

## DEPARTMENT OF THE INTERIOR

## Fish and Wildlife Service

## 50 CFR Part 17

[Docket No. FWS-R2-ES-2013-0014;  
4500030114]

RIN 1018-AZ32

**Endangered and Threatened Wildlife  
and Plants; Proposed Designation of  
Critical Habitat for the New Mexico  
Meadow Jumping Mouse**

**AGENCY:** Fish and Wildlife Service,  
Interior.

**ACTION:** Proposed rule.

**SUMMARY:** We, the U.S. Fish and Wildlife Service (Service), propose to designate critical habitat for the New Mexico meadow jumping mouse (*Zapus hudsonius luteus*) under the Endangered Species Act (Act). If we finalize this rule as proposed, it would extend the Act's protections to this subspecies' critical habitat. The effect of these regulations will be to protect the New Mexico meadow jumping mouse's habitat under the Act.

**DATES:** We will accept comments received or postmarked on or before August 19, 2013. Comments submitted electronically using the Federal eRulemaking Portal (see **ADDRESSES** section, below) must be received by 11:59 p.m. Eastern Time on the closing date. We must receive requests for public hearings, in writing, at the address shown in **FOR FURTHER INFORMATION CONTACT** by August 5, 2013.

**ADDRESSES:** You may submit comments by one of the following methods:

(1) *Electronically:* Go to the Federal eRulemaking Portal: <http://www.regulations.gov>. In the Search box, enter FWS-R2-ES-2013-0014, which is the docket number for this rulemaking. Then, in the Search panel on the left side of the screen, under the Document Type heading, click on the Proposed Rules link to locate this document. You may submit a comment by clicking on "Comment Now!"

(2) *By hard copy:* Submit by U.S. mail or hand-delivery to: Public Comments Processing, Attn: FWS-R2-ES-2013-0014; Division of Policy and Directives Management; U.S. Fish and Wildlife Service; 4401 N. Fairfax Drive, MS 2042-PDM; Arlington, VA 22203.

We request that you send comments only by the methods described above. We will post all comments on <http://www.regulations.gov>. This generally means that we will post any personal information you provide us (see the Public Comments section below for more information).

The coordinates or plot points or both from which the proposed critical habitat maps are generated are included in the administrative record for this rulemaking and are available at <http://www.fws.gov/southwest/es/NewMexico/>, at <http://www.regulations.gov> at Docket No. FWS-R2-ES-2013-0014, and at the New Mexico Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**). Any additional tools or supporting information that we may develop for this rulemaking will also be available at the Fish and Wildlife Service Web site and Field Office set out above, and may also be included at <http://www.regulations.gov>.

**FOR FURTHER INFORMATION CONTACT:** Wally "J" Murphy, Field Supervisor, U.S. Fish and Wildlife Service, New Mexico Ecological Services Field Office, 2105 Osuna NE., Albuquerque, NM 87113, by telephone 505-346-2525 or by facsimile 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.

**SUPPLEMENTARY INFORMATION:**

**Executive Summary**

*Why we need to publish a rule.* Under the Endangered Species Act (Act), any species that is determined to be threatened or endangered requires critical habitat to be designated, to the maximum extent prudent and determinable. Designations and revisions of critical habitat can only be completed by issuing a rule. Elsewhere in today's **Federal Register**, we propose to list the New Mexico meadow jumping mouse as an endangered species under the Act.

*This rule consists of:* A proposed rule for designation of critical habitat for the New Mexico meadow jumping mouse. The New Mexico meadow jumping mouse has been proposed for listing under the Act. This rule proposes designation of critical habitat necessary for the conservation of the species.

*The basis for our action.* Under the Endangered Species Act, any species that is determined to be a threatened or endangered species shall, to the maximum extent prudent and determinable, have habitat designated that is considered to be critical. Section 4(b)(2) of the Endangered Species Act states that the Secretary shall designate and make revisions to critical habitat on the basis of the best available scientific data after taking into consideration the economic impact, national security impact, and any other relevant impact of specifying any particular area as critical habitat. The Secretary may exclude an

area from critical habitat if she determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless she determines, based on the best scientific data available, that the failure to designate such area as critical habitat will result in the extinction of the species. The species has been proposed for listing as endangered, and therefore, we also propose to designate approximately 310.5 km (193.1 mi) of critical habitat within Bernalillo, Colfax, Mora, Otero, Rio Arriba, Sandoval, and Socorro Counties, in New Mexico; Las Animas, Archuleta, and La Plata Counties, Colorado; and Greenlee and Apache Counties, Arizona.

*We are preparing an economic analysis of the proposed designations of critical habitat.* In order to consider economic impacts, we are preparing a new analysis of the economic impacts of the proposed critical habitat designations and related factors. We will announce the availability of the draft economic analysis as soon as it is completed, at which time we will seek additional public review and comment.

*We will seek peer review.* We are seeking comments from knowledgeable individuals with scientific expertise to review our analysis of the best available science and application of that science and to provide any additional scientific information to improve this proposed rule. Because we will consider all comments and information received during the comment period, our final determinations may differ from this proposal.

**Information Requested**

We intend that any final action resulting from this proposed rule will be based on the best scientific and commercial data available and be as accurate and as effective as possible. Therefore, we request comments or information from the public, other concerned governmental agencies, Native American tribes, the scientific community, industry, or any other interested parties concerning this proposed rule. We particularly seek comments concerning:

(1) The reasons why we should or should not designate habitat as "critical habitat" under section 4 of the Act (16 U.S.C. 1531 *et seq.*), including whether there are threats to the species from human activity, the degree of which can be expected to increase due to the designation, and whether that increase in threats outweighs the benefit of designation such that the designation of critical habitat is not prudent.

(2) Specific information on:

(a) The amount and distribution of the New Mexico meadow jumping mouse and its habitat;

(b) What may constitute “physical or biological features essential to the conservation of the species,” within the geographical range currently occupied by the species;

(c) Where these features are currently found;

(d) Whether any of these features may require special management considerations or protection;

(e) What areas, that were occupied at the time of listing (or are currently occupied) and that contain features essential to the conservation of the species, should be included in the designation and why; and

(f) What areas not occupied at the time of listing are essential for the conservation of the species and why.

(3) Land use designations and current or planned activities in the areas occupied by the species or proposed to be designated as critical habitat, and possible impacts of these activities on this species and proposed critical habitat.

(4) Information on the projected and reasonably likely impacts of climate change on the New Mexico meadow jumping mouse and proposed critical habitat.

(5) Any foreseeable economic, national security, or other relevant impacts that may result from designating any area that may be included in the final designation. We are particularly interested in any impacts on small entities, and the benefits of including or excluding areas from the proposed designation that are subject to these impacts.

(6) Whether our approach to designating critical habitat could be improved or modified in any way to provide for greater public participation and understanding, or to assist us in accommodating public concerns and comments.

(7) The likelihood of adverse social reactions to the designation of critical habitat and how the consequences of such reactions, if likely to occur, would relate to the conservation and regulatory benefits of the proposed critical habitat designation.

Please include sufficient information with your submission (such as scientific journal articles or other publications) to allow us to verify any scientific or commercial information you include.

Please note that submissions merely stating support for or opposition to the action under consideration without providing supporting information, although noted, will not be considered in making a determination, as section

4(b)(1)(A) of the Act directs that listing and critical habitat determinations must be made “solely on the basis of the best scientific and commercial data available.”

You may submit your comments and materials concerning this proposed rule by one of the methods listed in the **ADDRESSES** section. We request that you send comments only by the methods described in the **ADDRESSES** section.

If you submit information via <http://www.regulations.gov>, your entire submission—including any personal identifying information—will be posted on the Web site. If your submission is made via a hardcopy that includes personal identifying information, you may request at the top of your document that we withhold this information from public review. However, we cannot guarantee that we will be able to do so. We will post all hardcopy submissions on <http://www.regulations.gov>. Please include sufficient information with your comments to allow us to verify any scientific or commercial information you include.

Comments and materials we receive, as well as supporting documentation we used in preparing this proposed rule, will be available for public inspection on <http://www.regulations.gov>, or by appointment, during normal business hours, at the U.S. Fish and Wildlife Service, New Mexico Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

#### Previous Federal Actions

All previous Federal actions are described in the proposal to list the New Mexico meadow jumping mouse as an endangered species under the Act published elsewhere in today’s **Federal Register**.

#### Background

It is our intent to discuss below only those topics directly relevant to the proposed designation of critical habitat for the New Mexico meadow jumping mouse. For a thorough assessment of the species’ biology and natural history including limiting factors and species resource needs, please refer to the May 2013 version of the New Mexico Meadow Jumping Mouse Species Status Assessment (SSA Report; Service 2013, entire, available online at [www.regulations.gov](http://www.regulations.gov), Docket No. FWS–R2–ES–2013–0014).

#### Critical Habitat

##### Background

Critical habitat is defined in section 3 of the Act as:

(1) The specific areas within the geographical area occupied by the

species, at the time it is listed in accordance with the Act, on which are found those physical or biological features:

(a) Essential to the conservation of the species and

(b) Which may require special management considerations or protection; and

(2) Specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

Conservation, as defined under section 3 of the Act, means to use and the use of all methods and procedures that are necessary to bring an endangered or threatened species to the point at which the measures provided pursuant to the 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 translocation, and, in the extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved, may include regulated taking.

Critical habitat receives protection under section 7 of the Act through the requirement that Federal agencies 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 Act 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.

Under the first prong of the Act’s definition of critical habitat, areas within the geographical area occupied by the species at the time it was listed

are included in a critical habitat designation if they contain physical or biological features (1) essential to the conservation of the species and (2) which may require special management considerations or protection. For these areas, critical habitat designations identify, to the extent known using the best scientific and commercial data available, those physical or biological features that are essential to the conservation of the species (such as space, food, cover, and protected habitat). In identifying those physical and biological features within an area, we focus on the principal biological or physical constituent elements (primary constituent elements such as roost sites, nesting grounds, seasonal wetlands, water quality, tide, soil type) that are essential to the conservation of the species. Primary constituent elements are the specific elements of physical or biological features that provide for a species' life-history processes, and are essential to the conservation of the species.

Under the second prong of the Act's definition of critical habitat, we can designate critical habitat in areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. We designate critical habitat in areas outside the geographic area occupied by a species only when a designation limited to its range would be inadequate to ensure the conservation of the species.

Section 4 of the Act requires that we designate critical habitat on the basis of the best scientific data available. Further, our Policy on Information Standards Under the Endangered Species Act (published in the **Federal Register** on July 1, 1994 (59 FR 34271)), the Information Quality Act (section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Pub. L. 106-554; H.R. 5658)), and our associated Information Quality Guidelines, provide criteria, establish procedures, and provide guidance to ensure that our decisions are based on the best scientific data available. They require our biologists, to the extent consistent with the Act and with the use of the best scientific data available, to use primary and original sources of information as the basis for recommendations to designate critical habitat.

When we are determining which areas should be designated as critical habitat, our primary source of information is generally the information developed during the listing process for the species as reviewed in the May 2013 SSA

Report (Service 2013, entire) and the proposed rule for listing the species as endangered (which is publishing simultaneously with this proposed rule in today's **Federal Register**). Additional information sources may include articles in peer-reviewed journals, conservation plans developed by States and counties, scientific status surveys and studies, biological assessments, other unpublished materials, or experts' opinions or personal knowledge.

Habitat is dynamic, and species may move from one area to another over time. We recognize that critical habitat designated at a particular point in time may not include all of the habitat areas that we may later determine are necessary for the recovery of the species. For these reasons, a critical habitat designation does not signal that habitat outside the designated area is unimportant or may not be needed for recovery of the species. Areas that are important to the conservation of the species, both inside and outside the critical habitat designation, will continue to be subject to: (1) Conservation actions implemented under section 7(a)(1) of the Act, (2) regulatory protections afforded by the requirement in section 7(a)(2) of the Act for Federal agencies to ensure their actions are not likely to jeopardize the continued existence of any endangered or threatened species, and (3) the prohibitions of section 9 of the Act if actions occurring in these areas may affect the species. Federally funded or permitted projects affecting listed species outside their designated critical habitat areas may still result in jeopardy findings in some cases. These protections and conservation tools will continue to contribute to recovery of this species. Similarly, critical habitat designations made on the basis of the best available information at the time of designation will not control the direction and substance of future recovery plans, habitat conservation plans (HCPs), or other species conservation planning efforts if new information available at the time of these planning efforts calls for a different outcome.

#### *Prudence Determination*

Section 4(a)(3) of the Act, as amended, and implementing regulations (50 CFR 424.12), require that, to the maximum extent prudent and determinable, the Secretary designate critical habitat at the time the species is determined to be an endangered or threatened species. Our regulations (50 CFR 424.12(a)(1)) state that the designation of critical habitat is not prudent when one or both of the

following situations exist: (1) The species is threatened by taking or other human activity, and identification of critical habitat can be expected to increase the degree of threat to the species, or (2) such designation of critical habitat would not be beneficial to the species.

There is no documentation that the New Mexico meadow jumping mouse is currently threatened by collection, and mapping of critical habitat is not expected to initiate any such threat. In the absence of a finding that the designation of critical habitat would increase threats to a species, if there are any benefits to a critical habitat designation, then a prudent finding is warranted. The potential benefits include: (1) Triggering consultation under section 7 of the Act in new areas for actions in which there may be a Federal nexus where it would not otherwise occur because, for example, it 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. Therefore, because we have determined that the designation of critical habitat will not likely increase the degree of threat to the species, and may provide some measure of benefit, we find that designation of critical habitat is prudent for the New Mexico meadow jumping mouse.

#### *Critical Habitat Determinability*

Having determined that designation is prudent, under section 4(a)(3) of the Act, we must find whether critical habitat for the New Mexico meadow jumping mouse is determinable. Our regulations at 50 CFR 424.12(a)(2) state that critical habitat is not determinable when one or both of the following situations exist:

- (1) Information sufficient to perform required analyses of the impacts of the designation is lacking, or
- (2) The biological needs of the species are not sufficiently well known to permit identification of an area as critical habitat.

When critical habitat is not determinable, the Act provides for an additional year to publish a critical habitat designation (16 U.S.C. 1533(b)(6)(C)(ii)).

We reviewed the available information pertaining to the biological needs of the species and habitat characteristics where this species is located. This and other information represent the best scientific data

available and led us to conclude that the designation of critical habitat is determinable for the New Mexico meadow jumping mouse.

#### *Physical or Biological Features*

In accordance with section 3(5)(A)(i) and 4(b)(1)(A) of the Act and regulations at 50 CFR 424.12, in determining which areas within the geographical area occupied by the species at the time of listing to designate as critical habitat, we consider the physical or biological features that are essential to the conservation of the species and which may require special management considerations or protection. These include, but are not limited to:

- (1) Space for individual and population growth and for normal behavior;
- (2) Food, water, air, light, minerals, or other nutritional or physiological requirements;
- (3) Cover or shelter;
- (4) Sites for breeding, reproduction, or rearing (or development) of offspring; and
- (5) Habitats that are protected from disturbance or are representative of the historical, geographic, and ecological distributions of a species.

We derive the specific physical or biological features required for the New Mexico meadow jumping mouse from studies of this species' habitat, ecology, and life history as described below. Unfortunately, there have been relatively few studies on the New Mexico meadow jumping mouse and its natural life history, and information gaps remain. However, we have used the best available information as described in the May 2013 SSA Report (Service 2013, entire). To identify the physical and biological needs of the New Mexico meadow jumping mouse, we have relied on conditions at currently occupied locations where the New Mexico meadow jumping mouse has been observed during surveys, and the best information available on the species and its close relatives. Below, we summarize the physical and biological features needed by foraging, breeding, and hibernating New Mexico meadow jumping mice. For a complete review of the physical and biological features required by the New Mexico meadow jumping mouse, see Chapter 2 in the May 2013 SSA Report (Service 2013, Chapter 2).

For the New Mexico meadow jumping mouse to be considered viable, individual mice need specific vital resources for survival and completion of their life history. One of the most important aspects of the New Mexico meadow jumping mouse life history is

that it hibernates about 8 or 9 months out of the year, longer than most mammals. Conversely, it is only active 3 or 4 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, New Mexico meadow jumping mice only live 3 years or less and have one small litter annually with 7 or fewer 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, New Mexico meadow jumping mice populations would be greatly impacted.

The New Mexico meadow jumping mouse has exceptionally specialized habitat requirements to support these life-history needs and maintain adequate population sizes. Habitat requirements are characterized by tall (averaging at least 61 cm (24 in)), dense herbaceous (plants with no woody tissue) riparian vegetation composed primarily of sedges and forbs. This suitable habitat is found only when wetland vegetation achieves full growth potential associated with perennial flowing water. This vegetation is an important resource need for the New Mexico meadow jumping mouse because it provides vital food sources (insects and seeds), as well as the structural material for building day nests that are used for shelter from predators. It is imperative that the New Mexico meadow jumping mouse have rich abundant food sources during the summer so it can accumulate sufficient fat reserves to survive their long hibernation period because the species does not cache food for the winter. In addition, individual New Mexico meadow 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.

