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Experimental Populations Under the Endangered Species Act

Section 10(j) of the Endangered Species Act (ESA; 16 U.S.C. §§ 1531 et seq.) allows for the establishment of experimental populations of endangered or threatened species listed under the act and delineates how they are to be regulated. Congress added Section 10(j) to the ESA as part of the Endangered Species Act Amendments of 1982. The amendments gave the U.S. Fish and Wildlife Service (FWS) and National Marine Fisheries Service (NMFS) (together, the Services) more flexibility to determine how to protect and manage experimental populations, and they altered certain agency consultation requirements for nonessential experimental populations.

With certain exceptions, experimental populations are treated as threatened species under the ESA regardless of the designation of the listed species generally. This treatment allows the Services to tailor the protections and exceptions that apply to the population, providing for flexible management while contributing to the conservation of the species.

The Services have established more than 60 experimental populations for many kinds of species. Examples include the gray wolf, grizzly bear, black-footed ferret, California condor, Chinook salmon, Anthony's riversnail, and American burying beetle. Two experimental populations of gray wolf that were released in Idaho, Montana, and Wyoming in the mid-1990s eventually allowed the resultant distinct population segment to be delisted through administrative and legislative action.

This In Focus describes the criteria and process for establishing and regulating 10(j) experimental populations.

Experimental Population Criteria

Section 10(j) authorizes the Secretary of the Interior or of Commerce, as delegated to FWS or NMFS, respectively, to release endangered or threatened species into the wild outside the current range of the species, provided the Services determine that the release will contribute to the conservation of the species. *Experimental populations* must be wholly separate geographically from any non-experimental populations of the species. The Services have each enacted regulations to implement Section 10(j).

Outside the Species' Current Range

Section 10(j) requires that the Services release experimental populations outside the species' current range. FWS regulations further require the experimental population to be released into "suitable natural habitat." In addition, FWS generally requires that when an experimental population is to be released outside the species' *historical* range, FWS consider any possible adverse effects on the ecosystem from the release.

Wholly Separate Geographically

The Services' regulations provide that the geographic separation between the released population and existing populations must be "reasonably predictable." For example, fixed migration patterns or natural or manmade barriers between the populations may create sufficiently predictable separation. When making this determination, the Services focus on the population as a whole rather than individuals within the population. Individuals from an experimental population that venture into an area of overlap with the non-experimental population are not recognized as part of the experimental population while they are intermixed with a non-experimental population.

Contribution to the Conservation of the Species

The ESA requires that the establishment of an experimental population must contribute to the conservation of the listed species. The Services must consider whether removing individuals from existing populations to establish the experimental one will adversely affect those populations. They must also consider whether the experimental population is likely to survive for the foreseeable future and meet population goals. The agencies must further examine the anticipated effects that establishing an experimental population will have on the species' recovery. Finally, the Services must determine whether and to what extent existing or anticipated federal or state actions or private activities may be affected by establishing an experimental population. Each factor must be determined based on the best commercial and scientific data available.

Designation as Essential or Nonessential

When the Services designate an experimental population, Section 10(j) of the ESA also requires that they determine whether the experimental population is "essential to the continued existence" of the species. The Services designate such experimental populations as *essential experimental populations* and all others as *nonessential experimental populations*. These determinations are made based on the "best available information." Pursuant to their regulations, the Services consider an experimental population to be essential if losing the population would likely "appreciably reduce the likelihood" of the species surviving in the wild. To date, no experimental population has been designated as essential.

Implications of Designation

In general, even if a species is listed as endangered, experimental populations of that species are treated as threatened species under the statute. The prohibitions in Section 9 of the ESA, such as on importing or exporting species, automatically apply to endangered species, but they only apply to threatened species (and, by extension, experimental populations) if provided by regulation. When

the Services extend Section 9 prohibitions to experimental populations, those regulations are referred to as *10(j) rules*.

