



Questions and Answers: Final Critical Habitat Designation for the New Mexico Meadow Jumping Mouse

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Q: What action is the U.S. Fish and Wildlife Service (Service) taking?

A: The Service is announcing the final rule to designate critical habitat for the New Mexico meadow jumping mouse (*Zapus hudsonius luteus*) (jumping mouse) under the Endangered Species Act (ESA). We are designating approximately 13,970 acres of critical habitat in eight units within Colfax, Mora, Otero, Sandoval, and Socorro counties, in New Mexico; Las Animas, Archuleta, and La Plata counties, in Colorado; and Greenlee and Apache counties, in Arizona as critical habitat for the jumping mouse. The final rule takes effect on April 15.

Q: What is a New Mexico meadow jumping mouse?

A: The jumping mouse is a small mammal that hibernates about 8 or 9 months out of the year, longer than most mammals. Conversely, it is only active three or four months during the summer. Within this short time frame, it must breed, birth and raise young, and store up sufficient fat reserves to survive the next year's hibernation period. In addition, jumping mice only live three years or less and have one small litter annually with seven or less young, so the species has limited capacity for high population growth rates due to this low fecundity. As a result, if resources are not available in a single season, jumping mice populations would be greatly stressed.

For additional ecological information on New Mexico Meadow jumping mouse, please see the Final New Mexico Meadow Jumping Mouse Species Status Assessment Report (SSA Report). (An SSA Report is a comprehensive biological status review for a species. SSA Reports serve to inform the listing and critical habitat decisions for a species under the ESA and also to serve as an information source to inform future conservation efforts.)

Q: What is critical habitat?

A: Critical habitat is a term in the ESA that identifies geographic areas occupied at the time a species is listed that contain the physical or biological features essential for the species' conservation. Critical habitat may also include areas outside the geographic area occupied by the

species at the time of listing that are essential for the conservation of the species. The ESA defines "conservation" as the actions leading to the eventual recovery of a species so that it no longer requires the ESA.

Critical habitat provides protection against "destruction or adverse modification" from actions carried out, funded, or authorized by a federal agency and is carried out through required consultation under section 7 of the ESA. Under such consultations, the Service reviews federal actions for how they affect the "physical or biological features essential to the conservation of a listed species," and the ability of that habitat to support the species throughout its life cycle, and to meet the species' recovery needs.

The designation of critical habitat does <u>not</u> affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. A critical habitat designation identifies areas that are important to the conservation of federally listed threatened or endangered species. A critical habitat designation requires federal agencies to consult with the Service on any of their actions that may affect designated critical habitat. The Service can then recommend ways to minimize any adverse effects. It imposes no requirements on state or private actions on state or private lands where no federal funding, permits or approvals are required.

Critical habitat designation has several benefits including: (1) Triggering consultation under section 7 of the ESA in designated areas for actions in which there may be a federal nexus and where it would not otherwise occur. For example, the area has become unoccupied or the occupancy is in question; (2) focusing conservation activities on the most essential features and areas; (3) providing educational benefits to state or county governments or private entities; and (4) preventing people from causing inadvertent harm to the species.

Q: What is the purpose of designating critical habitat?

A: A critical habitat designation is a tool used to identify areas that are important to the recovery of a species. It is also a tool used to notify federal agencies of areas that must be given special consideration when they are planning, implementing, or funding activities. Federal agencies are required to consult with the Service on their actions that may affect critical habitat. A critical habitat designation has no effect when a federal agency is not involved. For example, a private landowner undertaking a project that involves no federal funding or permit has no additional responsibilities if his or her property falls within critical habitat boundaries.

Q: What protection does the New Mexico meadow jumping mouse currently receive as a listed species?

A: The New Mexico jumping mouse is currently listed as Endangered under the ESA. The ESA prohibits the import, export, or interstate or foreign sale of protected animals and plants without a special permit. It also makes "take" illegal - forbidding the killing, harming, harassing, possessing, or removing of protected animals from the wild. Federal agencies must consult with the Service to conserve listed species and ensure that any activity they fund, authorize, or carry out will not

jeopardize the continued survival and recovery of a listed species. This is referred to as a Section 7 consultation process.

