



Southwest Program Office

210 Montezuma Avenue, Suite 210 | Santa Fe, New Mexico 87501 | tel 505.395.7330
www.defenders.org

Elizabeth Humphrey, District Ranger
c/o Ciara Cusack
Sacramento Ranger District
PO Box 288, #4 Lost Lodget Rd.
Cloudcroft, NM 88317

Dear Ms. Humphrey,

Thank you for the opportunity to comment on the United States Forest Service (Forest Service) New Mexico Meadow Jumping Mouse (NMMJM) Habitat Improvement Projects Proposal on the Sacramento Grazing Allotment dated February 28, 2017. This proposal highlights the Service's efforts to protect the NMMJM and recover critical riparian habitat in the Lincoln National Forest. Defenders of Wildlife (Defenders) is encouraged by the plan's details and commends the Service for its commitment to this endangered species. To help Forest Service identify issues to address in the environmental analysis for this proposal, Defenders is providing comment on the Description of Proposed Actions and other issues to consider.

Description of Proposed Actions

Fencing. The Forest Service proposes to replace temporary enclosure fencing with permanent fencing with slight modification. Defenders supports replacing the fencing but with wildlife friendly fencing, such as smooth wire or rail for the top and smooth wire for the bottom wire. Fences should be low enough for adult deer and other large animals to jump over and high enough for animals to crawl under to minimize the chance of tangling.¹

The Forest Service proposes enclosure fencing include gates for removal of livestock. The proposal should explicitly state and/or provide maps of the location, size and type of gates for the removal of livestock.

The Forest Service proposes that not all critical habitat will be fenced -- the fencing would focus on approximately 100 acres known to be occupied by the NMMJM. Defenders recommends protecting larger areas of critical habitat because it would improve NMMJM survivability and continued health of the riparian habitat.

Defenders strongly recommends that the Forest Service expand fencing throughout the NMMJM designated critical habitat regardless of whether or not the NMMJM is known to occupy there. Fencing all areas upstream and downstream including highly degraded areas will not only help the recovery of the NMMJM but improve the health of the riparian habitat.

Construction Activities. The Forest Service proposes constructing more livestock handling facilities and additional water developments for livestock and wildlife. The grazing permit holder

¹ U.S.D.A. Natural Resources Conservation Service. Animal Enhancement Activity – ANM27 – Wildlife friendly fencing, 2013 Ranking Period 1. Page 8.

gave the Forest Service a proposal for desired projects for handling facilities and water developments. These desired projects were not included in this proposal. Defenders is supportive of the collaboration between the grazing permit holder and the Forest Service, and asks the Forest Service to also involve the general public in these decisions. At a minimum, Defenders recommends the proposal should explicitly state the desired projects and/or provide maps showing the location, size and number of these handling facilities and water developments.

The Forest Service proposes removing trees within the fence line or livestock handling facility, or to reduce hazards during construction. The proposal should explicitly describe the process for removing trees from selection through removal process, and identify NMMJM critical habitat locations affected.

The Forest Service proposes participation from the grazing permit holder and his/her preference will be taken into consideration during water development and handling facility construction. Defenders asks the Forest Service to publish information on water developments, facility placement and design specifications for public comment. Defenders recommends the Forest Service should recruit erosion control specialists, riparian recovery experts and environmental professionals to provide best practice recommendations for construction in riparian habitats. Building construction could harm riparian health, designated NMMJM critical habitat and the NMMJM, itself.

The Endangered Species Act (ESA) Section 7 consultation process requires federal agencies to consult with the U.S. Fish and Wildlife 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 the listed species. How will the Forest Service guarantee construction will be done during a time least likely to disrupt behavior, such as breeding, nesting, raising young, etc. Will there be take of NMMJM during construction? If so, how will Forest Service mitigate? Will the Forest Service seek an ESA Section 10 take permit? The proposal should say when (dates) construction will take place, how the Forest Service will mitigate takes of NMMJM and if the Forest Service will seek a take permit.