These suitable habitat conditions need to be in appropriate locations and of adequate sizes to support healthy populations of the New Mexico meadow jumping mouse. Historically, these wetland habitats would have been in large patches located intermittently along long stretches of streams. The ability of New Mexico meadow jumping mouse populations to be resilient to adverse stochastic events depends on the robustness of a population and the ability to recolonize if populations are extirpated. Because counting individual New Mexico meadow jumping mice to assess population sizes is very difficult and data are unavailable, we can best

measure population health by the size of the intact, suitable habitat available. We estimate that resilient populations of New Mexico meadow jumping mice need at least about 27.5 to 73.2 ha (68 to 181 ac) of suitable habitat along 9 to 24 km (5.6 to 15 mi) of flowing streams, ditches, or canals. This distribution and amount of suitable habitat would support multiple subpopulations of New Mexico meadow jumping mice throughout each of the waterways and would provide for sources of recolonization if some areas were extirpated due to disturbances, thereby increasing the chance of New Mexico meadow jumping mouse populations surviving the elimination or alteration of suitable habitat from a variety of sources and persisting while the necessary vegetation is restored. The suitable habitat patches must be relatively close together because the New Mexico meadow jumping mouse has limited dispersal capacity for natural recolonization. Range wide, we determined that the New Mexico meadow jumping mouse needs at least two resilient populations (where at least two existed historically) within each of eight identified geographic conservation areas. This number and distribution of resilient populations is expected to provide the species with the necessary redundancy and representation to provide for viability.

Populations of New Mexico meadow jumping mice with a high likelihood of long-term viability require functionally connected areas throughout stream reaches, ditches, or canals. This continuous suitable habitat is necessary to attain the population sizes and densities needed to increase the probability that populations of the species will persist in the face of natural or manmade events and seasonal fluctuations of food resources. Because the species occurs only in areas that are water-saturated, populations have a high potential for extirpation when habitat dries due to ground and surface water depletion, draining of wetlands, or drought. New Mexico meadow jumping mouse habitat is subject to dynamic changes that result from flooding and drying of these waterways and the ensuing fluctuations (loss and regrowth) in the quantity and location of dense herbaceous riparian vegetation over time. Consequently, fluctuating water levels may create circumstances in which New Mexico meadow jumping mice population sizes and locations within a waterway vary over time, and populations may be periodically extirpated and subsequently recolonized. To encompass the daily

and seasonal movements of the majority of individual New Mexico meadow jumping mice and allow for the occasional inter-population dispersal to occur unimpeded, appropriately-sized patches of suitable habitat should be no more than about 100 m (330 feet) apart within these waterways.

#### Primary Constituent Elements

Under the Act and its implementing regulations, we are required to identify the physical or biological features essential to the conservation of the New Mexico meadow jumping mouse in the geographic area occupied by the species at the time of listing, focusing on the features' primary constituent elements. We consider primary constituent elements to be the elements of physical or biological features that provide for a species' life-history processes and that are essential to the conservation of the species.

Based on our current knowledge of the physical or biological features and habitat characteristics required to sustain the species' life-history processes (Service 2013, Chapter 2), we determine that the primary constituent elements (PCEs) specific to the New Mexico meadow jumping mouse consist of the following:

(1) Riparian communities along rivers and streams, springs and wetlands, or canals and ditches characterized by one of two wetland vegetation community types:

(a) Persistent emergent herbaceous wetlands dominated by beaked sedge (*Carex rostrata*) or reed canarygrass (*Phalaris arundinacea*) alliances; or

(b) Scrub-shrub riparian areas that are dominated by willows (*Salix* spp.) or alders (*Alnus* spp.); and

(2) Flowing water that provides saturated soils throughout the New Mexico meadow jumping mouse's active season that supports tall (average stubble height of herbaceous vegetation of at least 69 cm (27 inches) and dense herbaceous riparian vegetation (cover averaging at least 61 vertical cm (24 inches) composed primarily of sedges (*Carex* spp. or *Schoenoplectus pungens*) and forbs, including, but not limited to one or more of the following associated species: Spikerush (*Eleocharis macrostachya*), beaked sedge (*Carex rostrata*), reed canarygrass (*Phalaris arundinacea*), rushes (*Juncus* spp. and *Scirpus* spp.), and numerous species of grasses such as bluegrass (*Poa* spp.), slender wheatgrass (*Elymus trachycaulus*), brome (*Bromus* spp.), foxtail barley (*Hordeum jubatum*), or Japanese brome (*Bromus japonicas*), and forbs such as water hemlock (*Circuta douglasii*), field mint (*Mentha arvensis*),

asters (*Aster* spp.), or cutleaf coneflower (*Rudbeckia laciniata*); and

(3) Sufficient areas of 9 to 24 km (5.6 to 15 mi) along a stream, ditch, or canal that contain suitable or restorable habitat to support movements of individual New Mexico meadow jumping mice; and

(4) Include adjacent floodplain and upland areas extending approximately 100 m (330 ft) outward from the water's edge (as defined by the bankfull stage of streams).

This proposed designation is designed to support the necessary life-history functions of the species and the areas containing those PCEs in the appropriate quantity and spatial arrangement essential for the conservation of the species. We determined that these primary constituent elements of critical habitat provide for the physiological, behavioral, and ecological requirements of the species. New Mexico meadow jumping mice require herbaceous riparian vegetation associated with perennial (persistent) flowing water and adjacent uplands that can support the necessary habitat components needed for foraging, breeding, and hibernating individuals. New Mexico meadow jumping mice must also have sufficient cover within which to forage in an appropriate configuration and proximity to day, maternal, and hibernation nesting sites. This vegetation enables New Mexico meadow jumping mice to find adequate food resources not only to successfully raise young, but also to accumulate sufficient body fat for survival during hibernation. The appropriate configuration is provided by protecting multiple local populations throughout a minimum length of stream or ditch or canal of 9 to 24 km (5.6 to 15 mi) of suitable habitat that will ensure sufficient resiliency of populations such that the species will be able to withstand and recover from periodic disturbances. Therefore, this amount of suitable habitat would support multiple local populations throughout each of the waterways, thereby increasing the chance of New Mexico meadow jumping mouse populations surviving the elimination or alteration of suitable habitat from a variety of sources and persisting while the necessary vegetation is restored.

Populations of New Mexico meadow jumping mice with a high likelihood of long-term viability require functionally connected areas throughout stream reaches, ditches, or canals. This continuous suitable habitat is necessary to attain the population sizes and densities needed to increase the probability that populations of the

species will persist in the face of natural or manmade events and seasonal fluctuations of food resources. This configuration of suitable habitat would encompass the daily and seasonal movements of the majority of individual New Mexico meadow jumping mice and would allow occasional inter-population dispersal to occur unimpeded.

#### Special Management Considerations or Protection

When designating critical habitat, we assess whether the specific areas within the geographic area occupied by the species at the time of listing contain features that are essential to the conservation of the species and which may require special management considerations or protection. The features essential to the conservation of this species may require special management considerations or protection to reduce the following threats: Excessive grazing pressure, water use and management, highway reconstruction, development, severe wildland fires, unregulated recreation, the reduction in the distribution and abundance of beaver ponds. These threats have the potential to affect the PCEs if they are conducted within or adjacent to units proposed as critical habitat.

Management activities that could ameliorate these threats include, but are not limited to: (1) Maintenance of occupied New Mexico meadow jumping mouse sites with active management to continue the protection of these areas from livestock grazing; (2) restoring, enhancing, and managing additional habitat through fencing of riparian areas, especially the Santa Fe, Lincoln, and Apache-Sitgreaves National Forests, to restore the required vegetative components and support the expansion of populations of the New Mexico meadow jumping mouse located since 2005 into areas that were historically occupied by the species, but where natural expansion is currently unlikely because no suitable habitat remains; (3) restoring habitat on Bosque del Apache National Wildlife Refuge (NWR) or other areas by carefully managing mowing and removing willows older than 5 years to maintain early seral habitat conditions along irrigation canals and ditches; and (4) developing and implementing a beaver management or restoration plan for occupied and historic New Mexico meadow jumping mouse localities where appropriate. A more complete discussion of the threats to the jumping mouse and its habitats can be found in the May 2013 SSA Report (Service 2013, Chapter 5).

### *Criteria Used To Identify Critical Habitat*

The following discussion describes the process and methodology that we used to identify the areas to propose as critical habitat units for the New Mexico meadow jumping mouse. As required by section 4(b)(2) of the Act, we used the best scientific data available to designate critical habitat. We relied heavily on the analysis of biological information reviewed in the SSA Report (Service 2013, Chapters 2 and 3). In accordance with section 3(5)(A) of the Act and its implementing regulation at 50 CFR 424.12(e), we determined the specific areas within the geographical area occupied by the species, at the time it is listed, where are found the physical or biological features that are essential to the conservation of the species and which may require special management considerations or protections (described earlier). Next, we determined the specific areas outside the geographical area occupied by the species at the time it is listed that are found to be essential for the conservation of the species. Finally, we described how we determined the lateral extent and mapping processes used in developing the proposed critical habitat units.

### *Occupied Areas—Section 3(5)(A)(i) of the Act*

Our initial step was to decide how to determine what areas are within the geographic area occupied by the New Mexico meadow jumping mouse at the time of listing (occupied areas). In reviewing all of the available data on New Mexico meadow jumping mouse occurrences, we decided that verified collections of the species between 2005 to 2012 would be used to identify the areas considered occupied by the New Mexico meadow jumping mouse at the time of listing. This timeframe was selected because we found no capture records of New Mexico meadow jumping mice between 1996 and 2005. For a detailed review of this assessment, see Chapter 3 of the May 2013 SSA Report (Service 2013) where we referenced historical records as those from the 1980s and 1990s and current records as those verified from 2005 to 2012. This assessment resulted in 29 locations of the New Mexico meadow jumping mouse considered occupied at the time of listing. However, there is uncertainty regarding the current status of the 29 populations that have been found since 2005 because 11 of the 29 populations have been substantially compromised since 2011 (due to water shortages, grazing, or wildfire and postfire flooding), and these populations

could already be extirpated. Moreover, an additional seven populations may continue to experience loss of habitat from postfire flooding in the near term. Nevertheless, since no newer information has shown the New Mexico meadow jumping mouse to be extirpated from any of these locations, we find that the best available information supports considering these areas to be within the geographic area occupied by the New Mexico meadow jumping mouse at the time of listing.

The occupied areas include the 29 locations that contain suitable habitat plus an additional 0.8-km (0.5-mi) segment upstream and downstream of these capture localities. These additional 0.8-km (0.5-mi) segments are considered occupied because this is approximately the maximum dispersal distance that an individual New Mexico meadow jumping mouse has been observed to travel (744 meters, 2,441 feet; Frey and Wright 2012, pp. 16, 109). Although the species usually exhibits extreme site fidelity with regular daily and seasonal movements of less than 100 m (330 feet) (Frey and Wright 2012, pp. 16, 109), these additional 0.8-km (0.5-mi) segments have the potential to be occupied during the active season of the species if a New Mexico meadow jumping mouse moves the maximum known distance beyond the protective herbaceous cover found within the 29 locations. For each of the occupied areas, we next decided whether these areas contain the essential elements of physical and biological features which may require special management considerations or protections (PCEs and special management are described above). As noted, all of the 29 locations found since 2005 are considered currently occupied by the New Mexico meadow jumping mouse and contain the essential PCEs (1 and 2), indicating each area requires special management considerations or protections to maintain those PCEs. Each of these 29 locations documented since 2005 occur within 1 of the 19 units or subunits (some units or subunits contain multiple occupied locations) proposed as critical habitat for the New Mexico meadow jumping mouse. For a site-by-site analysis of the 29 locations, see the May 2013 SSA Report Chapter 4 (Service 2013).

### *Partially Occupied Areas—Section 3(5)(A)(ii) of the Act*

We then decided which areas that are outside the geographic area occupied by the species at the time of listing (unoccupied areas) are essential for the conservation of the New Mexico meadow jumping mouse. We first

determined that, because of the loss of a substantial number (approximately 70) of historically occupied locations of the New Mexico meadow jumping mouse (Service 2013, Chapter 4) the number and distribution of populations should be increased at all of the currently occupied areas for the New Mexico meadow jumping mouse to be viable. The populations at these areas are needed to maintain sufficient redundancy and representation to provide for species viability (see Service 2013, Chapters 3 and 6). However, the areas occupied by the mouse since 2005 do not contain enough suitable, connected habitat to support resilient populations of New Mexico meadow jumping mouse (Service 2013, Chapter 3).

Because the species needs multiple local populations along streams and other waterways to maintain genetic diversity and provide sources for recolonization when local populations are extirpated, it was important that we consider areas adjacent to the locations considered occupied by the mouse since 2005 to provide for population resiliency and species viability. We found that it is essential for the conservation of the New Mexico meadow jumping mouse to expand its occupied habitats into areas considered currently unoccupied, but within its historical range. The inclusion of essential but unoccupied areas will not only protect these segments and provide habitat for population expansion from the 29 locations documented since 2005, but also provide sites for possible future reintroduction that will improve the species' status through added population resiliency. For example, when unoccupied habitat is restored, the New Mexico meadow jumping mouse would have the ability to expand beyond the 0.8-km (0.5-mi) segments surrounding each of the 29 locations and populate the individual stream reaches or waterways. Consequently, the currently unoccupied segments within individual stream reaches or waterways need to be of sufficient size to allow for the expansion of current and future populations and provide connectivity (active season movements and dispersal) between multiple populations as they become established.

So for each of the 19 areas (encompassing 29 locations) considered occupied, we proposed critical habitat units that include areas that are considered unoccupied adjacent to the occupied areas. The currently occupied areas contain the essential PCEs (1 and 2), indicating each area requires special management considerations or protections to maintain those PCEs;

however, the unoccupied areas are essential for the restoration of the essential PCEs (1, 2, 3, and 4) along streams and other waterways. Each of these units or subunits are considered “partially occupied” because they include some small areas that have been occupied by the species since 2005 and other larger areas upstream or downstream that are not known to be occupied by the New Mexico meadow jumping mouse at the time of listing.

To decide what areas of unoccupied habitat should be included in proposed critical habitat units that are partially occupied, we focused on areas that had historical collection records confirmed to be the New Mexico meadow jumping mouse. Capture locations were then used to approximate previously occupied habitat and guide our proposed critical habitat areas. We then identified areas of potential habitat that have been recently restored, areas that likely still contain the habitat characteristics sufficient to support the life history of the species, or areas where functionally connected patches of suitable habitat will be required to provide for resilient populations and conserve the species.

In considering how much area to include in proposed critical habitat units we considered how much suitable habitat might be needed to support resilient populations. In reviewing the available information, we think that New Mexico meadow jumping mouse populations generally need connected areas of suitable habitat along at least 9 to 24 km (5.6 to 15 mi) of continuous suitable habitat to support viable populations of New Mexico meadow jumping mice with a high likelihood of long-term persistence (Service 2013, Section 2.7). This stream length is twice the length recommended by Frey (2011, p. 29) because we think it is important to account for the ability of populations to have a higher probability of withstanding catastrophic events such as wildfire. We used this length as a general guide for determining proposed critical habitat areas along waterways, but each unit and subunit were evaluated on a site-by-site basis to determine the best configuration of proposed critical habitat to support New Mexico meadow jumping mouse populations in that unit or subunit.

In proposing critical habitat boundaries, we also considered the need for movement and dispersal to occur between suitable habitat areas within a proposed critical habitat unit or subunit. We do not anticipate that suitable habitat containing dense riparian herbaceous vegetation will be continuous throughout each of the

critical habitat units or subunits, but rather, that suitable habitat should be disperse throughout waterways to allow for natural behaviors and perhaps occasional longer distance (i.e., from 200 to 700 m (656 to 2,297 ft)) exploratory movements (Frey and Wright 2012, p. 109), including dispersal.

These movement and dispersal corridors are needed to connect sites that we consider occupied to one another within individual units or subunits, but not among units or subunits, which will enhance genetic exchange between New Mexico meadow jumping mouse populations and allow for natural recolonization if local populations are extirpated (Service 2013, Section 2.6). Historically, populations were likely distributed throughout drainages, with a series of interconnected local populations (also called subpopulations) occupying suitable habitat patches within individual streams. Interconnected local populations were likely arranged within suitable habitat patches along streams in such a way that individuals could fulfill their daily and seasonal movements of about 100 m (330 feet), but also occasionally move greater distances (i.e., 200 to 744 m (656 to 2,441 ft)) to disperse to other habitat patches within stream segments (Frey and Wright 2012, p. 109). This ability to have multiple local populations is important to maintaining genetic diversity within the populations along streams and providing sources for recolonization when local populations are extirpated. For example, if a site is extirpated, recolonization from persisting local source populations within the same general area would have to occur along riparian corridors that contain suitable habitat (Frey 2011, p. 41).

As a result, the most likely routes for dispersal of New Mexico meadow jumping mice among sites would occur along perennial or intermittent drainages where habitat is present or restorable. Although we did not select specific areas in which to designate movement corridors, we assumed perennial drainages are better movement corridors than ephemeral or intermittent drainages, and the ephemeral or intermittent drainages are better movement corridors than upland routes. We also assume that, if all else is equal, the shorter the route the more likely New Mexico meadow jumping mice will successfully move. Because New Mexico meadow jumping mouse habitat is subject to the dynamic process of flooding, inundation, and drought, the extent and location of riparian corridors along streams and rivers may

not remain constant and, depending on local conditions, are likely to expand and contract. Nevertheless, areas containing suitable habitat should be no more than about 100 m (330 feet) apart within these waterways, which would encompass the majority of daily and seasonal movements of individual New Mexico meadow jumping mice (Wright and Frey 2012, p. 109). This configuration of habitat provides for a local population to be “functionally connected,” such that the movements of the majority of individual New Mexico meadow jumping mice and perhaps occasional interpopulation dispersal occur unimpeded.

As a result of this analysis, we have determined that some of the areas within the proposed critical habitat units do not contain currently suitable habitat and are beyond the maximum known dispersal distance of 0.8 km (0.5 mi) to be considered occupied at any point in time. For example, within proposed Unit 2 we include the Harold Brock Fishing Easement that is located between the two sites that we consider occupied on Coyote Creek. The fishing easement is considered unoccupied because it does not currently contain suitable habitat and is beyond the daily and seasonal movement capacity of the species. Increasing the amount of suitable habitat in units like Coyote Creek is essential because it expands the available habitat within a given unit that can be occupied by the species and provides for potentially increasing population size within that riparian system. Increased population sizes are essential to conserving the species as higher numbers of individuals in the populations increases the likelihood of the persistence of the populations over time, in other words larger populations increase population resiliency.

