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Public Comments Processing  
Attn: FWS-HQ-ES-2025-0034  
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**Subject:** OPPOSE Proposed Rulemaking Rescinding the Definition of Harm under the Endangered Species Act (Docket No. FWS-HQ-ES-2025-0034)

### **Summary of Comments**

On behalf of the members of the Western Section of the Wildlife Society, the Conservation Affairs Committee submits the following comments opposing the United States Fish and Wildlife Service (USFWS) and National Oceanic and Atmospheric Administration's (NOAA) proposed rulemaking to rescind the regulatory definition of "harm" in the Endangered Species Act (ESA) regulations. We urge you to reconsider this action and to withdraw the proposed rule.

We disagree with the rationale of the proposed rule that the existing regulatory definition of "harm", which includes habitat modification, runs contrary to the best meaning of the statutory term "take" and that rescinding this regulatory definition would result in the single, best meaning of the ESA. Rather, we posit that the existing regulatory definition of "harm" is consistent with the best meaning of the term of "take" and the single, best meaning of the ESA. This conclusion is consistent with the statutory intent of the ESA, which is to prevent extinction, as stated in the ESA purpose statement "to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved" (§1531(b)).

### **The Basis for Comments by the Western Section of The Wildlife Society**

TWS was founded in 1937 and is a non-profit professional society representing wildlife biologists, managers, and educators dedicated to excellence in wildlife stewardship through science and education. Our mission is to inspire, empower, and enable wildlife professionals to sustain wildlife populations and habitats through science-based management and conservation.

The Western Section of TWS represents over 1,200 professional wildlife biologists residing and working in Nevada, California, Hawaii, and Guam. Our members are working, retired, and student wildlife professionals with extensive experience in wildlife population research and monitoring, conducting species- and community-specific wildlife surveys, evaluating sensitive species listing, and brokering mitigation agreements and compliance. Our collective professional training and experience provide a strong and unique basis for providing the following comments relating to the Issue, Plan, etc..

### **Interpretation of Harm Makes a Difference in Species Recovery**

The interpretation of harm has direct consequences for species recovery, if the protection of habitat under “harm” is rescinded from the ESA species recovery will be slowed, if not prevented. It is self-evident that loss of habitat can result in injury and mortality of individuals in a population, which leads to population decline and ongoing losses prevent recovery. Considering most species listed under the ESA have habitat loss as a primary cause for their status, how can species recover without habitat protection? If habitat destruction or modification is not considered “take” under the ESA these species cannot recover.

As we illustrate in the Section below [Statutory Intent of the Endangered Species Act](#), Congress clearly understood this when writing the Act and documented this intent, and the associated consequences, throughout the Act. In addition, see the Section below, [Select Listed Species Dependent Upon Habitat Protection for Recovery](#), for detailed examples of how species recoveries will be negatively impacted by rescinding the current harm protections from the ESA. Finally, see our Section below [Success Stories Due to Habitat Protection Under ESA Definition of Harm](#) for spotlights on select species residing within the Western Section whose recovery stories were dependent on such habitat protections.

Basing the proposed modified definition of harm on the dissenting, or minority, opinion is contrary to established law, ignoring the findings of the court. While the argument in the proposed rule states *“The ESA itself defines “take,” and further elaborating on one subcomponent of that definition—“harm”—is unnecessary in light of the comprehensive statutory definition”* it is not a valid argument. However, Section 3 Definitions of the ESA text does not include a definition of “harm”. Rather that definition is understood through the implementing text of the Act that clearly states in numerous places that loss of habitat is “take” under the ESA. The “statutory definition of take” includes harm, and because harm is not defined in the Act, the rescission has no effect.

Clearly, the take definition cited from Justice Scalia’s minority opinion in *Babbitt v Sweet Home*, that take means only “to reduce those animals, by killing or capturing, to human control”, is not consistent with the ESA’s plain language that take may include *“significant habitat modification or degradation where it actually kills or injures wildlife by*

*significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.”*

The proposed rule modification applies a temporal standard to take that is not included in the ESA. It suggests that the harm incurred to species must be proximate and immediate, whereas no such limitations are evident in the ESA. Habitat loss that leads to the inability for individuals to eat, rest, and/or reproduce is “harm,” and therefore “take.”