Water/Access Lanes for Livestock. The Forest Service proposes strategically placed water/access lanes where livestock could cross the stream channel, and that some large areas of NMMJM critical habitat would remain open in Wills Canyon. Allowing livestock to cross the stream channel can result in degradation of the riparian habitat including destabilizing the streambank, trampling and grazing of vegetation and impairing water quality. Water/access lanes can exist for livestock to cross if properly placed where the crossings have the least impact along the stream's path. Water/access lanes should not be included in all of the NMMJM enclosure areas. What would the Forest Service base their decision on for water/access lane locations? Where does the Forest Service propose to place these lanes? The proposal should explicitly state criteria and/or provide maps showing the location of the water/access lanes.

NMMJM Habitat. To address the current status of the NMMJM and work toward long-term viability and recovery of the NMMJM, the Forest Service's recovery efforts should preferentially focus on restoring habitats and increasing the connectivity of suitable areas.²

² U.S. Fish and Wildlife Service. New Mexico Ecological Services Field Office. Recovery Outline, New Mexico Meadow Jumping Mouse (*Zapus hudsonius luteus*), June 2014. [https://www.fws.gov/southwest/es/NewMexico/documents/NMMJM_fCH_FAQs_03142016\(final\).pdf](https://www.fws.gov/southwest/es/NewMexico/documents/NMMJM_fCH_FAQs_03142016(final).pdf)

The decline of the NMMJM is mainly due to habitat loss and fragmentation across its range. A majority of the remaining mouse habitat is on federal land. The NMMJM already has fragmented habitat along the riparian reaches making it difficult for its long term survival. Fragmentation prevents the NMMJM from migrating to upland reaches of the riparian habitat to breed and raise its young. Upland habitat is crucial for the long term survivability of the species.

Also, the NMMJM habitat require tall, dense herbaceous riparian vegetation of sedge and forbs with flowing water. It is important that the mice have these food sources available during summer so they accumulate sufficient fat reserves to survive hibernation. They also need intact upland areas adjacent to the riparian wetland for nesting and raising young. Riparian vegetation provides cover for the mice to travel along the stream bank.

The NMMJM is closely associated with riparian ecosystems. To protect and improve the riparian habitat the NMMJM relies upon, activities such as grazing, camping and recreational vehicles use should be excluded from the stream, on and along the streambanks, recreational vehicles should be routed to pre-existing roads and trails. Highly degraded areas can be treated and recovered using proven restoration and management techniques such as planting native seedlings.³ Preventing cattle grazing in riparian zones through exclusion fencing can allow riparian vegetation to rapidly increase in robustness and cover, and also shift to a more natural community composition.⁴

The Lincoln National Forest must provide for conservation of listed species in its forest plan implementation. The Endangered Species Act (ESA) mandates under § 7(a)(1) that federal agencies carry out programs that further the recovery of endangered and threatened species in consultation with the appropriate consulting agencies, in this case the U.S. Fish and Wildlife Service.

In conclusion, Defenders believes in the inherent values of wildlife and their habitats. We envision diverse wildlife populations in North American are secure and thriving, sustained by a network of healthy lands and waters. The Forest Service NMMJM Habitat Improvement Projects Proposal upholds these values. Through understanding the benefits of a healthy riparian ecosystem to protecting the habitat the NMMJM relies upon (riparian habitat) to collaboration with permit holders and the public - all will contribute to saving the NMMJM from extinction. Thank you again for the opportunity to comment on the proposal.

Sincerely,

Laura Eaton
Southwest Program Coordinator
Defenders of Wildlife

³ Stromberg, J.C. (1993), "Frémont Cottonwood-Goodding Willow Riparian Forests: A Review of Their Ecology, Threats, and Recovery Potential", Journal of the Arizona-Nevada Academy of Science, 27: 97–110

⁴ Sarr, D.A. (2002), "Riparian livestock exclosure research in the western United States: A critique and some recommendations", Environmental Management, 30 (4): 516–526, doi:10.1007/s00267-002-2608-8