#### Completely Unoccupied Areas—Section 3(5)(A)(ii) of the Act

We next considered whether there were any other areas within the species’ historical range but outside of the geographic area occupied at the time of listing (in other words completely unoccupied areas) that are essential for the conservation of the New Mexico meadow jumping mouse. In other words, we examined whether resilient populations at the 19 partially occupied proposed units (with 29 locations occupied since 2005) would be sufficient to provide for viability of the New Mexico meadow jumping mouse. We reviewed the current and historical distribution of the species within each of the eight conservation areas across its range and the need for sufficient redundancy for the New Mexico



meadow jumping mouse (Service 2013, Chapter 3). With three exceptions, we found that each of the conservation areas would have sufficient populations to support species viability if the current New Mexico meadow jumping mouse areas were expanded to provide for resilient populations. The exceptions where the historic distribution is not adequately represented by recently located populations were in the Jemez Mountains, the Sacramento Mountains, and the Rio Grande conservation areas. We found that the conservation of the species requires increasing the number and distribution of populations of the New Mexico meadow jumping mouse to allow for the restoration and expansion of recently located populations into areas that were historically occupied within the Jemez Mountains, Sacramento Mountains, and the middle Rio Grande.

We found four subunits (described under the Jemez Mountains, Sacramento Mountains, and middle Rio Grande Units below) within three conservation areas that are completely unoccupied, but are essential for the conservation of the New Mexico meadow jumping mouse. Inclusion of these areas provides for expansion of the overall geographic distribution of the species and increases the redundancy within these conservation areas. Much of the habitat within these four unoccupied subunits (Rio de las Vacas, Upper Rio Peñasco, Isleta Pueblo, and Ohkay Owingeh) contained New Mexico meadow jumping mice as recently as the late 1980s (Morrison 1985, entire; 1988, pp. 22–35; 1989, pp. 7–23; 1992, p. 311; Frey 2005a, p. 7). For each of these unoccupied subunits, we found that, because of ongoing habitat loss, the conservation of the New Mexico meadow jumping mouse requires the protection of stream reaches with a high potential for restoration of suitable habitat to enable the reestablishment of the New Mexico meadow jumping mouse within areas that were historically occupied. The protection and restoration of suitable habitat within these areas will enable the reestablishment of the New Mexico meadow jumping mouse and increase its distribution to provide population redundancy and resiliency.

In evaluating what areas are essential for the New Mexico meadow jumping mouse, we do not propose as critical habitat a number of historical locations of the New Mexico meadow jumping mouse because we do not think they are essential for conservation of the species. These omitted locations are, compared to other habitat segments, believed to be of lesser quality and do not contribute

as much to connectivity, stability, or protection against catastrophic loss. Consequently, we are not proposing historical locations along riparian segments as critical habitat because we did not find them to be essential for conservation of the New Mexico meadow jumping mouse.

#### Lateral Extent

To allow normal behavior and to ensure that the New Mexico meadow jumping mouse and the physical and biological features and sufficient PCEs on which it depends are protected, we believe that the outward extent of critical habitat from the riparian habitats should at least approximate the 100-year floodplain. Unfortunately, floodplains have not been mapped for many streams within the New Mexico meadow jumping mouse's range. While alternative delineation of critical habitat based on geomorphology and existing vegetation could accurately portray the presence and extent of required habitat components, we lack the explicit data to allow us to conduct such a delineation of critical habitat on a site-by-site basis. Moreover, some locations are associated with canals and ditches (e.g., Bosque del Apache NWR) that are manmade and do not have any associated floodplain. To address these issues, we propose to use a set distance of 100 m (328 ft) outward from either side of the river, stream, irrigation ditch, or canal's edge. The river, stream, irrigation ditch or canal's edge is defined by the bankfull stage. We believe this width is necessary to accommodate not only stream meandering and high flows within natural waterways, but also to capture essential upland areas in order to ensure that this proposed designation contains the features essential to all of the life-history stages (e.g., foraging, breeding, and hibernation) and the conservation of the species (Service 2013, Chapter 3). While this lateral extent of critical habitat may not extend outward to all areas used by individual mice over time, we expect that it will support the full range of PCEs essential for conservation of New Mexico meadow jumping mouse populations in these reaches.

Bankfull stage is defined as the upper level of the range of channel-forming flows, which transport the bulk of available sediment over time. Bankfull stage is generally considered to be that level of stream discharge reached just before flows spill out onto the adjacent floodplain. The discharge that occurs at bankfull stage, in combination with the range of flows that occur over a length of time, govern the shape and size of the river channel (Rosgen 1996, pp. 2–2 to 2–4). The use of bankfull stage and 100

m (328 ft) on either side recognizes the naturally dynamic nature of riverine systems, recognizes that floodplains are an integral part of the stream ecosystem, and contains the area and associated features essential to the conservation of the species. Bankfull stage is not an ephemeral feature, meaning it does not disappear. Bankfull stage can always be determined and delineated for any stream and for the canals and ditches we are proposing as critical habitat. We acknowledge that the bankfull stage of any given segment may change depending on the magnitude of a flood event, but it is a definable and standard measurement for stream systems. Following high flow events, stream channels can move from one side of a canyon to the opposite side, for example. If we were to designate critical habitat based on the location of the stream on a specific date, the area within the designation could be a dry channel in less than 1 year from the publication of the determination, should a high flow event occur.

#### Mapping

The critical habitat units that we propose were first delineated by creating rough areas for each unit by screen-digitizing polygons (map units) using Google Earth. We then digitized and refined the units using ArcMap version 10 (Environmental Systems Research Institute, Inc.), a computer Geographic Information System (GIS) program. The polygons were created by using current (2005 to 2012) and historical species (1985 to 1996) location points, which were then used in conjunction with hydrology, vegetation, and expert opinion. The location points were split into current and historical groups because we found no capture records of New Mexico meadow jumping mice between 1996 and 2005.

We set the limits of each critical habitat unit by identifying landmarks (islands, confluences, roadways, crossings, dams) that clearly delineated each area. Stream confluences are often used to delineate the boundaries of a unit for an aquatic species because the confluence of a tributary typically marks a significant change in the size or habitat characteristics of the stream. Stream confluences are also logical and recognizable termini. When a named tributary was not available, or if another landmark provided a more recognizable boundary, another landmark was used.

When current or historical locations of New Mexico meadow jumping mice were used to delineate upstream and downstream boundaries of critical habitat, we extended the boundaries by



about 0.8 km (0.5 mi) to encompass areas that have the potential to be occupied during the active season of the species if a New Mexico meadow jumping mouse moves the maximum known distance beyond the protective herbaceous cover. However, we then refined the starting and end points by evaluating appropriate habitat conditions based on the presence or absence of perennial water or suitable vegetation. We selected upstream and downstream cutoff points that would avoid including highly degraded areas that are not likely restorable. For example, we did not include areas that were permanently dewatered or permanently developed (i.e., natural vegetation removed), or areas in which there was some other indication that suitable habitat no longer existed and was not likely to be restored.

When determining proposed critical habitat boundaries, we also made every effort to avoid including developed areas such as lands covered by buildings, pavement, and other structures because such lands lack physical or biological features for the New Mexico meadow jumping mouse. The scale of the maps we prepared under the parameters for publication within the Code of Federal Regulations

may not reflect the exclusion of such developed lands. Any such lands inadvertently left inside critical habitat boundaries shown on the maps of this proposed rule have been excluded by text in the proposed rule and are not proposed for designation as critical habitat. Therefore, if the critical habitat is finalized as proposed, a Federal action involving these lands would not trigger section 7 consultation with respect to critical habitat and the requirement of no adverse modification unless the specific action would affect the physical or biological features in the adjacent critical habitat.

#### Summary

In summary, we are proposing for designation of critical habitat geographic areas that we have determined are occupied by the New Mexico meadow jumping mouse at the time of listing and contain sufficient elements of physical or biological features to support life-history processes essential for the conservation of the species and that require special management. Moreover, we are proposing to designate as critical habitat additional areas that are considered presently unoccupied, but essential to the conservation of the New Mexico meadow jumping mouse.

The critical habitat designation is defined by the maps, as modified by any accompanying regulatory text, presented at the end of this document in the rule portion. We will make the coordinates or plot points or both on which each map is based available to the public on <http://www.regulations.gov> at Docket No. FWS-R2-ES-2013-0014, at <http://www.fws.gov/southwest/es/NewMexico/>, and at the New Mexico Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT** above).

#### Proposed Critical Habitat Designation

We are proposing to designate approximately 310.5 km (193.1 mi) (5,892 ha (14,560 ac)) in eight units as critical habitat for the New Mexico meadow jumping mouse in the states of Colorado, New Mexico, and Arizona. The critical habitat areas we describe below constitute our current best assessment of areas that meet the definition of critical habitat for the New Mexico meadow jumping mouse. The units we propose as critical habitat and the approximate area of each proposed critical habitat unit and land ownership are shown in Table 1. A summary of the proposed areas by land ownership and State are provided in Table 2.

TABLE 1—PROPOSED CRITICAL HABITAT UNITS FOR THE NEW MEXICO MEADOW JUMPING MOUSE

[Area estimates reflect all land within critical habitat unit boundaries.]

Stream segment	Occupied at the time of listing	Land ownership	Length of unit, km (mi)	Area, ha (ac)
<b>Unit 1—Sugarite Canyon</b>				
Chicorica Creek .....	Partial .....	State of New Mexico, State of Colorado, Private .....	.....	229 (568) 114 (282) 344 (849)
Total Unit 1 .....	.....	.....	13.0 (8.1)	687 (1698)
<b>Unit 2—Coyote Creek</b>				
Coyote Creek .....	Partial .....	State of New Mexico, Private .....	.....	26 (64) 213 (527)
Total Unit 2 .....	.....	.....	11.8 (7.4)	239 (590)
<b>Unit 3—Jemez Mountains</b>				
<i>Subunit 3A—San Antonio</i> San Antonio Creek .....	Partial .....	Forest Service, Private, Other Federal Agency ..	.....	223 (550) 10 (26) 1 (3)
Total Subunit 3A .....	.....	.....	11.5 (7.1)	234 (579)
<i>Unit 3B—Rio Cebolla</i> Rio Cebolla .....	Partial .....	Forest Service, Private, State of New Mexico ....	.....	278 (686) 76 (187) 76 (187)
Total Subunit 3B .....	.....	.....	20.7 (12.9)	429 (1060)
<i>Unit 3C—Rio de las Vacas</i>				

TABLE 1—PROPOSED CRITICAL HABITAT UNITS FOR THE NEW MEXICO MEADOW JUMPING MOUSE—Continued

[Area estimates reflect all land within critical habitat unit boundaries.]

Stream segment	Occupied at the time of listing	Land ownership	Length of unit, km (mi)	Area, ha (ac)
Rio de las Vacas .....	No .....	Forest Service, Private .....	.....	332 (820) 122 (302)
Total Subunit 3C .....	.....	.....	23.3 (14.5)	454 (1122)
Total Unit 3 .....	.....	.....	55.5 (34.5)	1117 (2761)
<b>Unit 4—Sacramento Mountains</b>				
<i>Subunit 4A—Silver Springs</i> Silver Springs Creek .....	Partial .....	Forest Service, Private .....	.....	28 (70) 77 (190)
Total Subunit 4A .....	.....	.....	5.2 (3.2)	105 (260)
<i>Subunit 4B—Upper Peñasco</i> Rio Peñasco .....	No .....	Forest Service, Private .....	.....	18 (44) 118 (291)
Total Subunit 4B .....	.....	.....	6.4 (4.0)	136 (335)
<i>Subunit 4C—Middle Peñasco</i> Rio Peñasco .....	Partial .....	Forest Service, Private .....	.....	26 (65) 238 (587)
Total Subunit 4C .....	.....	.....	11.4 (7.1)	264 (652)
<i>Subunit 4D—Wills Canyon</i> Mauldin Springs .....	Partial .....	Forest Service, Private .....	.....	65 (162) 46 (113)
Total Subunit 4D .....	.....	.....	5.5 (3.4)	111 (275)
<i>Subunit 4E—Agua Chiquita Canyon</i> Agua Chiquita Creek .....	Partial .....	Forest Service .....	.....	161 (398)
Total Subunit 4E .....	.....	.....	7.7 (4.8)	161 (398)
Total Unit 4 .....	.....	.....	36.2 (22.5)	777 (1920)
<b>Unit 5—White Mountains</b>				
<i>Subunit 5A—Little Colorado</i> Little Colorado River .....	Partial .....	Forest Service, Private .....	.....	445 (1100) 33 (81)
Total Subunit 5A .....	.....	.....	22.6 (14.0)	478 (1181)
<i>Subunit 5B—Nutrioso</i> Nutrioso River .....	Partial .....	Forest Service, Private .....	.....	142 (351) 271 (670)
Total Subunit 5B .....	.....	.....	20.4 (12.7)	413 (1021)
<i>Subunit 5C—San Francisco</i> San Francisco River .....	Partial .....	Forest Service, Private .....	.....	68 (167) 184 (455)
Total Subunit 5C .....	.....	.....	11.8 (7.3)	252 (622)
<i>Subunit 5D—East Fork Black</i> East Fork Black River .....	Partial .....	Forest Service .....	.....	421 (1040)
Total Subunit 5D .....	.....	.....	20.3 (12.6)	421 (1040)
<i>Subunit 5E—West Fork Black</i> West Fork Black River .....	Partial .....	Forest Service, Private, State of Arizona .....	.....	415 (1025) 17 (43) 49 (120)
Total Subunit 5E .....	.....	.....	23.0 (14.3)	481 (1188)
<i>Subunit 5F—Boggy and Centerfire</i> Boggy and Centerfire Creeks .....	Partial .....	Forest Service .....	.....	196 (485)
Total Subunit 5F .....	.....	.....	8.9 (5.5)	196 (485)
<i>Subunit 5G—Corduoy</i> Corduoy Creek .....	Partial .....	Forest Service .....	.....	104 (256)

TABLE 1—PROPOSED CRITICAL HABITAT UNITS FOR THE NEW MEXICO MEADOW JUMPING MOUSE—Continued

[Area estimates reflect all land within critical habitat unit boundaries.]

Stream segment	Occupied at the time of listing	Land ownership	Length of unit, km (mi)	Area, ha (ac)
Total Subunit 5G .....	.....	.....	4.8 (3.0)	104 (256)
Subunit 5H—Campbell Blue	.....	.....	.....	.....
Campbell Blue Creek .....	Partial .....	Forest Service, Private .....	.....	100 (247) 2 (6)
Total Subunit 5H .....	.....	.....	4.8 (3.0)	102 (253)
Total Unit 5 .....	.....	.....	116.6 (72.4)	2448 (6047)
<b>Unit 6—Middle Rio Grande</b>				
Subunit 6A—Isleta Marsh	.....	.....	.....	.....
Marsh .....	No .....	Isleta Pueblo .....	3.7 (2.3)	43 (105)
Subunit 6B—Ohkay Owingeh	.....	.....	.....	.....
Marsh .....	No .....	Ohkay Owingeh .....	4.8 (3.0)	51 (125)
Subunit 6C—Bosque del Apache NWR	.....	.....	.....	.....
Canal .....	Partial .....	Service .....	21.1 (13.1)	201 (496)
Total Unit 6 .....	.....	.....	29.6 (18.5)	294 (727)
<b>Unit 7—Florida</b>				
Florida River .....	Partial .....	Private, Bureau of Land Mgt .....	.....	254 (627) 3 (6)
Total Unit 7 .....	.....	.....	13.6 (8.4)	256 (634)
<b>Unit 8—Sambrito Creek</b>				
Sambrito Creek .....	Partial .....	State of Colorado, Private .....	.....	61 (150) 14 (35)
Total Unit 8 .....	.....	.....	4.6 (2.9)	75 (184)
GRAND TOTAL ALL UNITS .....	.....	.....	310.5 (193.1)	5892 (14,560)

**Note:** Area sizes may not sum due to rounding.

TABLE 2—PROPOSED CRITICAL HABITAT UNITS FOR THE NEW MEXICO MEADOW JUMPING MOUSE, SUMMARIZED BY LAND OWNERSHIP AND STATE

State	Land ownership, ha (ac)				
	Federal	State	Private	Tribal	Total
New Mexico .....	(3,294)	(819)	(3,072)	(230)	(7,415)
Arizona .....	(4,671)	(120)	(1,255)	.....	(6,046)
Colorado .....	(6)	(432)	(662)	.....	(1,100)
Total .....	(7,971)	(1,371)	(4,989)	(230)	(14,561)

#### Unit Descriptions

We present brief descriptions of each of the proposed critical habitat units, and reasons why they meet the definition of critical habitat for the New Mexico meadow jumping mouse, below. For additional information on each unit, see the SSA (Service 2013, Chapter 4).

We consider the 29 locations where the New Mexico meadow jumping mouse has been found since 2005 to be within the geographic area occupied at the time of listing (occupied areas). All of these occupied areas are contained

within 19 of the 23 proposed critical habitats units that we refer to as partially occupied in Table 1. The exceptions are the completely unoccupied units (3—C Rio de las Vacas, 4—B Upper Rio Peñasco, 6—A Isleta Pueblo, and 6—B Ohkay Owingeh 3—C). We specifically describe each of the occupied areas within the proposed critical habitat unit descriptions presented below. All of these occupied areas contain suitable habitat with one or more of the essential physical or biological features that require special

management and are, therefore, included in the proposed designation under section 3(5)(A)(i) of the Act. All of these occupied areas exhibit: PCE 1—appropriate wetland vegetation communities and PCE 2—flowing water with tall herbaceous vegetation. The occupied areas within these 19 proposed units may require special management or protection to address the direct or indirect loss or alteration of the essential physical and biological features. These special management considerations or protections are needed

to address: Water development, recreational use, livestock grazing, road reconstruction, the loss of beaver ponds, and vegetation mowing.