The proposed rule focuses on whether habitat loss constitutes take, but other forms of harm that are not intentional would be affected by the redefinition. These include a wide variety of factors that affect individuals and populations of listed Threatened and Endangered species including pesticide contamination; incidental poisoning during predator control; collisions with motorized vehicles, wind turbines, and buildings; , electrocution; overutilization of prey species (e.g. fisheries); introduction of non-native species; human disturbance; and climate change.

In Section 9 of the Act, Prohibited Acts, subsection 9(a)(1)(B) states that with respect to endangered species subject to the ESA, it is unlawful to *take any such species within the United States or the territorial sea of the United States*. This clause does not specify direct or indirect forms of take; however, by using context clues from other portions of the act, one can easily determine the intention of Congress to include both indirect and direct forms of take, contrary to what the proposed rule is suggesting. For example, Sections 2(b), 3(3), and 4(a)(1) highlight the importance of habitat to the conservation of endangered species. Habitat loss, whether that be through modification, destruction, or conversion, would be considered an indirect form of take and thus be a prohibited act under Section 9 of the ESA.

### **Consequences of Rescinding Harm Definition**

If this proposed rule were to go into effect it is likely that there will be a decrease in species recovery success stories as habitat is harmed. In addition, it is likely that species currently listed as threatened will be uplisted to endangered at greater speed than currently occurring due to increased habitat loss. In addition to the direct consequences of habitat destruction not being regulated as “take” under the ESA, these outcomes also are likely to occur due to the loss of successful proactive measures currently in place, such as Habitat Conservation Plans and Incidental Take Permits. It is incumbent upon the USFWS and NOAA to analyze these potential impacts fully as part of the proposed rulemaking decision process.

Further, if the rule were to go into effect, it would, at best, create uncertainty for interagency coordination and consultation, at worst, conflicting regulatory authority and standards. Determination of the need for interagency consultation is based on the “may affect” standard, not on a determination of potential for take. Destruction of habitat “may” affect survival and recovery of a listed species, but how is that to be addressed if

the destruction of habitat is removed from the definition of harm, and therefore of “take”?

Specifically, agency actions, including permitting for development and resource extraction projects that could detrimentally affect listed species, would cause this to be resolved. How can the USFWS and NMFS identify “*reasonable and prudent measures that are necessary and appropriate to minimize such impact*” where the effect is to harm the species through incidental destruction of habitat under the proposed rule? These actions would substantially reduce protections for species in ways that clearly violate the intent and letter of the ESA.

### **Statutory Intent of the Endangered Species Act**

There should be no question that the statutory intent of the ESA is to include the protection of habitat, not just species. This intent is undoubtedly stated throughout the text, the first of which occurs in the Act’s purpose statement (§1531 Sec 2.(b); emphasis added):

The purposes of this chapter are *to provide a means whereby the **ecosystems upon which endangered species and threatened species depend may be conserved***, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section.

As Congress plainly documented in 1973, habitat destruction is a major cause of species endangerment and the protection of habitat required by species is a purpose of the act. In other words, preventing the extinction of species requires protecting their habitat. A species cannot be protected from extinction if all of their natural history needs are not met, which includes protecting the habitats upon which they depend. The intent for protections to include that of habitat is directly stated no less than ten (10) times in the ESA, plus countless indirect mentions. This does not include instances referring to critical habitat. Furthermore, Congress clearly stated that they undertook the creation of the Endangered Species Act to support not only the plants, fish, and wildlife protected but the people of the United States (Sec. 2.(3)):

These species of fish, wildlife, and plants are of esthetic, ecological, educational, historical, recreational, and scientific **value to the Nation and its people**.

Section 3. Definitions of the ESA clearly recognizes the need for habitat acquisition, conservation, and management as a tool to conserve species:

The terms “conserve”, “conserving”, and “conservation” mean *to use and the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the*

measures provided pursuant to this Act are no longer necessary. Such methods and procedures include, but are not limited to, all activities associated with scientific resources management such as research, census, law enforcement, **habitat acquisition and maintenance**, propagation, live trapping, and transplantation...