Permits may be issued by the Service for activities that are otherwise prohibited under the ESA, if these activities are for scientific purposes or to enhance the propagation or survival of the affected species, or for "take" that is incidental to otherwise lawful activities.

In addition, the ESA requires that federal agencies not only implement actions to prevent further loss of a species, but also pursue actions to recover species to the point where they no longer require protection and can be delisted.

Q: Do listed species with designated critical habitat receive more protection than listed species without it?

A: A critical habitat designation does not set up a preserve or refuge. It only affects activities with federal involvement, such as federal funding or a federal permit. Listed species and their habitats are protected by the ESA whether or not they are in areas designated as critical habitat.

Designation of critical habitat can help focus conservation activities for a listed species by identifying areas that contain the physical and biological features that are essential for the conservation of that species. Critical habitat also alerts the public as well as land management agencies to the importance of these areas.

Q: Do Federal agencies have to consult with the Service outside critical habitat areas?

A: Even when there is not critical habitat designation, Federal agencies must consult with the Service, if an action that they fund, or authorize, or permit may affect listed species.

Q: What is the range of the New Mexico meadow jumping mouse?

A: The historical distribution of the jumping mouse likely included riparian wetlands along streams in the Sangre de Cristo and San Juan Mountains from southern Colorado to central New Mexico, including the Jemez and Sacramento Mountains and the Rio Grande Valley from Espanola to Bosque del Apache National Wildlife Refuge, and into parts of the White Mountains in eastern Arizona.

Since 2005, 29 populations have been located within eight areas (two in Colorado, 15 in New Mexico, and 12 in Arizona). All of the remaining populations are small and isolated, and 11 of them have been substantially compromised since 2011 (due to water shortages, grazing, or wildfire and flooding). Another seven populations in Arizona may also be compromised due to post-fire flooding following the 538,000-acre Wallow Fire that burned in 2011.

Q: What kinds of habitat does the New Mexico meadow jumping mouse need?

A: The jumping mouse has exceptionally specialized habitat requirements, characterized by tall (averaging 24 inches), dense herbaceous riparian vegetation composed primarily of sedges and forbs associated with perennial flowing water, which is required to support its life history and maintain adequate population sizes.

It is imperative that jumping mice have rich, abundant food sources during the summer so it can accumulate sufficient fat reserves to survive their long hibernation period. In addition, individual jumping mice also need intact upland areas adjacent to riparian wetland areas because this is where they build nests or use burrows to give birth to young in the summer and to hibernate over the winter.

Q: How did the Service determine which areas to designate as critical habitat?

A: All areas proposed as critical habitat for the jumping mouse contain one or more of the elements essential for the conservation of the species. When determining critical habitat, biologists considered physical and biological habitat features needed for life and successful reproduction of the species. Habitat areas essential for jumping mouse conservation are those that provide the biological needs of reproducing, rearing of young, foraging, sheltering, hibernation, dispersal, and genetic exchange.

Q: What is the current status of the New Mexico jumping mouse?

A: At the current rate of population extirpations, without substantial conservation efforts, the probability of persistence of the species is expected to be severely compromised in less than 10 years. The jumping mouse faces an elevated risk of extinction beyond 10 years.

Q: Why is the New Mexico meadow jumping mouse declining? What are the threats to it?

A: The jumping mouse is closely associated with riparian ecosystems that are relatively narrow and represent a small percentage of the landscape. The decline in the extent and quality of jumping mouse habitat is considered the main factor threatening the subspecies. Threats to jumping mouse habitat include grazing pressure (which removes the needed vegetation), water management and use (which causes vegetation loss from mowing and drying of soils), lack of water due to drought (exacerbated by climate change), wildfires (exacerbated by climate change), drought (also exacerbated by climate change), scouring floods, loss of beaver ponds, highway reconstruction, residential and commercial development, coalbed methane development, and unregulated recreation. Habitat destruction may impact individual jumping mice directly or by destroying nest sites, food resources, and hibernation sites, by disrupting behavior, or by creating a movement barrier.