Every proposed critical habitat unit contains areas outside the geographic area occupied by the species at the time of listing (unoccupied areas) that we conclude are essential for the conservation of the New Mexico meadow jumping mouse. As noted, four of these units (3—C Rio de las Vacas, 4—B Upper Rio Peñasco, 6—A Isleta Pueblo, and 6—B Ohkay Owingeh 3—C) are considered completely unoccupied. The remaining 19 proposed critical habitat units include unoccupied areas that are up- or downstream of the occupied areas, but do not currently have the necessary vegetation to protect New Mexico meadow mice from predators or to provide food sources. We describe these units containing both occupied and unoccupied areas within the same stream reach as partially occupied (Table 1). All of these completely or partially unoccupied areas currently have flowing water to allow for future restoration of the essential PCEs 1 and 2, but also PCE 3—sufficient areas of streams, ditches or canals; and PCE 4—adjacent floodplain and upland areas that would collectively provide the needed physical and biological features of habitat required to sustain the species' life-history processes.

We conclude that all of these areas, whether they are within partially or completely unoccupied proposed units, are essential to the conservation of the New Mexico meadow jumping mouse because: (1) The areas occupied by the mouse since 2005 do not contain enough suitable, connected habitat to support resilient populations of New Mexico meadow jumping mouse; (2) the currently unoccupied segments within individual stream reaches or waterways need to be of sufficient size to allow for the expansion of populations and provide connectivity (active season movements and dispersal) between multiple populations as they become established; (3) additional areas need habitat protection to allow restoration of the necessary herbaceous vegetation for possible future reintroductions; and (4) multiple local populations along streams are important to maintaining genetic diversity within the populations and for providing sources for recolonization if local populations are extirpated. Therefore, all of the unoccupied areas are included in the proposed designation under section 3(5)(A)(ii) of the Act.

#### *Unit 1: Sugarite Canyon*

Unit 1 consists of 687 ha (1,698 ac) along 13.0 km (8.1 mi) of streams on private lands and areas owned by the States of Colorado and New Mexico. The Colorado streams areas are found within Las Animas County, Colorado, and the New Mexico stream areas are found within Colfax County, New Mexico. The unit begins 0.6 km (0.4 mi) north of the headwaters of Lake Dorothey, Colorado, along the East Fork and 1.1 km (0.7 mi) north of the headwaters of Lake Dorothey along the West Fork of Schwacheim Creek and follows the drainage downstream, to include a 2.0 km (1.25 mi) segment of Chicorica Creek that is a tributary flowing into the headwaters of Lake Maloya and a 0.8 km (0.5 mi) segment of Segerstrom Creek which is a tributary flowing into the western edge of Lake Maloya, New Mexico. The unit continues through Lake Maloya and includes about 1.8 km (1.1 mi) of the small western tributary Soda Pocket Creek, which flows into and includes lower Chicorica Creek below Lake Maloya Dam downstream to the terminus of the area at Lake Alice Dam within Sugarite Canyon State Park.

Based upon captures of the New Mexico meadow jumping mouse since 2005 (Frey 2006d, pp. 19–21, 67) approximately 2.8 ha (7 ac) within this unit in Sugarite Canyon State Park in New Mexico are considered occupied at the time of listing and contain suitable habitat. The occupied areas occur along the Canyon at five locations: Chicorica Creek 0.6 km (0.4 mi) below Lake Maloya Dam; Segerstrom Creek just above the western confluence with Lake Maloya; the headwaters of Lake Alice; and Soda Pocket Creek and Campground along the two streams that cross the open meadow on Barlett Mesa near the campfire program area and behind campsite number 16 (Frey 2006d, pp. 19–21, 67). In 2011, the Track Fire burned nearly the entire watershed of Sugarite Canyon, and surveys have not been conducted to determine whether New Mexico meadow jumping mice still persist postfire (Service 2012c). However, until new information is collected we consider this area within the geographical area occupied by the New Mexico meadow jumping mouse at the time of listing. The features essential to the conservation of this species may require special management considerations or protection to reduce the following threats: Severe wildland fires, recreation, grazing, water use and management, floods, the reduction in the distribution and abundance of

beaver ponds, and coalbed methane. The occupied areas are centered around the five capture locations plus an additional 0.8-km (0.5-mi) segment upstream and downstream of these areas where the physical and biological features are found. The remaining unoccupied areas within Unit 1 are found both upstream and downstream of the occupied areas, and are considered essential to the conservation of the New Mexico meadow jumping mouse (as described in the *Unit Description* introduction section above).

#### *Unit 2: Coyote Creek*

Unit 2 consists of 239 ha (590 ac) along 11.8 km (7.4 mi) of Coyote Creek on private lands and an area owned by the State of New Mexico within Mora County. The unit begins at the confluence of Little Blue Creek and Coyote Creek and extends downstream about to the terminus just south of the Village of Guadalupita.

Based upon captures of the New Mexico meadow jumping mouse since 2006 (Frey 2006d, pp. 24, 70; Frey 2012, p. 6), approximately 1.7 ha (4.3 ac) within this unit in Coyote Creek State Park and several miles north of the park along Highway 434 in New Mexico are considered occupied at the time of listing and contain suitable habitat. The occupied areas occur at two locations along Coyote Creek including: an area that contains extensive beaver ponds, dams, and canals and is located between the only vehicle bridge within the southwestern part of Coyote Creek State Park and the southern boundary of the park; and within another area that contains extensive beaver activity about 1.9 km (1.2 mi) south of the confluence of Little Blue Creek and Coyote Creek. The features essential to the conservation of this species may require special management considerations or protection to reduce the following threats: severe wildland fires, recreation, grazing, water use and management, floods, the reduction in the distribution and abundance of beaver ponds, and development. The occupied areas are centered around the two capture locations plus an additional 0.8-km (0.5-mi) segment upstream and downstream of these areas where the physical and biological features are found. The remaining unoccupied areas within Unit 2 are found both upstream and downstream of the occupied areas, and are considered essential to the conservation of the New Mexico meadow jumping mouse (as described in the *Unit Description* introduction section above).

### Unit 3: Jemez Mountains

Unit 3 consists of 1,118 ha (2,761 ac) of streams within three subunits on private lands and areas owned by the Forest Service and the State of New Mexico within Sandoval County, New Mexico. Areas proposed for critical habitat for the New Mexico meadow jumping mouse in this unit incorporate the only habitat known to be occupied by the species since 2005 within the Jemez Mountains with the capability to support the breeding and reproduction of the species.

#### Subunit 3–A; San Antonio Creek

Subunit 3–A consists of 234 ha (579 ac) along 11.5 km (7.1 mi) of San Antonio Creek on private lands and areas owned by the Forest Service. This subunit begins along the northern part of San Antonio Creek where it exits the boundary of the Valles Caldera National Preserve and follows the creek through mostly Forest Service lands where it meets private land immediately downstream of the San Antonio Campground.

Based upon the capture of one New Mexico meadow jumping mouse since 2005 (Frey 2005a, pp. 15, 24, 58), approximately 0.4 ha (1 ac) within this unit along San Antonio Creek are considered occupied at the time of listing and contain suitable habitat. The occupied area is located within a wet meadow near the southwestern part of San Antonio Campground (Frey 2005a, pp. 15, 24, 58). The features essential to the conservation of this species may require special management considerations or protection to reduce the following threats: severe wildland fires, recreation, grazing, floods, and the reduction in the distribution and abundance of beaver ponds. The occupied area is centered around the capture location plus an additional 0.8-km (0.5-mi) segment upstream and downstream of this area where the physical and biological features are found. The remaining unoccupied areas within Subunit 3–A are found both upstream and downstream of the occupied area, and are considered essential to the conservation of the New Mexico meadow jumping mouse (as described in the *Unit Description* introduction section above).

#### Subunit 3–B; Rio Cebolla

Subunit 3–B consists of 429 ha (1,060 ac) along 20.7 km (12.9 mi) of the Rio Cebolla on private lands and areas owned by the Forest Service and the State of New Mexico. This subunit extends from an old beaver dam about 0.6 km (0.4 mi) north of Hay Canyon

downstream about where it meets the Rio de las Vacas.

Based upon captures of the New Mexico meadow jumping mouse since 2005 (Frey 2005a, pp. 23–28, 37–38; Frey 2007b, p. 11), approximately 10.7 ha (26.4 ac) within this unit on State of New Mexico and Forest Service lands in New Mexico are considered occupied at the time of listing and contain suitable habitat. The occupied areas occurs at six locations along the Rio Cebolla: near the western edge of the northwestern pond along the access road within the New Mexico Department of Game and Fish's Seven Springs Hatchery; within Fenton Lake State Park at the upper end of Fenton Lake Marsh above Highway 126 and the New Mexico Highway 126 bridge; within Fenton Lake State Park Day Use Area at the mouth of a small tributary that enters the southwest side of Fenton Lake; within Lake Fork Canyon inside a livestock enclosure above the bridge on Forest Road 376; within a network of channels, beaver ponds, and wet meadows about 0.9 kilometers (0.6 miles) southwest of Forest Road 376 bridge; and about 2.7 km (1.7 mi) north of the confluence of the Rio Cebolla and the Rio de las Vacas (Frey 2005a, pp. 23–28, 37–38; Frey 2007b, p. 11). The features essential to the conservation of this species may require special management considerations or protection to reduce the following threats: severe wildland fires, recreation, grazing, floods, the reduction in the distribution and abundance of beaver ponds, development, and highway reconstruction. The occupied areas are centered around the six capture locations plus an additional 0.8-km (0.5-mi) segment upstream and downstream of these areas where the physical and biological features are found. The remaining unoccupied areas within Subunit 3–B are found both upstream and downstream of the occupied areas, and are considered essential to the conservation of the New Mexico meadow jumping mouse (as described in the *Unit Description* introduction section above).

#### Subunit 3–C; Rio de las Vacas

Subunit 3–C consists of 454 ha (1,122 ac) along 23.3 km (14.5 mi) of the Rio de las Vacas on private lands and areas owned by the Forest Service. This subunit starts about 0.8 km (0.5 mi) north of Forest Road 94 adjacent to Burned Canyon and extends downstream to the confluence with the Rio Cebolla Subunit.

Although much of the habitat was historically occupied with individuals detected as recently as 1989 (Morrison

1985; 1992, p. 311; Frey 2005a, p. 7), no New Mexico meadow jumping mice were captured during surveys in 2005 (Frey 2005a, p. 18). The entire subunit is considered unoccupied at the time of listing. All of the areas within the Subunit 3–C are considered essential to the conservation of the New Mexico meadow jumping mouse (as described in the *Unit Description* introduction section above).

### Unit 4: Sacramento Mountains

Unit 4 consists of 777 ha (1,920 ac) of streams within five subunits on private lands and areas owned by the Forest Service within Otero County, New Mexico. Areas proposed for critical habitat for the New Mexico meadow jumping mouse in this unit incorporate the only habitat known to be occupied by the species since 2005 within the Sacramento Mountains with the capability to support the breeding and reproduction of the species.

#### Subunit 4–A; Silver Springs

Subunit 4–A consists of 105 ha (260 ac) along 5.2 km (3.2 mi) of Silver Springs Creek on private lands and areas owned by the Forest Service. This subunit begins about 0.3 km (0.2 mi) north of the intersection of Forest Road 162 and New Mexico Highway 244 and follows Silver Springs Creek downstream to the boundary of Forest Service and Mescalero Apache lands.

Based upon the capture of one New Mexico meadow jumping mouse since 2005 (Frey 2005a, p. 31), approximately 5.4 ha (13.3 ac) within this unit on Forest Service lands in New Mexico are considered occupied at the time of listing. The occupied area is located within a grazing enclosure containing well-developed riparian habitat about 7.4 km (4.6 mi) north of Cloudcroft along middle Silver Springs Creek, at Junction of Turkey Pen Canyon and Forest Road 405 (Frey 2005a, pp. 31, 38). The features essential to the conservation of this species may require special management considerations or protection to reduce the following threats: severe wildland fires, grazing, floods, and the reduction in the distribution and abundance of beaver ponds. The occupied area is centered around the capture location plus an additional 0.8-km (0.5-mi) segment upstream and downstream of this area where the physical and biological features are found. The remaining unoccupied areas within Subunit 4–A are found both upstream and downstream of the occupied area, and are considered essential to the conservation of the New Mexico meadow jumping mouse (as described

in the *Unit Description* introduction section above).

#### Subunit 4-B; Upper Rio Peñasco

Subunit 4-B consists of 136 ha (335 ac) along 6.4 km (4.0 mi) of the Rio Peñasco on private lands and areas owned by the Forest Service. This subunit begins at the junction of Forest Service Road 164 and New Mexico Highway 6563 and follows the Rio Peñasco drainage downstream to about 2.4 km (1.5 mi) below Bluff Spring at the boundary of private and Forest Service lands.

Although much of the habitat was historically occupied with individuals detected as recently as 1988 (Morrison 1989, pp. 7–10, Frey 2005a, pp. 30–31), no New Mexico meadow jumping mice were captured during surveys in 2005 (Frey 2005a, pp. 19–20, 32–34). The entire subunit is considered unoccupied at the time of listing. All of the areas within the Subunit 4-B are considered essential to the conservation of the New Mexico meadow jumping mouse (as described in the *Unit Description* introduction section above).

#### Subunit 4-C; Middle Rio Peñasco

Subunit 4-C consists of 264 ha (652 ac) along 11.4 km (7.1 mi) of the Rio Peñasco on private lands and areas owned by the Forest Service. This subunit begins at the junction of Wills Canyon and Forest Service Road 169 and follows the Rio Peñasco drainage downstream to the junction of Forest Road 212.

Based upon the capture of two New Mexico meadow jumping mice in 2012, following the cessation of grazing for 2 years, (Forest Service 2012h, pp. 2–4; Service 2012d; U.S. Army Corps of Engineers 2012, entire; 2012a, entire), approximately 0.3 ha (0.75 ac) within this unit on Forest Service lands in New Mexico are considered occupied at the time of listing. The occupied area is located within a wetland at the junction of Cox Canyon and the Rio Peñasco (Forest Service 2012h, pp. 2–4). The features essential to the conservation of this species may require special management considerations or protection to reduce the following threats: severe wildland fires, recreation, grazing, floods, and the reduction in the distribution and abundance of beaver ponds. The occupied area is centered around the capture location plus an additional 0.8-km (0.5-mi) segment upstream and downstream of this area where the physical and biological features are found. The remaining unoccupied areas within Subunit 4-C are found both upstream and downstream of the

occupied area, and are considered essential to the conservation of the New Mexico meadow jumping mouse (as described in the *Unit Description* introduction section above).

#### Subunit 4-D; Wills Canyon

Subunit 4-D consists of 111 ha (275 ac) along 5.6 km (3.5 mi) of streams on private lands and areas owned by the Forest Service. This subunit begins at upper Mauldin Spring, the head of the Wills Canyon, and follows the drainage downstream along Forest Service Road 169 to the boundary of Forest Service and private lands in the vicinity of Bear Spring.

Based upon the capture of one New Mexico meadow jumping mouse in 2012 (Forest Service 2012b, entire; 2012c, entire; 2012h, pp. 2–5), approximately 0.8 ha (1.9 ac) within this unit on Forest Service lands in New Mexico are considered occupied at the time of listing. The occupied area is located within a grazing enclosure at Lower Mauldin Spring in Wills Canyon (Forest Service 2012h, pp. 2–5). The features essential to the conservation of this species may require special management considerations or protection to reduce the following threats: severe wildland fires, grazing, floods, and the reduction in the distribution and abundance of beaver ponds. The occupied area is centered around the capture location plus an additional 0.8-km (0.5-mi) segment upstream and downstream of this area where the physical and biological features are found. The remaining unoccupied areas within Subunit 4-D are found both upstream and downstream of the occupied area, and are considered essential to the conservation of the New Mexico meadow jumping mouse (as described in the *Unit Description* introduction section above).

#### Subunit 4-E; Agua Chiquita Canyon

Subunit 4-E consists of 161 ha (398 ac) along 7.7 km (4.8 mi) of Agua Chiquita Creek on areas owned by the Forest Service. This subunit begins about 0.8 km (0.5 mi) upstream of the livestock enclosure around Barrel and Sand Springs along Agua Chiquita Creek and follows the canyon downstream along Forest Service Road 64 to Crisp, a Forest Service riparian pasture.

Based upon multiple captures of New Mexico meadow jumping mice since 2005 (Frey 2005a, p. 34; Forest Service 2010, entire; Service 2012d, pp. 1–2), approximately 4.9 ha (12.0 ac) within this unit on Forest Service lands in New Mexico are considered occupied at the time of listing. The occupied areas are

located within two of four fenced livestock enclosures including: the enclosure surrounding Sand and Barrel Springs and the most downstream section of the second in the series of four enclosures (Frey 2005a, p. 34; Forest Service 2010, entire; Service 2012d, pp. 1–2). The features essential to the conservation of this species may require special management considerations or protection to reduce the following threats: severe wildland fires, recreation, grazing, floods, and the reduction in the distribution and abundance of beaver ponds. The occupied areas are centered around the two capture locations plus an additional 0.8-km (0.5-mi) segment upstream and downstream of these areas where the physical and biological features are found. The remaining unoccupied areas within Subunit 4-E are found both upstream and downstream of the occupied areas, and are considered essential to the conservation of the New Mexico meadow jumping mouse (as described in the *Unit Description* introduction section above).

