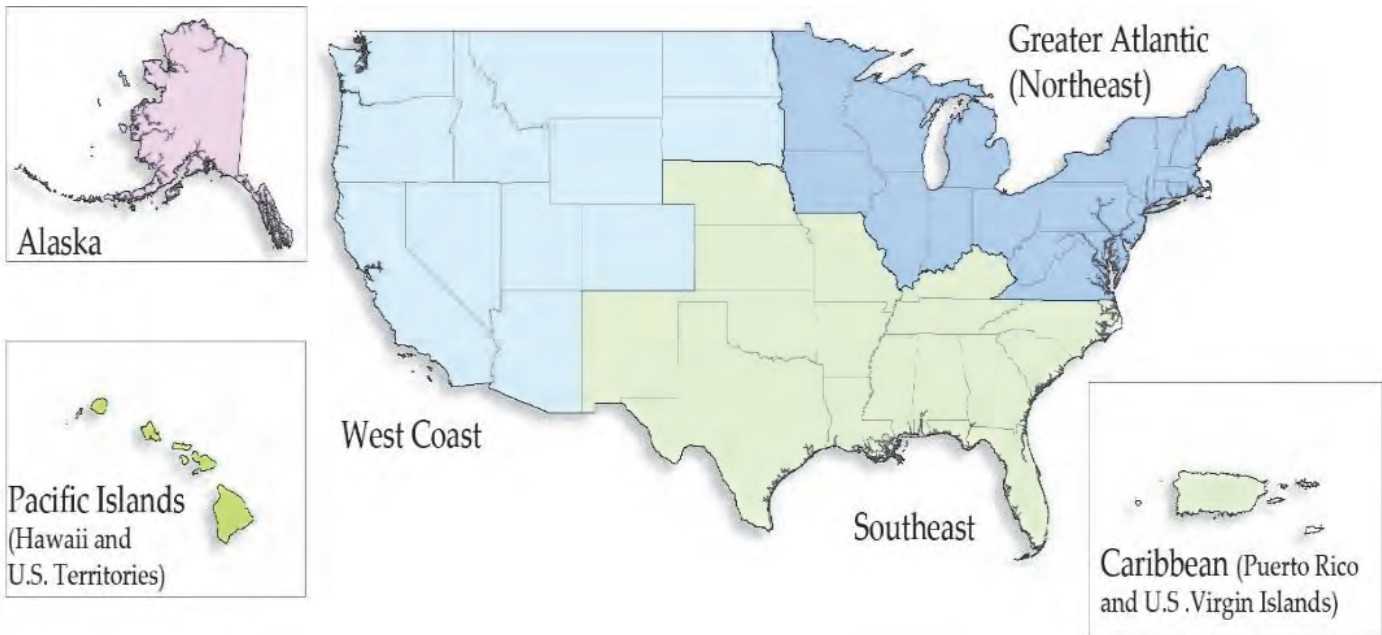
**Region 6 – Mountain-Prairie:** <https://www.fws.gov/mountain-prairie/es/endangered.php>

**Region 7 – Alaska:** <http://alaska.fws.gov/fisheries/endangered/>

**Region 8 – Pacific Southwest:** <http://www.fws.gov/cno/>

## Are NOAA Fisheries ESA-listed species or designated critical habitat present?

Contact the local regional NOAA Fisheries office to find out whether ESA-protected species or habitat under NOAA fisheries' jurisdiction occurs in your application area. The NOAA Fisheries' species and habitat protected under the ESA occur in marine and fresh waters of coastal states, the Snake River Basin of Idaho, and marine waters of the Pacific and Caribbean islands.



### NOAA Fisheries Regions:

**Alaska:** <https://www.fisheries.noaa.gov/alaska/marine-mammal-protection/protecting-marine-life-alaska> (marine mammals, sea turtles)

**Pacific Islands:** <https://www.fisheries.noaa.gov/pacific-islands/marine-mammal-protection/protecting-marineanimals-pacific> (marine mammals, marine fish, coral, sea turtles)

**West Coast:** <https://www.fisheries.noaa.gov/west-coast/about-us/protecting-marine-life-west-coast> (Pacific salmonids and other anadromous species in marine and inland waters, marine mammals, marine fish, abalone, sea turtles)

**Greater Atlantic Region:** <https://www.fisheries.noaa.gov/new-england-mid-atlantic/marine-mammal-protection/protecting-marine-life-new-england-mid-atlantic> (Atlantic salmon in marine waters, anadromous sturgeon in marine waters and major rivers, marine mammals, marine fish, sea turtles)

**Southeast Region and Caribbean:** <https://www.fisheries.noaa.gov/southeast/endangered-species-conservation/esa-section-7-interagency-consultation-southeast-united-states> (anadromous sturgeon in marine waters and major rivers, marine mammals, marine fish, coral, sea turtles)