Q: What activities could adversely affect critical habitat?

A: Some activities could have an adverse effect on jumping mouse critical habitat. Such activities might include:

- Any activity that destroys, modifies, alters, or removes the herbaceous riparian vegetation that comprises the species' habitat, as described in the final rule or within the <u>SSA Report</u>, especially if these activities occur during the jumping mouse's limited active season.
- Any activity (e.g., instream dredging, impoundment, water diversion or withdrawal, channelization, discharge of fill material) that detrimentally alters natural processes in a habitat unit, including changes to inputs of water, sediment, and nutrients, or any activity that significantly and detrimentally alters water quantity in the unit.
- Any activity that could lead to the introduction, expansion, or increased density of an exotic plant or animal species that is detrimental to the jumping mouse and to its habitat.
- Any activity that results in changes in the hydrology of the habitat unit, including modification to any stream or water body that results in the removal or destruction of herbaceous riparian vegetation in any stream or water body.

Q: Will a critical habitat designation affect use of my personal property? Will this result in any taking of my property?

A: Federal agencies must ensure, in consultation with the Service that any action they authorize, fund, or carry out is not likely to result in the destruction or adverse modification of critical habitat. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. Such designation does not allow the government or public to access private lands. Such designation does not require implementation of restoration, recovery, or enhancement measures by non-federal landowners. Where a landowner requests federal agency funding or authorization for an action that may affect a listed species or critical habitat, the consultation requirements of section 7(a)(2) of the ESA would apply, but even in the event of a destruction or adverse modification finding, the obligation of the federal action agency and the landowner is not to restore or recover the species, but to implement reasonable and prudent alternatives to avoid destruction or adverse modification of critical habitat.

Q: What impact will jumping mouse critical habitat designation have on existing recreational uses of the rivers and streams?

A: Unregulated dispersed recreational activities such as camping, fishing, and off-road vehicle use pose a concern to the jumping mouse because the development of trails, resulting barren areas, and trampling can render habitat unsuitable by reducing or removing dense riparian vegetation containing required microhabitat. Although some forms of recreation can lead to modifications of required microhabitat, we have not consulted with the federal agencies to determine whether recreational uses destroy or adversely modify critical habitat for the jumping mouse.

Q: Is livestock grazing compatible with properly functioning jumping mouse habitat?

A: Whether livestock grazing results in loss of suitable habitat and adverse effects to a jumping mouse population is likely dependent upon a number of factors including: the number of livestock present; the proportion of suitable habitat patches subjected to grazing; whether grazing occurs during the growing season; precipitation patterns; and the amount of isolation from other patches of suitable habitat. Moderate levels of livestock grazing may be compatible with the jumping mouse; however, compared to other forms of habitat loss, grazing has the greatest potential for negative impacts on the jumping mouse and riparian habitat. When livestock grazing is present for short periods of time (such as a few hours or days because of unauthorized use when cattle enter livestock exclosures), population abundance of jumping mice may be reduced, but is not extirpated.

Since the listing of the jumping mouse, the Service has provided technical assistance and entered into consultation with the Forest Service regarding grazing programs in jumping mouse habitat. Innovative grazing practices and increased range management capacity (e.g. fencing, out-off channel livestock waters, and directed cattle access to stream waters) have been and continue to be developed. These conservation measures can improve the "primary constituent elements" of jumping mouse habitat while addressing the unique requirements of individual grazing operations. Conserving surface water flows (especially in an era of drought and climate change) benefits jumping mouse habitat and livestock operation.

Q: Are developed areas and structures included in the final critical habitat designation?