#### Unit 5: White Mountains

Unit 5 consists of 2,448 ha (6,047 ac) of streams within eight subunits on private lands and areas owned by the Forest Service and the State of Arizona within Greenlee and Apache Counties, Arizona. Areas proposed for critical habitat for the New Mexico meadow jumping mouse in this unit incorporate the only habitat known to be occupied by the species since 2005 within the White Mountains with the capability to support the breeding and reproduction of the species.

#### Subunit 5-A; Little Colorado River

Subunit 5-A consists of 478 ha (1,181 ac) along 22.6 km (14.0 mi) of the Little Colorado River on private lands and areas owned by the Forest Service. This subunit encompasses the East and West Forks of the Little Colorado River. The East Fork Segment begins 0.8 km (0.5 mi) upstream of the Phelps Research Natural Area and follows the drainage downstream about 3.2 km (2.0 mi) to the confluence of Lee Valley Creek and then runs upstream about 1.6 km (1.0 mi) to the dam of Lee Valley Reservoir. The subunit continues from the confluence of Lee Valley Creek and the East Fork, downstream to the confluence of the West Fork of the Little Colorado River, continuing to about 8.9 km (5.5 mi) upstream along the drainage to about 0.8 km (0.5 mi) past Sheep's Crossing.

Based upon multiple captures of New Mexico meadow jumping mice since 2008 (Frey 2011, p. 87; ADGF 2012a, p. 3), approximately 0.6 ha (1.5 ac) within

this unit on Forest Service lands in Arizona are considered occupied at the time of listing. The occupied area is within a livestock enclosure along a short 0.4-km stream reach that is 1.8 km (1.1 mi) south of Greer, below Montlure Camp (Frey 2011, p. 87; ADGF 2012a, p. 3). In 2011, the Wallow Fire burned much of this area, and surveys during 2012 continued to detect New Mexico meadow jumping mice (ADGF 2012a, p. 3). The features essential to the conservation of this species may require special management considerations or protection to reduce the following threats: severe wildland fires, recreation, grazing, floods, the reduction in the distribution and abundance of beaver ponds, and development. The occupied areas are centered around the capture locations plus an additional 0.8-km (0.5-mi) segment upstream and downstream of this area where the physical and biological features are found. The remaining unoccupied areas within Subunit 5–A are found both upstream and downstream of the occupied area, and are considered essential to the conservation of the New Mexico meadow jumping mouse (as described in the *Unit Description* introduction section above).

#### Subunit 5–B; Nutrioso Creek

Subunit 5–B consists of 413 ha (1,021 ac) along 20.4 km (12.7 mi) of Nutrioso Creek on private lands and areas owned by the Forest Service. This subunit begins at the confluence of Paddy Creek about 4.8 km (3 mi) south of the town of Nutrioso and follows the drainage downstream about 16 km (10 mi) to Nelson Reservoir.

Based upon multiple captures of New Mexico meadow jumping mice since 2008 (Frey 2011, pp. 29, 35, 89, 95; ADGF 2012a, p. 3), approximately 1.9 ha (4.9 ac) within this unit on Forest Service lands in Arizona are considered occupied at the time of listing. The occupied area is a short 1.3-km (0.8-mi) stream reach 3.9 km (2.4 mi) south of the town of Nutrioso. In 2011, the Wallow Fire burned much of this area, and surveys during 2012 continued to detect New Mexico meadow jumping mice (ADGF 2012a, p. 3). The features essential to the conservation of this species may require special management considerations or protection to reduce the following threats: severe wildland fires, grazing, floods, the reduction in the distribution and abundance of beaver ponds, highway reconstruction, and development. The occupied area is centered around the capture locations plus an additional 0.8-km (0.5-mi) segment upstream and downstream of

this area where the physical and biological features are found. The remaining unoccupied areas within Subunit 5–B are found both upstream and downstream of the occupied area, and are considered essential to the conservation of the New Mexico meadow jumping mouse (as described in the *Unit Description* introduction section above).

#### Subunit 5–C; San Francisco River

Subunit 5–C consists of 252 ha (622 ac) along 11.8 km (7.3 mi) of the San Francisco River and its tributary Turkey (=Talwiwi) Creek on private lands and areas owned by the Forest Service. This subunit begins about 0.6 km (0.4 mi) west of Forest Road 8854 along the San Francisco River and follows the drainage downstream about 10.5 km (6.5 mi), including a 1.3-km (0.8-mi) segment of Turkey (= Talwiwi) Creek that is south of Arizona Highway 180, then continues downstream to the headwaters of Luna Lake.

Based upon multiple captures of New Mexico meadow jumping mice since 2008 (Frey 2011, p. 97), approximately 0.9 ha (2.3 ac) within this unit on Forest Service lands in Arizona are considered occupied at the time of listing. There are two occupied areas within this unit including: a small livestock enclosure along a 0.2-km (0.1-mi) stream reach of upper Turkey Creek at the junction of Highway 80 and Forest Road 289; and two fenced livestock enclosures along a 0.4-km (0.2-mi) stream reach at the junction of the San Francisco River and Forest Road 8854 (Frey 2011, p. 97). In 2011, the Wallow Fire burned much of this area, and surveys during 2012 did not detect New Mexico meadow jumping mice (ADGF 2012, entire, 2012a, p. 2). However, until multiple years of surveys determine that the population has been extirpated, we consider this area within the geographical area occupied by the New Mexico meadow jumping mouse at the time of listing. The features essential to the conservation of this species may require special management considerations or protection to reduce the following threats: severe wildland fires, grazing, floods, the reduction in the distribution and abundance of beaver ponds, highway reconstruction, and development. The occupied areas are centered around the capture locations plus an additional 0.8-km (0.5-mi) segment upstream and downstream of these areas where the physical and biological features are found. The remaining unoccupied areas within Subunit 5–C are found both upstream and downstream of the occupied areas, and are considered essential to the

conservation of the New Mexico meadow jumping mouse (as described in the *Unit Description* introduction section above).

#### Subunit 5–D; East Fork Black River

Subunit 5–D consists of 421 ha (1,040 ac) along 20.3 km (12.6 mi) of the East Fork of the Black River areas owned by the Forest Service. This subunit begins 0.8 km (0.5 mi) north of the intersection of Three Forks Road and Route 285 and follows the drainage downstream about 20.3 km (12.6 mi), where it abuts the West Fork Black River Subunit (see “West Fork Black River Subunit” below).

Based upon multiple captures of New Mexico meadow jumping mice since 2008 (Frey 2011, p. 97; ADGF 2012, entire, 2012a, p. 2), approximately 6.9 ha (16.9 ac) within this unit on Forest Service lands in Arizona are considered occupied at the time of listing. The occupied area is located along the headwaters of the East Fork Black River near the intersection of Three Forks Road and Route 285 (Frey 2011, p. 97; ADGF 2012, entire, 2012a, p. 2). In 2011, the Wallow Fire burned much of this area and surveys during 2012 continued to detect New Mexico meadow jumping mice (ADGF 2012a, p. 2). The features essential to the conservation of this species may require special management considerations or protection to reduce the following threats: severe wildland fires, grazing, floods, the reduction in the distribution and abundance of beaver ponds, and highway reconstruction. The occupied area is centered around the capture location plus an additional 0.8-km (0.5-mi) segment upstream and downstream of this area where the physical and biological features are found. The remaining unoccupied areas within Subunit 5–D are found both upstream and downstream of the occupied area, and are considered essential to the conservation of the New Mexico meadow jumping mouse (as described in the *Unit Description* introduction section above).

#### Subunit 5–E; West Fork Black River

Subunit 5–E consists of 481 ha (1,188 ac) along 23.0 km (14.3 mi) of the West Fork of the Black River on private lands and areas owned by the Forest Service and the State of Arizona. The proposed subunit begins at the confluence of the West Fork of the Black River and Burro Creek and follows the drainage downstream where it abuts the East Fork Black River Subunit (see “East Fork Black River Subunit” above).

Based upon multiple captures of New Mexico meadow jumping mice since



2008 (Frey 2011, p. 97; ADGF 2012, entire, 2012a, p. 2), approximately 13.7 ha (33.9 ac) within this unit on Forest Service lands in Arizona are considered occupied at the time of listing. The occupied areas occur at four locations: along the upper West Fork Black River just north of Forest Road 116; immediately adjacent to the campground along the middle Fork of the Black River; at the junction of Forest Road 68 and the middle Fork of the Black River; and near the junction of the lower Fork of the Black River and Home Creek (Frey 2011, p. 97; ADGF 2012, entire, 2012a, pp. 2–3). In 2011, the Wallow Fire burned much of this area and surveys during 2012 continued to detect New Mexico meadow jumping mice at the lower and middle sections of the West Fork Black River (ADGF 2012a, pp. 2–3). Although New Mexico meadow jumping mice were not detected at the upper West Fork Black River location, until multiple years of surveys determine that the population has been extirpated, we consider this area within the geographical area occupied by the New Mexico meadow jumping mouse at the time of listing. The features essential to the conservation of this species may require special management considerations or protection to reduce the following threats: severe wildland fires, grazing, floods, the reduction in the distribution and abundance of beaver ponds, and highway reconstruction. The occupied areas are centered around the capture locations plus an additional 0.8-km (0.5-mi) segment upstream and downstream of these areas where the physical and biological features are found. The remaining unoccupied areas within Subunit 5–E are found both upstream and downstream of the occupied areas, and are considered essential to the conservation of the New Mexico meadow jumping mouse (as described in the *Unit Description* introduction section above).

#### Subunit 5–F; Boggy Creek and Centerfire Creeks

Subunit 5–F consists of 196 ha (485 ac) along 8.9 km (5.5 mi) of Boggy Creek and Centerfire Creek on areas owned by the Forest Service. The East Segment of the subunit begins 0.8 km (0.5 mi) north of the intersection of Route 25 and Boggy Creek and follows the drainage downstream to the confluence with Centerfire Creek. The West segment begins 0.8 km (0.5 mi) north of the intersection of Route 25 and Centerfire Creek and follows the drainage downstream to the confluence with Boggy Creek, then continues

downstream to the confluence with the Black River.

Based upon multiple captures of New Mexico meadow jumping mice since 2008 (Frey 2011, pp. 104–105; ADGF 2012, entire, 2012, p. 3), approximately 3.0 ha (7.5 ac) within this unit on Forest Service lands in Arizona are considered occupied at the time of listing. The occupied areas are located within fenced livestock enclosures at the junction of Forest Road 25 and Boggy Creek; and within a fenced livestock enclosure at the junction of Forest Road 25 and Centerfire Creek (Frey 2011, pp. 104–105; ADGF 2012, entire, 2012, p. 3). In 2011, the Wallow Fire burned much of this area, and surveys during 2012 continued to detect New Mexico meadow jumping mice (ADGF 2012a, p. 3). The features essential to the conservation of this species may require special management considerations or protection to reduce the following threats: severe wildland fires, grazing, floods, and the reduction in the distribution and abundance of beaver ponds. The occupied areas are centered around the capture locations plus an additional 0.8-km (0.5-mi) segment upstream and downstream of these areas where the physical and biological features are found. The remaining unoccupied areas within Subunit 5–F are found both upstream and downstream of the occupied areas, and are considered essential to the conservation of the New Mexico meadow jumping mouse (as described in the *Unit Description* introduction section above).

#### Subunit 5–G; Corduroy Creek

Subunit 5–G consists of 104 ha (256 ac) along 4.8 km (3.0 mi) of Corduroy Creek on lands owned by the Forest Service. The proposed subunit begins at the headwaters about 0.8 km (0.5 mi) south of the intersection of County Road 24 and County Road 8184A and follows the drainage downstream to the confluence with Fish Creek.

Based upon multiple captures of New Mexico meadow jumping mice since 2009 (Frey 2011, pp. 104–105; ADGF 2012, entire, 2012a, p. 4), approximately 0.4 ha (1.1 ac) within this unit on Forest Service lands in Arizona are considered occupied at the time of listing. The occupied area is located within fenced livestock enclosures at the junction of Forest Road 8184A and Corduroy Creek (Frey 2011, pp. 104–105; ADGF 2012, entire, 2012a, p. 4). In 2011, the Wallow Fire burned much of this area, and surveys during 2012 continued to detect New Mexico meadow jumping mice (ADGF 2012a, p. 4). The features essential to the conservation of this

species may require special management considerations or protection to reduce the following threats: severe wildland fires, grazing, floods, and the reduction in the distribution and abundance of beaver ponds. The occupied area is centered around the capture location plus an additional 0.8-km (0.5-mi) segment upstream and downstream of this area where the physical and biological features are found. The remaining unoccupied areas within Subunit 5–G are found both upstream and downstream of the occupied area, and are considered essential to the conservation of the New Mexico meadow jumping mouse (as described in the *Unit Description* introduction section above).

#### Subunit 5–H; Campbell Blue Creek

Subunit 5–H consists of 102 ha (253 ac) along 4.8 km (3.0 mi) of Campbell Blue Creek on private lands and areas owned by the Forest Service. The proposed subunit begins at the confluence with Cat Creek along Forest Road 281 and extends downstream to the confluence with Turkey Creek.

Based upon multiple captures of New Mexico meadow jumping mice since 2008 (Frey 2011, p. 101), approximately 0.008 ha (0.02 ac) within this unit on Forest Service lands in Arizona are considered occupied at the time of listing. The occupied area is located within a livestock enclosure 13 km (8 mi) north of the community of Blue (Frey 2011, p. 101). In 2011, the Wallow Fire burned much of this area, and surveys during 2012 did not detect New Mexico meadow jumping mice (ADGF 2012, entire, 2012a, p. 2). However, until multiple years of surveys determine that the population has been extirpated, we consider this area within the geographical area occupied by the New Mexico meadow jumping mouse at the time of listing. The features essential to the conservation of this species may require special management considerations or protection to reduce the following threats: severe wildland fires, grazing, floods, and the reduction in the distribution and abundance of beaver ponds. The occupied area is centered around the capture location plus an additional 0.8-km (0.5-mi) segment upstream and downstream of this area where the physical and biological features are found. The remaining unoccupied areas within Subunit 5–H are found both upstream and downstream of the occupied area, and are considered essential to the conservation of the New Mexico meadow jumping mouse (as described

in the *Unit Description* introduction section above).

#### *Unit 6: Middle Rio Grande*

Unit 5 consists of 294 ha (727 ac) of streams, ditches, and canals within three subunits of streams on lands owned by Isleta Pueblo, Bernalillo County; Ohkay Owingeh, Rio Arriba County; and the Service's Bosque del Apache NWR, Socorro County, New Mexico. Areas proposed for critical habitat for the New Mexico meadow jumping mouse in this unit incorporate the only habitat believed to be occupied (Bosque del Apache NWR) by the subspecies within the middle Rio Grande with the capability to support the breeding and reproduction of the species.

Because Bosque del Apache NWR is the only locality within the middle Rio Grande considered still in existence (Frey and Wright 2012), we do not believe one population is sufficient to provide for the conservation of the species. A designation limited to the range that we consider occupied by the species within the middle Rio Grande would be inadequate to recover the species within the unit. We have determined additional subunits are essential to the conservation of the species because, if necessary, these additional areas have the potential to provide for the reintroduction and reestablishment of New Mexico meadow jumping mouse to support recovery. As such, we are proposing two additional subunits that were historically occupied, but where presence of the New Mexico meadow jumping mouse is currently unknown.

##### *Subunit 6–A; Isleta Pueblo*

Subunit 6–A consists of 43 ha (105 ac) along 3.7 km (2.3 mi) of ditches, canals, and marshes on lands owned by Isleta Pueblo. There are two segments within this subunit. One segment begins at the confluence of the Isleta Return Channel and the Rio Grande and extends north about 0.5 km (0.3 mi), then heads west about 30 m (100 ft), and finally heads south about 1.6 km (1 mi) to the end of Isleta Marsh paralleling New Mexico Highway 314. The other segment begins about 0.8 km (0.5 mi) south of Highway 25 and extends about 1.6 km (1.0 mi) along the marsh where it terminates at the railroad crossing, just west of the Rio Grande.

Much of the habitat was historically occupied with individuals detected as recently as 1988 (Morrison 1988, pp. 22–27; Frey 2006c, entire); however, no New Mexico meadow jumping mice surveys have been conducted recently. The entire subunit is considered

unoccupied at the time of listing. All of the areas within Subunit 6–A are considered essential to the conservation of the New Mexico meadow jumping mouse (as described in the *Unit Description* introduction section above).

We will also consider our partnership with this Tribe and evaluate the conservation planning and management that occurs for potential exclusion under section 4(b)(2) of the Act (see “Exclusions” below).

##### *Subunit 6–B; Ohkay Owingeh*

Subunit 6–B consists of 51 ha (125 ac) along 4.8 km (3.0 mi) of ditches, canals, and marshes on lands owned by Ohkay Owingeh. There are two segments within this subunit. The first segment begins at the junction of New Mexico Highway 291 and immediately west of the middle Rio Grande, generally follows riparian areas, and terminates about 0.6 km (0.4 mi) southeast of Guique, New Mexico. The second segment begins near San Juan Lakes, east of the Rio Grande 0.08 km (0.05 mi) east of Fishpond Road and extends about 0.4 km (0.25 mi) southeast where it heads northwest about 0.9 km (0.6 mi) through a series of ponds and marshes, paralleling the eastern edge of the fishing pond. Much of the habitat was historically occupied with individuals detected as recently as 1988 (Morrison 1988, pp. 28–35; Frey 2006c, entire); however, no New Mexico meadow jumping mice were captured during surveys conducted recently (Morrison 2012, entire). The entire subunit is considered unoccupied at the time of listing. All of the areas within Subunit 6–B are considered essential to the conservation of the New Mexico meadow jumping mouse (as described in the *Unit Description* introduction section above).

We will also consider our partnership with this Tribe and evaluate the conservation planning and management that occurs for potential exclusion under section 4(b)(2) of the Act (see “Exclusions”).