Congress undoubtedly stated the statutory intent of the ESA to include protection of habitat again in Section 4. Determination of Endangered Species and Threatened Species (Sec. 4(a)(1); emphasis added):

The Secretary shall by regulation promulgated in accordance with subsection (b) *determine whether any species is an endangered species or a threatened species because of any of the following factors: (A) the present or threatened destruction, modification, or curtailment **of its habitat or range.***

The Act continues, in Section 7(a)(2) to state that, through Interagency Cooperation, “Each Federal agency shall, ... insure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of... **or result in the destruction or adverse modification of habitat...**”

These examples continue throughout the ESA. In addition, in the identification of provisions to declare Critical Habitat and the development and implementation of Recovery Plans (Sec. 4(b)(3)(A)(b) and Sec. 4(b)(6)(C)) Congress clearly acknowledges the effects of habitat loss and the need for habitat conservation as a statutory intent of the act. Taking it a step further, prohibitions of take outlined in the ESA refer to “the species” not “individuals of a species”. This indicates that take prohibitions apply to actions that harm the species, not simply individuals directly. Destruction of habitat, i.e. take of habitat, harms both individuals and species.

### **Select Listed Species Dependent Upon Habitat Protection for Recovery**

Many members of the Western Section of the Wildlife Society have been and are actively engaged in the conservation of federally listed Threatened and Endangered species within Nevada, California, Hawaii, Guam, and other Pacific Islands. Our work repeatedly demonstrates the importance of habitat protection in meeting the statutory intent and requirements of the ESA. We briefly present the following species accounts as examples of evidence for the necessity of continuing the current regulatory definition of harm that encompasses all aspects of species needs, including the habitats upon which they rely for survival.

#### Coastal California Gnatcatcher (*Polioptila californica californica*)

The coastal California gnatcatcher is a small, insectivorous bird that was listed as federally threatened in 1993 due to habitat loss and predation (U.S. Fish & Wildlife Service). The coastal California gnatcatcher is an obligate species of coastal sage scrub habitat, as it extends from the southernmost edge of California into Northern Baja

California, Mexico, and relies on shrubby, low-lying vegetation, dominated by California sagebrush for shelter, breeding, and foraging (Atwood 1993, Atwood and Bontrager 2001). The coastal California gnatcatcher population status is strongly influenced by the presence of coastal sagebrush; gnatcatcher colonization and occupancy increased with 30-40% coastal sagebrush coverage (Winchell and Doherty 2018). Habitat loss of coastal sage scrub habitat has been attributed to agriculture and urban development (U.S. Fish & Wildlife Service). Since the species legal protection, many cities and counties have developed Habitat Conservation Plans (HCP) which focus on conserving remaining natural habitat and restoring disturbed coastal sage scrub habitat (U.S. Fish & Wildlife Service). From the inception of HCP's, approximately 350,000 acres of coastal sage scrub habitat have been preserved (U.S. Fish & Wildlife Service). Given that the coastal California gnatcatcher's existence and survival relies on coastal sage scrub habitat, any threat, destruction, or removal of the habitat directly harms the species impacting their ability to find food, mate, and create shelter, essentially disrupting their life cycle. Habitat protection under the ESA is critical to their recovery.

Palos Verdes Blue Butterfly (*Glaucopsyche lygdamus palosverdesensis*)