For threatened species, the Services must designate critical habitat to the maximum extent prudent and determinable. Critical habitat generally consists of habitat that is essential to the conservation of the species. Section 10(j) allows the Services to designate critical habitat for *essential* experimental populations but precludes such designations for *nonessential* experimental populations.

ESA Section 7 (16 U.S.C. § 1536) generally requires federal agencies to *consult* with the Services when their actions may affect endangered or threatened species. Under Section 10(j), however, *nonessential* experimental populations are generally subject instead to the Section 7 requirements that apply to species that are *proposed to be listed*. For proposed species, Section 7 requires federal agencies to *confer* with the Services about actions that may affect the species, which is a more informal process than consultation that allows the agency to proceed with its action in the meantime and results in only advisory recommendations about minimizing adverse effects to the species. For proposed actions within the National Park System or the National Wildlife Refuge System, Section 7 applies to nonessential experimental populations as it would to threatened species.

Process for Designating Experimental Populations and Crafting 10(j) Rules

The Services establish experimental populations and protections for those populations through the federal rulemaking process. Federal agency rulemaking procedures are largely governed by the Administrative Procedure Act (APA). The Services' designations and 10(j) rules are thus governed primarily by requirements established in the ESA, implementing regulations, and the APA.

Issuing Designation and 10(j) Rules

To designate an experimental population, the Service first publishes a proposed rule providing notice of its intent to designate an experimental population, its proposed designation of essential or nonessential, and any proposed 10(j) rule for the population.

The Services' regulations require the agencies to consult with relevant state fish and wildlife agencies and local governmental entities, as well as affected federal agencies and private landowners, when developing and implementing experimental population regulations. This consultation process may involve holding public meetings. Likewise, the APA requires the Services to provide an opportunity for the public to comment on the proposal. After considering any public comments, the Service may choose to complete the rulemaking process by publishing a final rule. The final rule must provide a reasoned justification supporting the agency's action, including responses to significant comments.

The Services' regulations require rules establishing experimental populations to include certain information in addition to demonstrating that the released population meet the statutory criteria. The rule must provide a means to

identify the experimental population, such as specifying the proposed location or anticipated migration. It must identify any special management concerns, such as management restrictions or protective measures to isolate or contain the population from the rest of the species. It must also create a process for periodic evaluation of how effective the experimental population is at conserving the species.

For an essential experimental population, the agency may also designate critical habitat. The Service may also choose to implement a 10(j) rule or designate critical habitat as part of the rule establishing the experimental population or through a separate rulemaking process.

Judicial Review of Designation and 10(j) Rules

Both the ESA and the APA provide a basis for judicial review of the Services' final designation and 10(j) rules for experimental populations, depending on the plaintiffs' particular allegations. The ESA allows citizens to sue in federal district court to enforce provisions of the ESA or its regulations. That includes suits claiming that the Services have violated Section 10(j) or challenging regulations issued under Section 10(j).

In reviewing those claims, courts apply the "arbitrary and capricious" standard contained in the APA. The ESA, however, does not provide for suit against the Services in certain instances. Some challenges to the Services' *administration* of the ESA through the rulemaking process must proceed under the APA, not the ESA.

Considerations for Congress

Although Section 10(j) affords the Services more flexibility to manage experimental populations than other listed populations, some stakeholders still raise concerns that designating an experimental population may affect development in particular areas. In addition, experimental populations of large predators such as gray wolves and grizzly bears can raise conflicting views about possible interactions with livestock and big game herds.

For example, FWS's proposal to release an experimental population of gray wolves in Colorado in 2023 has raised this issue. At the same time, other stakeholders criticize 10(j) rules that permit killing or harassing experimental populations of large predators, claiming those rules fail to fulfill the goals of the ESA, limit the species' ability to fully recover, and prevent the species from reestablishing natural relationships with large ungulate populations.

Congress may consider whether to leave such decisions to the discretion of the agency or to provide more direction as to how experimental populations should be managed, either in general or for specific species. Congress may also consider legislation directly targeting stakeholder concerns outside the 10(j) context, such as through depredation grant programs for livestock owners.

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