##### *Subunit 6–C; Bosque del Apache National Wildlife Refuge*

Subunit 6–C consists of 201 ha (496 ac) along 29.6 km (18.5 mi) of ditches and canals on areas owned by the Service. This subunit includes parts of a complex ditch system with associated irrigation of Refuge management units, making habitat within this area unique. This subunit begins in the northern part of the refuge and generally follows the Riverside Canal to the southern end, including a 4.8-km (3.0-mi) segment of Socorro-San Antonio Main Canal.

Based upon multiple captures of the New Mexico meadow jumping mouse since 2009 (Frey and Wright 2012, entire), approximately 4.1 ha (10.1 ac) within this unit on Service lands in New Mexico are considered occupied at the time of listing. The occupied area is located along a 2.7-km (1.7-mi) segment of the Riverside Canal (Frey and Wright 2012, entire). The features essential to the conservation of this species may require special management considerations or protection to reduce the following threats: water use and management, severe wildland fires, and thinning, mowing, or removing tamarisk (also known as saltcedar, *Tamarix ramosissima*), decadent stands of willow that are greater than 3 years old or 1.5 meters (4.9 feet) tall. The occupied area is centered around the capture locations plus an additional 0.8-km (0.5-mi) segment upstream and downstream of this area where the physical and biological features are found. The remaining unoccupied areas within Subunit 6–C are found both upstream and downstream of the occupied area, and are considered essential to the conservation of the New Mexico meadow jumping mouse (as described in the *Unit Description* introduction section above).

#### *Unit 7: Florida River*

Unit 7 consists of 256 ha (634 ac) along 13.6 km (8.4 mi) of the Florida River on private lands and an area owned by the Bureau of Land Management, La Plata County, Colorado. The unit begins at the irrigation diversion structure (Florida Ditch main headgate) of the Florida Water Conservancy District about 0.8 km (0.5 mi) northeast of the intersection of La Plata County Road 234 and 237 and follows the drainage downstream to about 0.16 km (0.1 mi) north of Ranchos Florida Road.

Based upon the capture of two New Mexico meadow jumping mice since 2007 (Museum of Southwestern Biology 2007; 2007a; Frey 2008c, pp. 42–45, 56; 2011a, pp. 19, 33), approximately 0.15 ha (0.37 ac) within this unit on private lands in Colorado are considered occupied at the time of listing. The occupied area is located 0.9 km (0.6 mi) north of Highway 160 along the Florida River (Museum of Southwestern Biology 2007; 2007a; Frey 2008c, pp. 42–45, 56; 2011a, pp. 19, 33). The features essential to the conservation of this species may require special management considerations or protection to reduce the following threats: floods, water use and management, development, and coalbed methane. The occupied area is centered around the capture location

plus an additional 0.8-km (0.5-mi) segment upstream and downstream of this area where the physical and biological features are found. The remaining unoccupied areas within Unit 7 are found both upstream and downstream of the occupied area, and are considered essential to the conservation of the New Mexico meadow jumping mouse (as described in the *Unit Description* introduction section above).

#### *Unit 8: Sambrito Creek*

Unit 8 consists of 75 ha (184 ac) along 4.6 km (2.9 mi) of Sambrito Creek on private lands and areas owned by the State of Colorado within Navajo State Park, near Arboles, Archuleta County, Colorado. There are two segments within this unit. One segment begins at Archuleta County Road 977, following Sambrito Creek downstream to the headwaters of Navajo Reservoir. The second segment starts about 0.3 km (0.2 mi) west of the intersection of Colorado Road 977 and 988 and follows the drainage about 3.9 km (2.1 mi) through the Sambrito Wetlands Area downstream about to the headwaters of Navajo Reservoir.

Based upon multiple captures of New Mexico meadow jumping mice in 2012 (Colorado Parks and Wildlife 2012, entire), approximately 0.9 ha (2.3 ac) within this unit on State of Colorado lands are considered occupied at the time of listing. The occupied area is located immediately south of Archuleta County Road 977 along the unnamed drainage through the Sambrito Wetlands Areas about 1.8 km (1.1 mi) due west of Sambrito Creek (Colorado Parks and Wildlife 2012, entire). The features essential to the conservation of this species may require special management considerations or protection to reduce the following threats: floods, grazing, water use and management, the reduction in the distribution and abundance of beaver ponds, development, recreation, and coalbed methane. The occupied area is centered around the capture location that is about 0.5 km (0.3 mi) south of Archuleta County Road 977 plus an additional 0.8-km (0.5-mi) segment upstream and downstream of this area where the physical and biological features are found. The remaining unoccupied areas within Unit 8 are found both upstream and downstream of the occupied area, and are considered essential to the conservation of the New Mexico meadow jumping mouse (as described in the *Unit Description* introduction section above).

## **Effects of Critical Habitat Designation**

### *Section 7 Consultation*

Section 7(a)(2) of the Act requires Federal agencies, including the Service, to ensure that any action they fund, authorize, or carry out is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of designated critical habitat of such species. In addition, section 7(a)(4) of the Act requires Federal agencies to confer with the Service on any agency action that is likely to jeopardize the continued existence of any species proposed to be listed under the Act or result in the destruction or adverse modification of proposed critical habitat.

Decisions by the 5th and 9th Circuit Courts of Appeals have invalidated our regulatory definition of “destruction or adverse modification” (50 CFR 402.02) (see *Gifford Pinchot Task Force v. U.S. Fish and Wildlife Service*, 378 F. 3d 1059 (9th Cir. 2004) and *Sierra Club v. U.S. Fish and Wildlife Service et al.*, 245 F.3d 434, 442 (5th Cir. 2001)), and we do not rely on this regulatory definition when analyzing whether an action is likely to destroy or adversely modify critical habitat. Under the statutory provisions of the Act, we determine destruction or adverse modification on the basis of whether, with implementation of the proposed Federal action, the affected critical habitat would continue to serve its intended conservation role for the species.

If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency (action agency) must enter into consultation with us. Examples of actions that are subject to the section 7 consultation process are actions on State, tribal, local, or private lands that require a Federal permit (such as a permit from the U.S. Army Corps of Engineers under section 404 of the Clean Water Act (33 U.S.C. 1251 *et seq.*) or a permit from the Service under section 10 of the Act) or that involve some other Federal action (such as funding from the Federal Highway Administration, Federal Aviation Administration, or the Federal Emergency Management Agency). Federal actions not affecting listed species or critical habitat, and actions on State, tribal, local, or private lands that are not federally funded or authorized, do not require section 7 consultation.

As a result of section 7 consultation, we document compliance with the requirements of section 7(a)(2) through our issuance of:

(1) A concurrence letter for Federal actions that may affect, but are not likely to adversely affect, listed species or critical habitat; or

(2) A biological opinion for Federal actions that may affect, or are likely to adversely affect, listed species or critical habitat.

When we issue a biological opinion concluding that a project is likely to jeopardize the continued existence of a listed species and/or destroy or adversely modify critical habitat, we provide reasonable and prudent alternatives to the project, if any are identifiable, that would avoid the likelihood of jeopardy and/or destruction or adverse modification of critical habitat. We define “reasonable and prudent alternatives” (at 50 CFR 402.02) as alternative actions identified during consultation that:

(1) Can be implemented in a manner consistent with the intended purpose of the action,

(2) Can be implemented consistent with the scope of the Federal agency’s legal authority and jurisdiction,

(3) Are economically and technologically feasible, and

(4) Would, in the Director’s opinion, avoid the likelihood of jeopardizing the continued existence of the listed species and/or avoid the likelihood of destroying or adversely modifying critical habitat.

Reasonable and prudent alternatives can vary from slight project modifications to extensive redesign or relocation of the project. Costs associated with implementing a reasonable and prudent alternative are similarly variable.

Regulations at 50 CFR 402.16 require Federal agencies to reinstate consultation on previously reviewed actions in instances where we have listed a new species or subsequently designated critical habitat that may be affected and the Federal agency has retained discretionary involvement or control over the action (or the agency’s discretionary involvement or control is authorized by law). Consequently, Federal agencies sometimes may need to request reinstatement of consultation with us on actions for which formal consultation has been completed, if those actions with discretionary involvement or control may affect subsequently listed species or designated critical habitat.

### *Application of the “Adverse Modification” Standard*

The key factor related to the adverse modification determination is whether, with implementation of the proposed Federal action, the affected critical

habitat would continue to serve its intended conservation role for the species. Activities that may destroy or adversely modify critical habitat are those that alter the physical or biological features to an extent that appreciably reduces the conservation value of critical habitat for the New Mexico meadow jumping mouse. As discussed above, the role of critical habitat is to support life-history needs of the species and provide for the conservation of the species.

Section 4(b)(8) of the Act requires us to briefly evaluate and describe, in any proposed or final regulation that designates critical habitat, activities involving a Federal action that may destroy or adversely modify such habitat, or that may be affected by such designation.

Activities that may affect critical habitat, when carried out, funded, or authorized by a Federal agency, should result in consultation for the New Mexico meadow jumping mouse. These activities include, but are not limited to:

(1) Any activity that destroys, modifies, alters, or removes the herbaceous riparian vegetation that comprises the species' habitat, as described in this proposed rule or within the May 2013 SSA Report, especially if these activities occur during the New Mexico meadow jumping mouse's active season. Such activities could include, but are not limited to: Domestic livestock grazing; land clearing or mowing; activities associated with construction for roads, bridges, pipelines, or bank stabilization; residential or commercial development; channel alteration; timber harvest; prescribed fires; off-road vehicle activity; recreational use; the removal of beaver (excluding irrigation ditches and canals); and other alterations of watersheds and floodplains. These activities may affect the physical or biological features of critical habitat for the New Mexico meadow jumping mouse, by removing sources of food, shelter, nesting or hibernation sites, or otherwise impacting habitat essential for completion of its life history.

(2) Any activity that results in changes in the hydrology of the 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. Such activities that could cause these effects include, but are not limited to, water diversions, groundwater pumping, watershed degradation, construction or destruction of dams or impoundments, developments or 'improvements' at a spring, channelization, dredging, road and

bridge construction, destruction of riparian or wetland vegetation, and other activities resulting in the draining or inundation of a unit.

(3) Any activity (e.g., instream dredging, impoundment, water diversion or withdrawal, channelization, discharge of fill material) that detrimentally alters natural processes in a unit, including changes to inputs of water, sediment, and nutrients, or any activity that significantly and detrimentally alters water quantity in the unit.

(4) Any activity that could lead to the introduction, expansion, or increased density of an exotic plant or animal species that is detrimental to the New Mexico meadow jumping mouse and to its habitat.

### Exemptions

#### *Application of Section 4(a)(3) of the Act*

The Sikes Improvement Act of 1997 (Sikes Act) (16 U.S.C. 670a) required each military installation that includes land and water suitable for the conservation and management of natural resources to complete an integrated natural resources management plan (INRMP) by November 17, 2001. An INRMP integrates implementation of the military mission of the installation with stewardship of the natural resources found on the base. Each INRMP includes:

- (1) An assessment of the ecological needs of the installation, including the need to provide for the conservation of listed species;
- (2) A statement of goals and priorities;
- (3) A detailed description of management actions to be implemented to provide for these ecological needs; and
- (4) A monitoring and adaptive management plan.

Among other things, each INRMP must, to the extent appropriate and applicable, provide for fish and wildlife management; fish and wildlife habitat enhancement or modification; wetland protection, enhancement, and restoration where necessary to support fish and wildlife; and enforcement of applicable natural resource laws.

The National Defense Authorization Act for Fiscal Year 2004 (Pub. L. 108–136) amended the Act to limit areas eligible for designation as critical habitat. Specifically, section 4(a)(3)(B)(i) of the Act (16 U.S.C. 1533(a)(3)(B)(i)) now provides: "The Secretary shall not designate as critical habitat any lands or other geographic areas owned or controlled by the Department of Defense, or designated for its use, that

are subject to an integrated natural resources management plan prepared under section 101 of the Sikes Act (16 U.S.C. 670a), if the Secretary determines in writing that such plan provides a benefit to the species for which critical habitat is proposed for designation."

There are no Department of Defense lands within the proposed critical habitat designation for the New Mexico meadow jumping mouse; therefore, we do not anticipate exempting any areas under section 4(a)(3)(B)(i) of the Act.

### Exclusions

#### *Application of Section 4(b)(2) of the Act*

Section 4(b)(2) of the Act states that the Secretary shall designate and make revisions to critical habitat on the basis of the best available scientific data after taking into consideration the economic impact, national security impact, and any other relevant impact of specifying any particular area as critical habitat. The Secretary may exclude an area from critical habitat if he determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless he determines, based on the best scientific data available, that the failure to designate such area as critical habitat will result in the extinction of the species. In making that determination, the statute on its face, as well as the legislative history, are clear that the Secretary has broad discretion regarding which factor(s) to use and how much weight to give to any factor.

Under section 4(b)(2) of the Act, we may exclude an area from designated critical habitat based on economic impacts, impacts on national security, or any other relevant impacts. In considering whether to exclude a particular area from the designation, we identify the benefits of including the area in the designation, identify the benefits of excluding the area from the designation, and evaluate whether the benefits of exclusion outweigh the benefits of inclusion. If the analysis indicates that the benefits of exclusion outweigh the benefits of inclusion, the Secretary may exercise his discretion to exclude the area only if such exclusion would not result in the extinction of the species.

#### *Exclusions Based on Economic Impacts*

Under section 4(b)(2) of the Act, we consider the economic impacts of specifying any particular area as critical habitat. In order to consider economic impacts, we are preparing an analysis of the economic impacts of the proposed critical habitat designation and related factors. Potential land use sectors that

may be affected by New Mexico meadow jumping mouse critical habitat designation include domestic livestock grazing, activities associated with construction or improvement of roads, bridges, pipelines, or bank stabilization; residential or commercial development; recreation; prescribed burns; and irrigation water use and management.

During the development of a final designation, we will consider economic impacts, public comments, and other new information, and areas may be excluded from the final critical habitat designation under section 4(b)(2) of the Act and our implementing regulations at 50 CFR 424.19.

#### *Exclusions Based on National Security Impacts*

Under section 4(b)(2) of the Act, we consider whether there are lands owned or managed by the Department of Defense (DOD) or lands where a national security impact might exist. In preparing this proposal, we have determined that the lands within the proposed designation of critical habitat for the New Mexico meadow jumping mouse are not owned or managed by the DOD. Currently, there are no areas proposed for exclusion based on impacts on national security.

#### *Exclusions Based on Other Relevant Impacts*

Under section 4(b)(2) of the Act, we consider any other relevant impacts, in addition to economic impacts and impacts on national security. We consider a number of factors including whether the landowners have developed any HCPs or other management plans for the area, or whether there are conservation partnerships that would be encouraged by designation of, or exclusion from, critical habitat. In addition, we look at Tribal management in recognition of their capability to appropriately manage their own resources, and consider the government-to-government relationship of the United States with Tribal entities. We also consider any social impacts that might occur because of the designation.

When we evaluate the existence of a conservation plan when considering the benefits of exclusion, we consider a variety of factors, including but not limited to, whether the plan is finalized; how it provides for the conservation of the essential physical or biological features; whether there is a reasonable expectation that the conservation management strategies and actions contained in a management plan will be implemented into the future; whether the conservation strategies in the plan are likely to be effective; and whether

the plan contains a monitoring program or adaptive management to ensure that the conservation measures are effective and can be adapted in the future in response to new information.

In preparing this proposal, we have determined that there are currently no HCPs for the New Mexico meadow jumping mouse. As detailed above, the proposed designation includes areas within two Native American Pueblos that are considered unoccupied by New Mexico meadow jumping mice, but are essential for the conservation of the species. Therefore, we have proposed designation of critical habitat for the New Mexico meadow jumping mouse on tribal lands. We have begun government-to-government consultation with these tribes, and will continue to do so throughout the public comment period and during development of the final designation of critical habitat for the New Mexico meadow jumping mouse. We will consider these areas for exclusion from the final critical habitat designation to the extent consistent with the requirements of section 4(b)(2) of the Act. At this time, we are not proposing the exclusion of any Tribal areas in this proposed critical habitat designation. However, we specifically solicit comments on the inclusion or exclusion of such areas. In the paragraphs below, we identify lands that we are considering for exclusion under section 4(b)(2) of the Act.

#### *Tribal Management Plans and Partnerships*

Ohkay Owingeh (San Juan Pueblo) and Isleta Pueblo contain segments of the Rio Grande in Rio Arriba and Bernalillo Counties, New Mexico, respectively, which are essential to the conservation of the New Mexico meadow jumping mouse. These river segments occur within the proposed Rio Grande Critical Habitat Unit. We sent notification letters in November 2011 to both Tribes describing our listing process. We will coordinate with these Tribes and examine what New Mexico meadow jumping mouse conservation actions, management plans, and commitments and assurances occur on these lands for potential exclusion from the final designation of New Mexico meadow jumping mouse habitat.

#### *Isleta Pueblo*

Isleta Pueblo contains proposed New Mexico meadow jumping mouse critical habitat along the Rio Grande within Bernalillo County, New Mexico. The Isleta Pueblo has conducted a variety of voluntary measures, restoration projects, and management actions to conserve riparian vegetation, including not

allowing cattle to graze within the bosque (riparian areas) and protecting riparian habitat from fire, maintaining native vegetation, and preventing habitat fragmentation (Service 2005; 70 FR 60955; Pueblo of Isleta 2005, entire). Because of the voluntary measures undertaken, we will consider excluding Isleta Pueblo lands from the final designation of New Mexico meadow jumping mouse critical habitat under section 4(b)(2) of the Act.