Amongst coastal sage scrub obligate species is the endangered Palos Verdes Blue (PVB) butterfly, a subspecies of the silvery blue butterfly (*Glaucopsyche lygdamus*; Mattoni 1994). Listed as endangered in 1980 due to habitat loss as conversion to urban development, the Palos Verdes Blue butterfly is endemic to coastal sage scrub habitat in the Palos Verdes Peninsula, Los Angeles County, California (U.S. Fish & Wildlife Service). The larval and adult stage of the butterfly relies exclusively on two coastal sage scrub host plants, Deerweed (*Acmispon glaber*) and Santa Barbara Milk Vetch (*Astragalus trichopodus* var. *lonchus*), for food, shelter, and mating (U.S. Fish & Wildlife Service, Lipman et al. 1999, Mattoni 1994). As PVB larvae develop they rely exclusively on rattlepod seed pods for critical fat and protein (Mattoni 1994). The Palos Verdes Blue butterfly is a species covered under the Natural Communities Conservation Plan (NCCP) and Habitat Conservation Plan (HCP). Historically, the PVB butterfly was mapped with associated food plants at 12 locations in the Palos Verdes Peninsula, with three of those sites being completely razed, and remaining habitat becoming reduced and fragmented (Mattoni 1994). Current steps for PVB recovery include coastal sage scrub ecosystem revegetation and enhancement with a focus on ecosystem integrity in addition to including vegetation nuances that support the topoclimate and substrate for rattlepod and deerweed (Mattoni 1994). Habitat protection under the ESA is critical to their recovery.

‘Ākohekohe (*Palmeria dolei*) and Kiwīkiu (*Pseudonestor xanthophrys*)

The ‘ākohekohe (*Palmeria dolei*) and kiwīkiu (*Pseudonestor xanthophrys*) are two critically endangered Hawaiian honeycreepers endemic to high-elevation native forests on Maui. Both species rely on intact, native montane mesic to wet forest dominated by ‘ōhi‘a lehua (*Metrosideros polymorpha*) and other native canopy trees for foraging, nesting, and protection from predators and disease (U.S. Fish and Wildlife Service

2006). These habitats support the unique ecological niches of Hawaiian forest birds, many of which are highly specialized and restricted to narrow elevational bands due to temperature sensitivity and the spread of avian malaria. Habitat degradation through the spread of invasive species such as strawberry guava (*Psidium cattleianum*), feral ungulate damage, and climate-driven habitat contraction has critically reduced available native forest habitat (Paxton et al. 2016; Fortini et al. 2015). For species like kiwikiu, whose current population is estimated to be fewer than 150 individuals, any further habitat loss, whether through direct clearing or degradation via invasive species, poses an existential threat (U.S. Fish and Wildlife Service 2023). A narrowed definition of “harm” that excludes habitat degradation unless injury or death can be directly proven would undermine the scientific basis of species protection in Hawai‘i, where loss of native forest structure precedes population collapse. Protecting habitat is not ancillary, it is central to survival for these species whose range is already diminished beyond recovery thresholds.

#### Akikiki (*Oreomystis bairdi*)

The ‘akikiki (*Oreomystis bairdi*), a critically endangered Hawaiian honeycreeper endemic to the island of Kaua‘i, is experiencing a precipitous decline as well, with only a handful of individuals remaining in the wild as of 2024 (U.S. Fish and Wildlife Service 2023). ‘Akikiki are insectivorous birds that rely on intact, native ‘ōhi‘a-dominated forests for nesting and foraging, exhibiting strong site fidelity to forested gulches and ridgelines in high-elevation habitats. These areas provide critical microclimates and natural barriers to disease vectors such as *Culex* mosquitoes that transmit avian malaria, which is rapidly spreading upslope due to climate change (Atkinson et al. 2014; Paxton et al. 2016). The species is exceptionally vulnerable to habitat alteration: the introduction of invasive understory plants and loss of native canopy trees degrade foraging opportunities and disrupt essential ecological interactions. For the ‘akikiki, even small-scale forest degradation—such as erosion from feral pig rooting or the spread of invasive ginger—can reduce food availability and nesting success. Under the proposed change to the ESA’s definition of “harm,” such degradation may not be considered actionable unless immediate injury to the bird is demonstrated. This ignores the well-documented link between habitat quality and species survival in Hawaiian ecosystems and could prevent timely intervention needed to stave off extinction.