A: Developed campgrounds or other manmade structures (such as buildings, fire lookout stations, runways, roads, and other paved areas) within the boundaries of critical habitat do not contain physical or biological features essential for the conservation of the jumping mouse. We have made every effort to remove these developed areas where possible; however, due to the scale of the maps, some areas may inadvertently be included. Developed areas are not reasonably believed to contain, or are capable of supporting, the physical or biological features essential for jumping mouse conservation. Therefore, a federal action involving these developed lands will not trigger section 7 consultation with respect to critical habitat and the requirement of no adverse modification unless the specific action would directly or indirectly affect the physical or biological features in the adjacent critical habitat.

Q: Were areas that were proposed for critical habitat designation in 2013 excluded from the final critical habitat designation?

A: Yes. In 2013, 230 acres of tribal land within Pueblo of Isleta and Ohkay Owingeh were proposed for designation as jumping mouse critical habitat; those areas have been excluded from the final designation. The Service has established conservation partnerships with Ohkay Owingeh and Pueblo of Isleta, and both pueblos have implemented conservation and recovery actions for the improvement of riparian habitat and the jumping mouse. Additionally, Pueblo of Islet has developed and maintains a Riverine Management Plan that includes the jumping mouse and its habitat.

The final designation is additionally reduced (350 acres) from the proposed rule as a result of improved mapping and refined definition of "primary constituent elements."

Q: Did the ESA require an economic analysis as part of designating critical habitat?

A: Yes. An economic analysis was prepared in 2014 to estimate the incremental costs associated with the proposed designation. Based on the economic analysis, critical habitat designation for the jumping mouse is unlikely to generate costs exceeding the rule-making benchmark of \$100 million in a single year and was estimated to be \$20 million in 2014 for both administrative and conservation effort costs. Moreover, our economic analysis, found it is unlikely that critical habitat would generate additional requests for conservation efforts beyond what would be required due to the listing of the subspecies because the middle Rio Grande and Florida River, Sambrito Creek, Colorado critical habitat units are partially occupied by the jumping mouse.

The Service took into account the economic and other relevant impacts of specifying any particular areas as critical habitat. The Service may exclude any area from critical habitat if it determines that the benefits of such exclusion outweigh the benefits of specifying the area as part of critical habitat unless it determines, based on the best scientific and commercial data available, that the failure to designate the area as critical habitat will result in the extinction of the species. None of the critical habitat areas proposed in 2013 were excluded from the final designation as a result of economic factors.

The full economic analysis, and other information about the New Mexico meadow jumping mouse, is available online at http://www.fws.gov/southwest/es/NewMexico/index.cfm, or by contacting the U.S. Fish and Wildlife Service, New Mexico Ecological Services Field Office at 505-346-2525.

Q: What are the recovery goals for the New Mexico meadow jumping mouse?

A: Although, we do not have a recovery plan for the jumping mouse, we do have a recovery outline for the meadow jumping mouse. Recovery outlines provide a map forward by summarizing what can be done to most effectively move toward recovery of a species as the recovery plan is being developed. For more information on the recovery outline, visit our website at: http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=A0BX

A recovery plan for the jumping mouse will seek to ensure that secure populations of the jumping mouse occur across its existing range in New Mexico, Colorado, and Arizona, and to bring the status of the jumping mouse to a point where ESA protection is no longer needed. To address the current status of the jumping mouse and work toward long-term viability and recovery of the subspecies, recovery efforts should preferentially focus on restoring habitats and increasing the connectivity among suitable areas. The expansion of all remaining populations is an immediate and long-term need for the jumping mouse.

Q: Where can I get more information on the jumping mouse and critical habitat?

A: For more information, visit our web site at:

http://www.fws.gov/southwest/es/NewMexico/index.cfm and http://www.fws.gov/southwest/es/NewMexico/NMMJM.cfm, or contact Wally "J" Murphy, Field Supervisor, Albuquerque, New Mexico, Ecological Services Field Office, 2105 Osuna NE, Albuquerque, New Mexico, 87113, by telephone (505-346-2525), or by fax (505-346-2542). Persons who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 800-877-8339.