#### *Ohkay Owingeh (San Juan Pueblo)*

Ohkay Owingeh contains proposed New Mexico meadow jumping mouse critical habitat along the Rio Grande within Rio Arriba County, New Mexico. The Pueblo has conducted a variety of voluntary measures, restoration projects, and management actions to conserve the New Mexico meadow jumping mouse and its habitat on their lands. The Pueblo has engaged in riparian vegetation and wetland improvement projects, while managing to reduce the occurrence of wildfire due to the abundance of exotic flammable riparian vegetation, including using Tribal Wildlife Grants in both 2004 and 2006 to restore riparian and wetland habitat to benefit the Southwestern willow flycatcher (*Empidonax traillii extimus*), bald eagle (*Haliaeetus leucocephalus*), and other riparian species on 36.4 ha (90 ac) of the Rio Grande (Service 2007a, p. 42; Service 2005, 70 FR 60963). Funding for another 10.9 ha (27 ac) of riparian and wetland restoration was provided in 2007 (Service 2012f, p. 12). The Pueblo received an additional Tribal Wildlife Grant in 2011 to conduct surveys and restore habitat for the New Mexico meadow jumping mouse (Service 2012f, p. 12). The long-term goal of the Pueblo's riparian management is to implement innovative restoration techniques, decrease fire hazards by restoring native vegetation, share information with other restoration practitioners, utilize restoration projects in the education of the Tribal community and surrounding community, and provide a working and training environment for the people of the Pueblo. Because of the voluntary measures undertaken, we will consider excluding Ohkay Owingeh (San Juan Pueblo) lands from the final designation of New Mexico meadow jumping mouse critical habitat under section 4(b)(2) of the Act.

A final determination on whether the Secretary will exercise his discretion to exclude any of these areas from critical habitat for the New Mexico meadow jumping mouse will be made when we publish the final rule designating critical habitat. We will take into

account public comments and carefully weigh the benefits of exclusion versus inclusion of these areas. We may also consider areas not identified above for exclusion from the final critical habitat designation based on information we may receive during the preparation of the final rule (e.g., management plans for additional areas).

#### Peer Review

In accordance with our joint policy on peer review published in the **Federal Register** on July 1, 1994 (59 FR 34270), we will seek the expert opinions of at least three appropriate and independent specialists regarding this proposed rule. The purpose of peer review is to ensure that our listing determination and critical habitat designation are based on scientifically sound data, assumptions, and analyses. We have invited these peer reviewers to comment during this public comment period.

We will consider all comments and information received during this comment period on this proposed rule during our preparation of a final determination. Accordingly, the final decision may differ from this proposal.

#### Public Hearings

Section 4(b)(5) of the Act provides for one or more public hearings on this proposal, if requested. Requests must be received within 45 days after the date of publication of this proposed rule in the **Federal Register**. Such requests must be sent to the address shown in **FOR FURTHER INFORMATION CONTACT**. We will schedule public hearings on this proposal, if any are requested, and announce the dates, times, and places of those hearings, as well as how to obtain reasonable accommodations, in the **Federal Register** and local newspapers at least 15 days before the hearing.

#### Required Determinations

##### *Regulatory Planning and Review—Executive Orders 12866 and 13563*

Executive Order 12866 provides that the Office of Information and Regulatory Affairs (OIRA) in the Office of Management and Budget will review all significant rules. The Office of Information and Regulatory Affairs has determined that this rule is not significant.

Executive Order 13563 reaffirms the principles of Executive Order 12866 while calling for improvements in the nation's regulatory system to promote predictability, to reduce uncertainty, and to use the best, most innovative, and least burdensome tools for achieving regulatory ends. The executive order directs agencies to

consider regulatory approaches that reduce burdens and maintain flexibility and freedom of choice for the public where these approaches are relevant, feasible, and consistent with regulatory objectives. Executive Order 13563 emphasizes further that regulations must be based on the best available science and that the rulemaking process must allow for public participation and an open exchange of ideas. We have developed this rule in a manner consistent with these requirements.

##### *Regulatory Flexibility Act (5 U.S.C. 601 et seq.)*

Under the Regulatory Flexibility Act (RFA; 5 U.S.C. 601 *et seq.*) as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996 (5 U.S.C. 801 *et seq.*), whenever an agency must publish a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the effects of the rule on small entities (small businesses, small organizations, and small government jurisdictions). However, no regulatory flexibility analysis is required if the head of the agency certifies the rule will not have a significant economic impact on a substantial number of small entities. The SBREFA amended the RFA to require Federal agencies to provide a certification statement of the factual basis for certifying that the rule will not have a significant economic impact on a substantial number of small entities.

According to the Small Business Administration, small entities include small organizations such as independent nonprofit organizations; small governmental jurisdictions, including school boards and city and town governments that serve fewer than 50,000 residents; and small businesses (13 CFR 121.201). Small businesses include such businesses as manufacturing and mining concerns with fewer than 500 employees, wholesale trade entities with fewer than 100 employees, retail and service businesses with less than \$5 million in annual sales, general and heavy construction businesses with less than \$27.5 million in annual business, special trade contractors doing less than \$11.5 million in annual business, and forestry and logging operations with fewer than 500 employees and annual business less than \$7 million. To determine whether small entities may be affected, we will consider the types of activities that might trigger regulatory impacts under this designation as well as types of project modifications that may result. In general, the term

“significant economic impact” is meant to apply to a typical small business firm's business operations.

Importantly, the incremental impacts of a rule must be *both* significant and substantial to prevent certification of the rule under the RFA and to require the preparation of an initial regulatory flexibility analysis. If a substantial number of small entities are affected by the proposed critical habitat designation, but the per-entity economic impact is not significant, the Service may certify. Likewise, if the per-entity economic impact is likely to be significant, but the number of affected entities is not substantial, the Service may also certify.

The Service's current understanding of recent case law is that Federal agencies are only required to evaluate the potential impacts of rulemaking on those entities directly regulated by the rulemaking; therefore, they are not required to evaluate the potential impacts to those entities not directly regulated. The designation of critical habitat for an endangered or threatened species only has a regulatory effect where a Federal action agency is involved in a particular action that may affect the designated critical habitat. Under these circumstances, only the Federal action agency is directly regulated by the designation, and, therefore, consistent with the Service's current interpretation of RFA and recent case law, the Service may limit its evaluation of the potential impacts to those identified for Federal action agencies. Under this interpretation, there is no requirement under the RFA to evaluate the potential impacts to entities not directly regulated, such as small businesses. However, Executive Orders 12866 and 13563 direct Federal agencies to assess costs and benefits of available regulatory alternatives in quantitative (to the extent feasible) and qualitative terms. Consequently, it is the current practice of the Service to assess to the extent practicable these potential impacts if sufficient data are available, whether or not this analysis is believed by the Service to be strictly required by the RFA. In other words, while the effects analysis required under the RFA is limited to entities directly regulated by the rulemaking, the effects analysis under the Act, consistent with the E.O. 12866 regulatory analysis requirements, can take into consideration impacts to both directly and indirectly impacted entities, where practicable and reasonable.

In conclusion, we believe that, based on our interpretation of directly regulated entities under the RFA and relevant case law, this designation of

critical habitat will only directly regulate Federal agencies which are not by definition small business entities. And as such, we certify that, if promulgated, this designation of critical habitat would not have a significant economic impact on a substantial number of small business entities. Therefore, an initial regulatory flexibility analysis is not required. However, though not necessarily required by the RFA, in our draft economic analysis for this proposal we will consider and evaluate the potential effects to third parties that may be involved with consultations with Federal action agencies related to this action.

*Energy Supply, Distribution, or Use—Executive Order 13211*

Executive Order 13211 (Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use) requires agencies to prepare Statements of Energy Effects when undertaking certain actions. A small portion of an existing gas pipeline is within proposed critical habitat; however, we do not expect the designation of this proposed critical habitat to significantly affect energy supplies, distribution, or use. Therefore, this action is not a significant energy action, and no Statement of Energy Effects is required. However, we will further evaluate this issue as we conduct our economic analysis, and review and revise this assessment as warranted.

*Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.)*

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.), we make the following findings:

(1) This rule will not produce a Federal mandate. In general, a Federal mandate is a provision in legislation, statute, or regulation that would impose an enforceable duty upon State, local, or tribal governments, or the private sector, and includes both “Federal intergovernmental mandates” and “Federal private sector mandates.” These terms are defined in 2 U.S.C. 658(5)–(7). “Federal intergovernmental mandate” includes a regulation that “would impose an enforceable duty upon State, local, or tribal governments” with two exceptions. It excludes “a condition of Federal assistance.” It also excludes “a duty arising from participation in a voluntary Federal program,” unless the regulation “relates to a then-existing Federal program under which \$500,000,000 or more is provided annually to State, local, and tribal governments under entitlement

authority,” if the provision would “increase the stringency of conditions of assistance” or “place caps upon, or otherwise decrease, the Federal Government’s responsibility to provide funding,” and the State, local, or tribal governments “lack authority” to adjust accordingly. At the time of enactment, these entitlement programs were: Medicaid; Aid to Families with Dependent Children work programs; Child Nutrition; Food Stamps; Social Services Block Grants; Vocational Rehabilitation State Grants; Foster Care, Adoption Assistance, and Independent Living; Family Support Welfare Services; and Child Support Enforcement. “Federal private sector mandate” includes a regulation that “would impose an enforceable duty upon the private sector, except (i) a condition of Federal assistance or (ii) a duty arising from participation in a voluntary Federal program.”

The designation of critical habitat does not impose a legally binding duty on non-Federal Government entities or private parties. Under the Act, the only regulatory effect is that Federal agencies must ensure that their actions do not destroy or adversely modify critical habitat under section 7. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency. Furthermore, to the extent that non-Federal entities are indirectly impacted because they receive Federal assistance or participate in a voluntary Federal aid program, the Unfunded Mandates Reform Act would not apply, nor would critical habitat shift the costs of the large entitlement programs listed above onto State governments.

(2) We lack the available economic information to determine if a Small Government Agency Plan is required. Therefore, we defer this finding until completion of the draft economic analysis is prepared under section 4(b)(2) of the Act.

*Takings—Executive Order 12630*

In accordance with Executive Order 12630 (Government Actions and Interference with Constitutionally Protected Private Property Rights), we will analyze the potential takings implications of designating critical habitat for the New Mexico meadow jumping mouse in a takings implications assessment. Critical habitat

designation does not affect landowner actions that do not require Federal funding or permits, nor does it preclude development of habitat conservation programs or issuance of incidental take permits to permit actions that do require Federal funding or permits to go forward. We have not yet completed the economic analysis for this proposed rule. Once the economic analysis is available, we will review and revise this preliminary assessment as warranted, and prepare a Takings Implication Assessment.

*Federalism—Executive Order 13132*

In accordance with Executive Order 13132 (Federalism), this proposed rule does not have significant Federalism effects. A Federalism assessment is not required. In keeping with Department of the Interior policy, we requested information from, and coordinated development of, this proposed critical habitat designation with appropriate State resource agencies. The designation of critical habitat in geographic areas currently occupied by the New Mexico meadow jumping mouse imposes no additional restrictions to those currently in place and, therefore, has little incremental impact on State and local governments and their activities. The designation may have some benefit to these governments because the areas that contain the physical or biological features essential to the conservation of the species are more clearly defined, and the elements of the features of the habitat necessary to the conservation of the species are specifically identified. This information does not alter where and what federally sponsored activities may occur. However, it may assist local governments in long-range planning (rather than having them wait for case-by-case section 7 consultations to occur).

Where State and local governments require approval or authorization from a Federal agency for actions that may affect critical habitat, consultation under section 7(a)(2) would be required. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency.

*Civil Justice Reform—Executive Order 12988*

In accordance with Executive Order 12988 (Civil Justice Reform), the Office of the Solicitor has determined that the



rule does not unduly burden the judicial system and that it meets the requirements of sections 3(a) and 3(b)(2) of the Order. We have proposed designating critical habitat in accordance with the provisions of the Act. To assist the public in understanding the habitat needs of the species, the rule identifies the elements of physical or biological features essential to the conservation of the species. The designated areas of critical habitat are presented on maps, and the rule provides several options for the interested public to obtain more detailed location information, if desired.

*Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.)*

This rule does not contain any new collections of information that require approval by OMB under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). This rule will not impose recordkeeping or reporting requirements on State or local governments, individuals, businesses, or organizations. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

*National Environmental Policy Act (42 U.S.C. 4321 et seq.)*

It is our position that, outside the jurisdiction of the U.S. Court of Appeals for the Tenth Circuit, we do not need to prepare environmental analyses pursuant to NEPA (42 U.S.C. 4321 et seq.) in connection with designating critical habitat under the Act. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244). This position was upheld by the U.S. Court of Appeals for the Ninth Circuit (*Douglas County v. Babbitt*, 48 F.3d 1495 (9th Cir. 1995), cert. denied 516 U.S. 1042 (1996)). However, when the range of the species includes States within the Tenth Circuit, such as that of the New Mexico meadow jumping mouse, under the Tenth Circuit ruling in *Catron County Board of Commissioners v. U.S. Fish and Wildlife Service*, 75 F.3d 1429 (10th Cir. 1996), we will undertake a NEPA analysis for critical habitat designation and notify the public of the availability of the draft environmental assessment for this proposal when it is finished.

*Government-to-Government Relationship With Tribes*

In accordance with the President's memorandum of May 29, 1994 (Government-to-Government Relations with Native American Tribal Governments; 59 FR 22951), Executive Order 13175 (Consultation and Coordination With Indian Tribal Governments), and the Department of the Interior's manual at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with recognized Federal Tribes on a government-to-government basis. In accordance with Secretarial Order 3206 of June 5, 1997 (American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act), we readily acknowledge our responsibilities to work directly with tribes in developing programs for healthy ecosystems, to acknowledge that tribal lands are not subject to the same controls as Federal public lands, to remain sensitive to Indian culture, and to make information available to tribes.

There are tribal lands in New Mexico included in this proposed designation of critical habitat that are unoccupied by the species at the time of listing that are essential for the conservation of the New Mexico meadow jumping mouse. We have begun government-to-government consultation with these tribes. We will consider these areas for exclusion from the final critical habitat designation to the extent consistent with the requirements of section 4(b)(2) of the Act. Isleta Pueblo and Ohkay Owingeh are the main tribes affected by this proposed rule. We sent notification letters in November 2011 to both tribes describing the listing process. We will coordinate with these tribes and examine what New Mexico meadow jumping mouse conservation actions, management plans, and commitments and assurances occur on these lands for potential exclusion from the final designation of New Mexico meadow jumping mouse habitat. We will schedule meetings with these tribes and any other interested tribes shortly after publication of this proposed rule so that we can give them as much time as possible to comment.

*Clarity of the Rule*

We are required by Executive Orders 12866 and 12988 and by the Presidential Memorandum of June 1, 1998, to write all rules in plain language. This means that each rule we publish must:

- (1) Be logically organized;

- (2) Use the active voice to address readers directly;

- (3) Use clear language rather than jargon;

- (4) Be divided into short sections and sentences; and

- (5) Use lists and tables wherever possible.

If you feel that we have not met these requirements, send us comments by one of the methods listed in the **ADDRESSES** section. To better help us revise the rule, your comments should be as specific as possible. For example, you should tell us the numbers of the sections or paragraphs that are unclearly written, which sections or sentences are too long, the sections where you feel lists or tables would be useful, etc.

**References Cited**

A complete list of references cited in this rulemaking is available on the Internet at <http://www.regulations.gov>, in the May 2013 version of the New Mexico Meadow Jumping Mouse Species Status Assessment Report (Service 2013), and upon request from the New Mexico Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

**Authors**

The primary authors of this document are the staff members of the New Mexico Ecological Services Field Office.

**List of Subjects in 50 CFR Part 17**

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

**Proposed Regulation Promulgation**

Accordingly, we propose to amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

**PART 17—ENDANGERED AND THREATENED WILDLIFE AND PLANTS**

- 1. The authority citation for part 17 continues to read as follows:

**Authority:** 16 U.S.C. 1361–1407; 1531–1544; 4201–4245, unless otherwise noted.

- 2. In § 17.11(h), add an entry for “Mouse, New Mexico meadow jumping” in alphabetical order under Mammals to the List of Endangered and Threatened Wildlife, to read as follows:

**§ 17.11 Endangered and threatened wildlife.**

\* \* \* \* \*

(h) \* \* \*

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
MAMMALS							
*	*	*	*	*	*		*
Mouse, New Mexico meadow jumping.	Zapus hudsonius luteus.	U.S. (AZ, CO, NM)	U.S. (AZ, CO, NM)	E	.....	17.95(a)	NA
*	*	*	*	*	*		*

■ 3. In § 17.95, amend paragraph (a) by adding an entry for “New Mexico Meadow Jumping Mouse (*Zapus hudsonius luteus*),” in the same alphabetical order that the species appears in the table at § 17.11(h), to read as follows:

**§ 17.95 Critical habitat—fish and wildlife.**

\* \* \* \* \*

(a) *Mammals.*

\* \* \* \* \*

**New Mexico Meadow Jumping Mouse (*Zapus hudsonius luteus*)**

(1) Critical habitat units are depicted for Bernalillo, Colfax, Mora, Otero, Rio Arriba, Sandoval, and Socorro Counties, in New Mexico; Las Animas, Archuleta, and La Plata Counties, Colorado; and Greenlee and Apache Counties, Arizona on the maps below.