In addition to the species documented above, habitat loss or modification is listed as the primary cause of decline for the majority of species that are threatened or endangered within the range of the Western Section of TWS. Regulating the loss or degradation of these species’ remaining habitats is key to their conservation. The following species have been severely impacted by habitat loss, which is listed as the primary cause of their decline:

- San Joaquin Kit Fox (*Vulpes macrotis mutica*)
  - Conversion of native grasslands to agriculture and urban areas has led to habitat fragmentation and population declines.
  - This species' Recovery Plan (USFWS 1998b) notes: "By the 1950s the principal factors in the decline of the San Joaquin kit fox were loss, degradation, and fragmentation of habitats associated with agricultural, industrial, and urban developments in the San Joaquin Valley [...] By 1979, only about 6.7 percent of the San Joaquin Valley floor's original wildlands south of Stanislaus County remained untilled and undeveloped [...] Such land conversions contribute to kit fox declines through displacement, direct and indirect mortalities, and reduction of prey populations."
  
- Peninsular Bighorn Sheep (*Ovis canadensis nelsoni*)
  - Habitat modification, human disturbance, and fragmentation due to infrastructure development have contributed to population declines.
  - This species' Recovery Plan (USFWS 2000) notes: "Habitat loss is a leading cause of current species extinctions and endangerment (Burgman et al. 1993). It represents a particularly serious threat to Peninsular bighorn sheep because they live in a narrow band of lower elevation habitat that represents some of the most desirable real estate in the California desert and is being developed at a rapid pace."
  
- California Red-Legged Frog (*Rana draytonii*)
  - Destruction and alteration of aquatic and upland habitats have significantly reduced the species' range.
  - This species' Recovery Plan (USFWS 2002) notes: "Habitat loss and alteration are the primary factors that have affected the California red-legged frog negatively throughout its range. For example, in the Central Valley of California, over 90 percent of historic wetlands have been diked, drained, or filled for agricultural and urban development (U.S. Fish and Wildlife Service 1978, Dahl 1990). This has resulted in a large loss of frog habitat throughout this species' range."
  
- Central California Tiger Salamander (*Ambystoma californiense*)
  - Habitat loss and fragmentation from agricultural and urban development are major factors in the species' decline.
  - This species' Recovery Plan (USFWS 2017) notes: "The loss, degradation, and fragmentation of habitat as the result of human activities are the primary threats to the Central California tiger salamander (Service 2004, 2014). Aquatic and upland habitat available to Central California tiger salamanders has been degraded and reduced in area through agricultural conversion, urbanization, road construction, and other projects (Service 2014) [...] Habitat destruction through grading or other habitat

modifications reduces the available feeding, breeding, and sheltering opportunities required for California tiger salamander survival and reproduction and thus lowers the carrying capacity of the landscape. Large areas of habitat have been converted to high intensity human uses, which are unsuitable for salamanders because they lack the aquatic and upland habitat necessary for the salamander.”

- California Least Tern (*Sternula antillarum browni*)
  - Loss of nesting habitat due to coastal development has increased vulnerability to predation and disease outbreaks.
  - This species’ Recovery Plan (USFWS 1985) notes: “The buildup of human use of the beaches displaced more and more colonies at the same time their bay feeding areas were being developed, filled in, and polluted. By the 1940's, most terns were gone from the beaches of Orange and Los Angeles counties (Cogswell 1947), and they were considered sparse everywhere (Grinnell and Miller 1944). Continuing loss of both nesting and feeding habitat and high levels of human disturbance at remaining colonies have been responsible for the continued decline to the present time (Craig 1971).”
  
- Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*)
  - The primary cause of decline is the loss and degradation of riparian habitat in California’s Central Valley. The recovery strategy focuses on mitigating this threat.
  - This species’ Recovery Plan (USFWS 1984) notes: “Artificial levees, river channelization, dam construction, water diversion, and heavy groundwater pumping, all contributed to the reduction of riparian forests to the small, scattered remnants known today. Katibah (1983) conservatively estimated that riparian forest habitat formerly covered about 373,410 ha (922,000 acres) prior to its conversion to agriculture. Based on a 1979 aerial survey, Katibah et al. (1981) determined that about 41,310 ha (102,000 acres) of riparian forest remain today in the Central Valley.”
  
- California Freshwater Shrimp (*Syncaris pacifica*)
  - Urban development and water management projects have led to significant habitat loss, contributing to the species' decline.
  - This species’ Recovery Plan (USFWS 1998a) notes: “Factors associated with declining populations of shrimp include degradation and loss of its habitat through increased urbanization, instream gravel mining, overgrazing, agricultural development and activities, impoundments, water diversion, water pollution, and introduced predators.”

## Success Stories Due to Habitat Protection Under ESA Definition of Harm

### Bald Eagle (*Haliaeetus leucocephalus*)

The recent history of the Bald Eagle, which was listed under the Act in 1978 (it was listed in 1967 as endangered under previous legislation) and then delisted in 2007 following its recovery, illustrates the importance of recognizing and regulating harm that results from loss or degradation of habitat. The Bald Eagle was federally listed within the lower 48 states as a result of dramatic population declines in the 1950s to 1970s, largely resulting from eggshell thinning and reproductive failure due to the insecticide DDT (Ratcliffe 1967; Hickey and Anderson 1968), leading to the 1973 passage of the ESA. The California population declined dramatically in numbers and geographic range during this period largely because of habitat degradation, especially destruction of nesting habitat, in addition to DDT impacts (Kiff 1980; Detrich 1985; U.S. Fish and Wildlife Service 1986). In 1975, only 26 Bald Eagle pairs nested in California. The banning of DDT enhanced recovery, but substantial efforts prompted by the ESA to protect and manage nesting and foraging habitat on federal, state, and private lands also played an important role in the recovery of the population to much of its former range (Lehman 1983, Detrich 1985, Sorenson et al. 2017, Airola et al. 2025). The proposed rescinding of the regulatory definition of harm in the ESA would have substantially hindered recovery, without the harm protections the bald eagle may not have recovered yet.

### ‘Io, Hawaiian Hawk (*Buteo solitarius*)

The ‘Io was listed as endangered in 1967 under the predecessor to the ESA. Its population at the time was low and had remained low due in large part to destruction of its native habitat, intact ‘Ōhi‘a and Koa forests. Although ‘Io can be found in non-native habitat, they generally prefer dense native forests. Without increased protection of its native forest habitat, the ‘Io population would not have rebounded. The establishment of the Hakalau Forest National Wildlife Refuge (north Hilo region) in 1985, the Kona Forest Unit of the Hakalau Forest NWR in 1997, and The Nature Conservancy’s Kona Hema Preserve (south Kona region) between 1999 and 2003 have all added important protected habitat for the ‘Io (<https://www.fws.gov/project/io-buteo-solitarius>, as viewed on 5/15/2025) which was critical to its recovery. Despite its delisting of ‘Io in 2020, the continued protection of native forest habitat for other endangered and threatened species in the area is critical to its continued recovery and ongoing success.

## Conclusion

The proposed rule claims that the existing definition of harm runs contrary to the statutory term “take” and by rescinding the definition, USFWS and NMFS are thus adhering to the single, best meaning of the ESA. If USFWS and NMFS would like to adhere to the single best meaning of the ESA, then we respectfully ask the agencies to withdraw this proposed rule. The definition, or part of a definition in this case, of take in Section 3(19) is only a small part of what the ESA was intended to achieve: to grant protections for endangered species by preserving the ecosystems upon which they

depend. Protection of habitat is paramount to the ESA as we have shown through multiple examples. To rescind the definition of harm based on a minority court opinion, as described in the proposed rule, would not only be contrary to established law, but would be missing the forest for the trees. Wildlife cannot exist without habitat, just as the forest cannot exist without trees.

Thank you for the opportunity to provide comments on the Proposed Rulemaking Rescinding the Definition of Harm under the Endangered Species Act (Docket No. FWS-HQ-ES-2025-0034). We appreciate your consideration of these comments. Please direct questions or requests for additional information regarding The Western Section or our expertise relating to the Endangered Species Act to Lisa Fields, The Western Section Conservation Affairs Committee Chair, at the letterhead address or [conservation@twswest.org](mailto:conservation@twswest.org).

Sincerely,

The Wildlife Society, Western Section

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