(2) Within these areas, the primary constituent elements of the physical or biological features essential to the conservation of the New Mexico meadow jumping mouse consist of the following:

(i) Riparian communities along rivers and streams, springs and wetlands, or canals and ditches characterized by one of two wetland vegetation community types:

(A) Persistent emergent herbaceous wetlands dominated by beaked sedge (*Carex rostrata*) or reed canarygrass (*Phalaris arundinacea*) alliances; or

(B) Scrub-shrub riparian areas that are dominated by willows (*Salix* spp.) or alders (*Alnus* spp.); and

(ii) Flowing water that provides saturated soils throughout the New Mexico meadow jumping mouse's active season that supports tall (average stubble height of herbaceous vegetation of at least 69 cm (27 inches) and dense herbaceous riparian vegetation (cover averaging at least 61 vertical cm (24 inches)) composed primarily of sedges (*Carex* spp. or *Schoenoplectus pungens*) and forbs, including, but not limited to one or more of the following associated species: spikerush (*Eleocharis macrostachya*), beaked sedge (*Carex rostrata*), reed canarygrass (*Phalaris arundinacea*), rushes (*Juncus* spp. and *Scirpus* spp.), and numerous species of grasses such as bluegrass (*Poa* spp.), slender wheatgrass (*Elymus trachycaulus*), brome (*Bromus* spp.), foxtail barley (*Hordeum jubatum*), or Japanese brome (*Bromus japonicas*), and forbs such as water hemlock (*Circuta douglasii*), field mint (*Mentha arvensis*), asters (*Aster* spp.), or cutleaf coneflower (*Rudbeckia laciniata*); and

(iii) Sufficient areas of 9 to 24 km (5.6 to 15 mi) along a stream, ditch, or canal that contain suitable or restorable habitat to support movements of individual New Mexico meadow jumping mice; and

(iv) Include adjacent floodplain and upland areas extending approximately 100 m (330 ft) outward from the water's edge (as defined by the bankfull stage of streams).

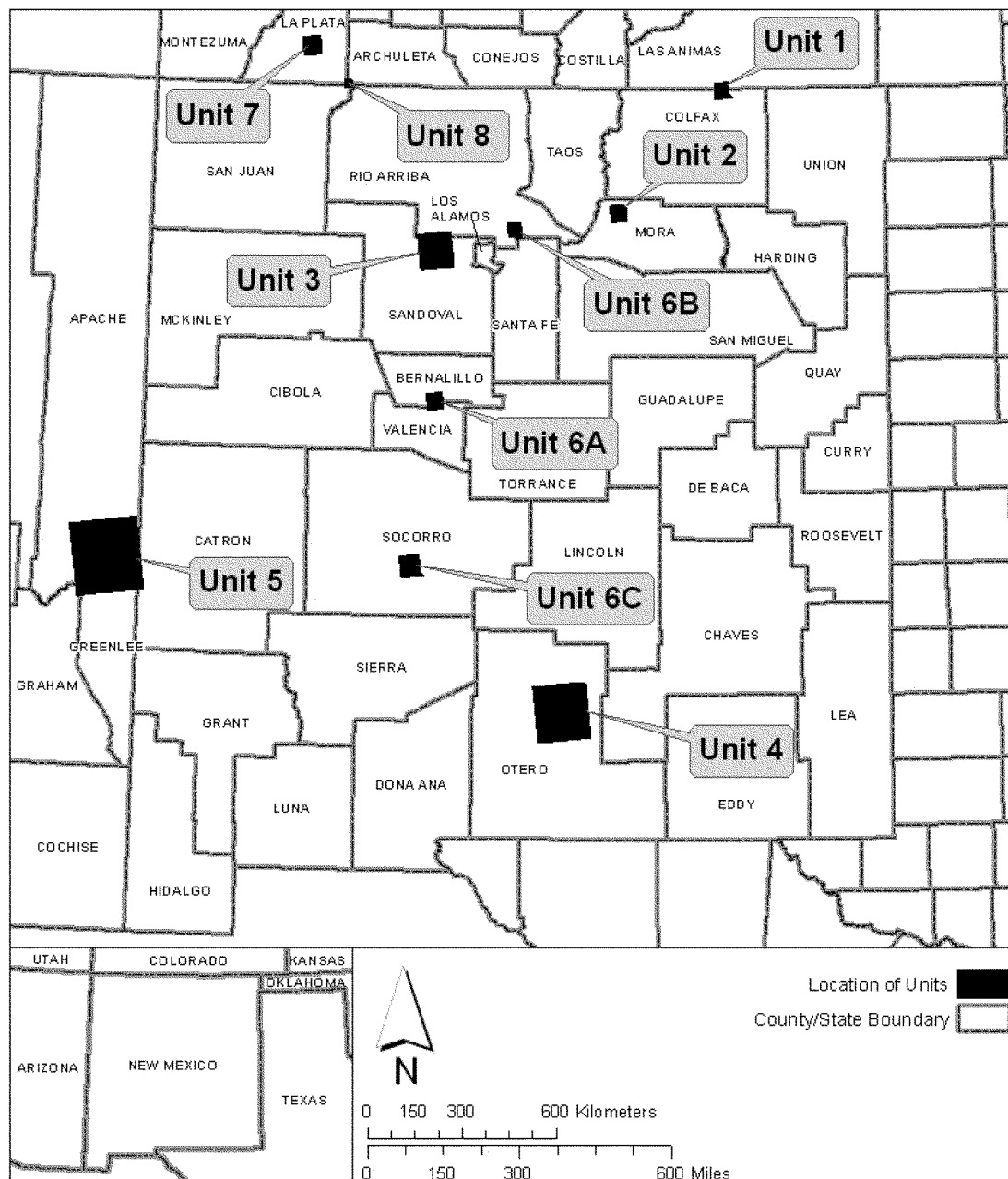
(3) Critical habitat does not include manmade structures (such as buildings, fire lookout stations, runways, roads, and other paved areas) and the land on which they are located existing within the legal boundaries on the effective date of this rule.

(4) *Critical habitat map units.* Units were mapped using the USA Contiguous Albers Equal Area Conic USGS version projection. The maps in this entry, as modified by any accompanying regulatory text, establish the boundaries of the critical habitat designation. The coordinates or plot points or both on which each map is based are available to the public at the Service's internet site (<http://www.fws.gov/southwest/es/NewMexico/>), at <http://www.regulations.gov> at Docket No. FWS-R2-ES-2013-0014, and at the New Mexico Ecological Services Field Office. You may obtain field office location information by contacting one of the Service regional offices, the addresses of which are listed at 50 CFR 2.2.

(5) Index map of critical habitat for the New Mexico meadow jumping mouse follows:

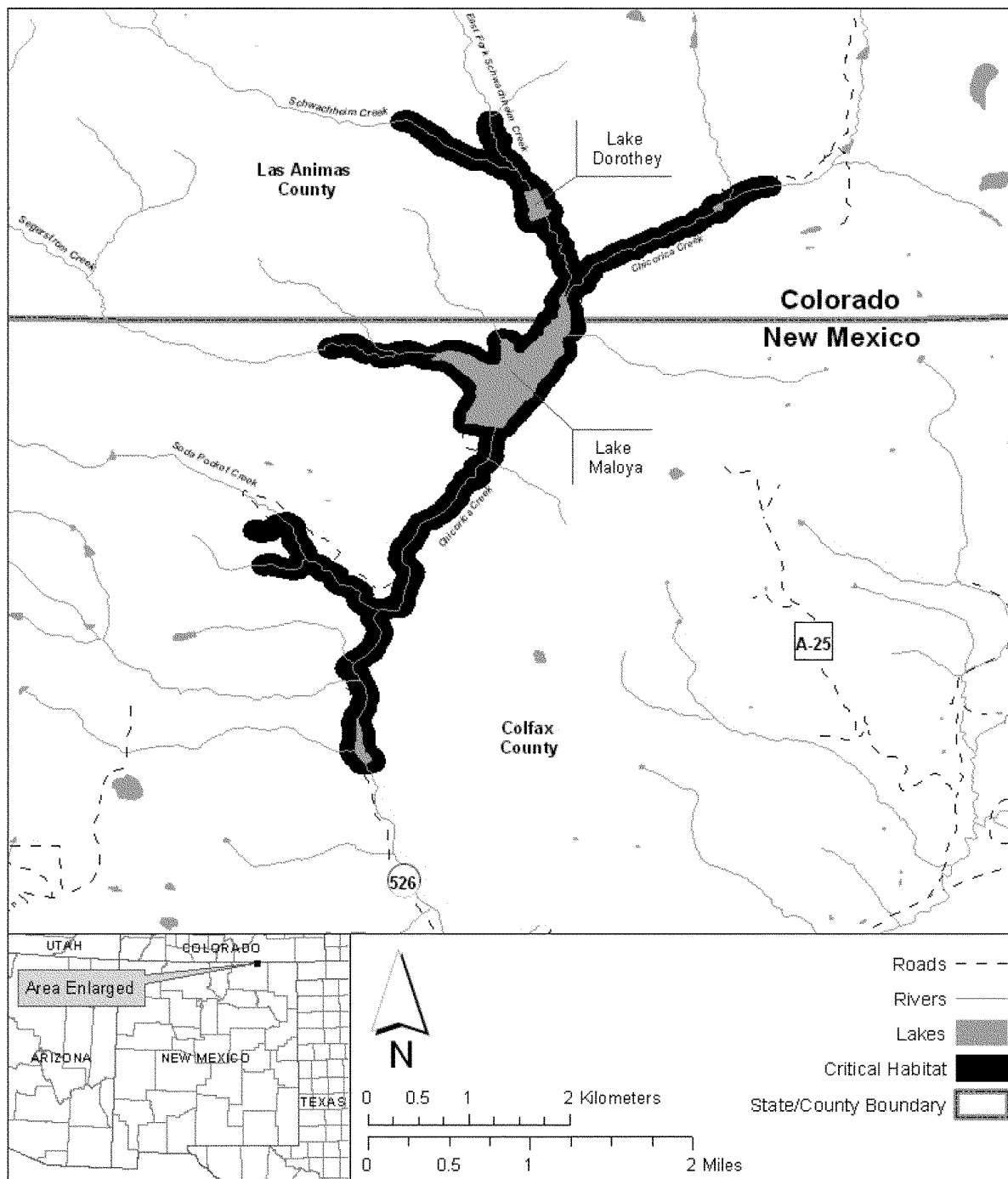
**BILLING CODE 4310-55-P**

## General Locations of Critical Habitat for the New Mexico Meadow Jumping Mouse - Overview



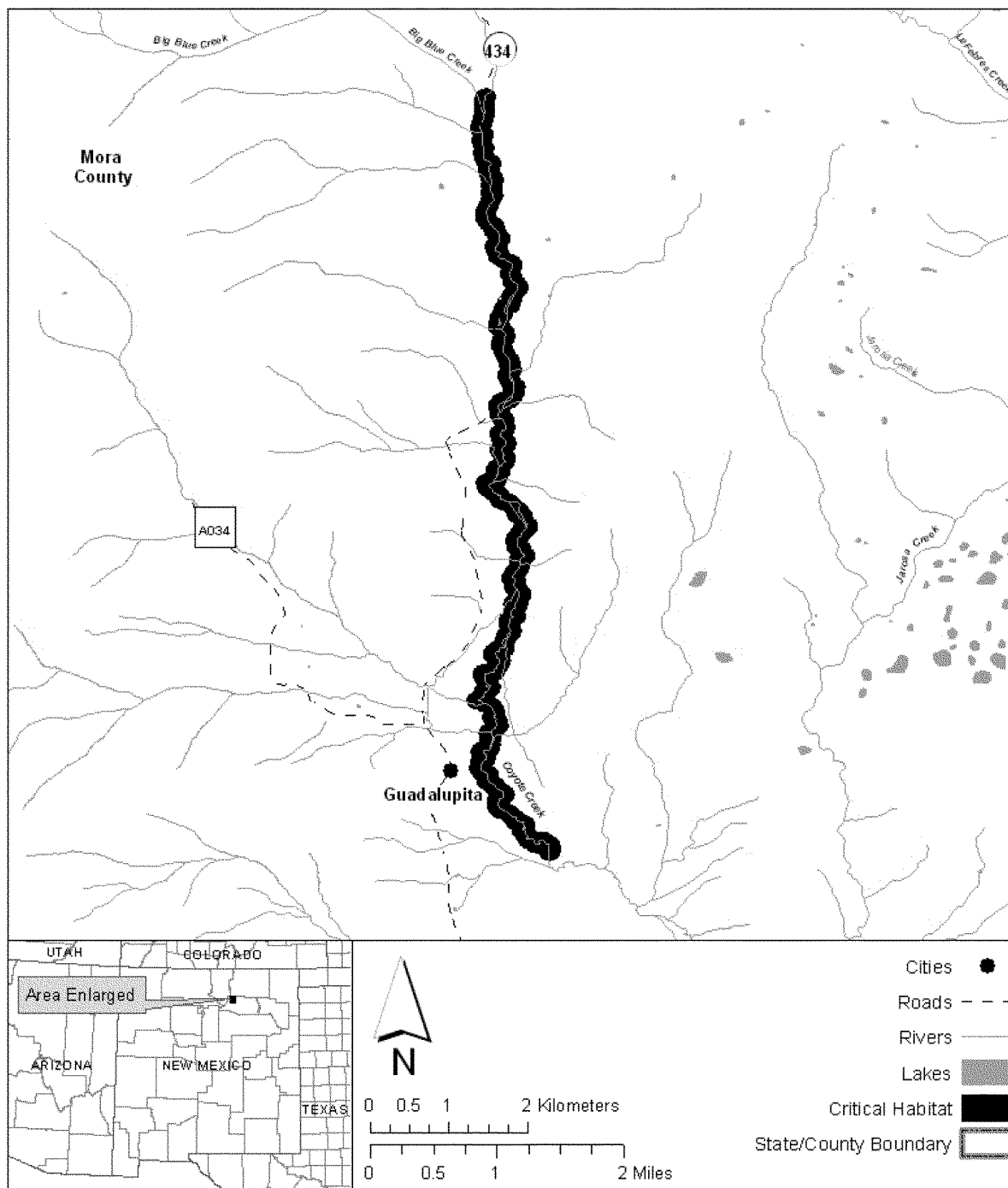
(6) Unit—Sugarite Canyon, New Mexico and Colorado, Map of Unit 1, follows:

## General Locations of Critical Habitat for the New Mexico Meadow Jumping Mouse Unit 1 - Sugarite Canyon



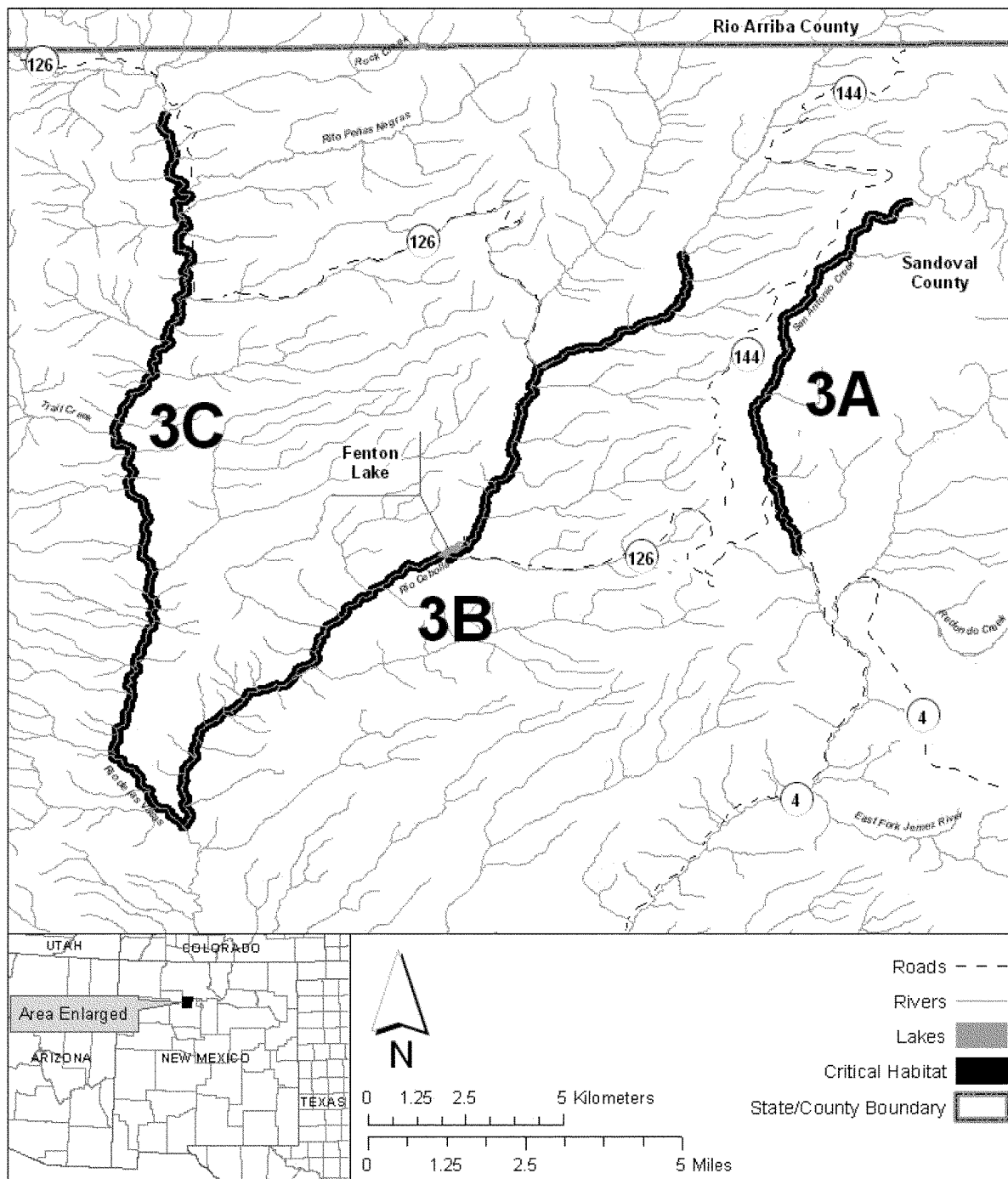
(7) Unit 2—Coyote Creek, New Mexico. Map of Unit 2, follows:

## General Locations of Critical Habitat for the New Mexico Meadow Jumping Mouse Unit 2 - Coyote Creek



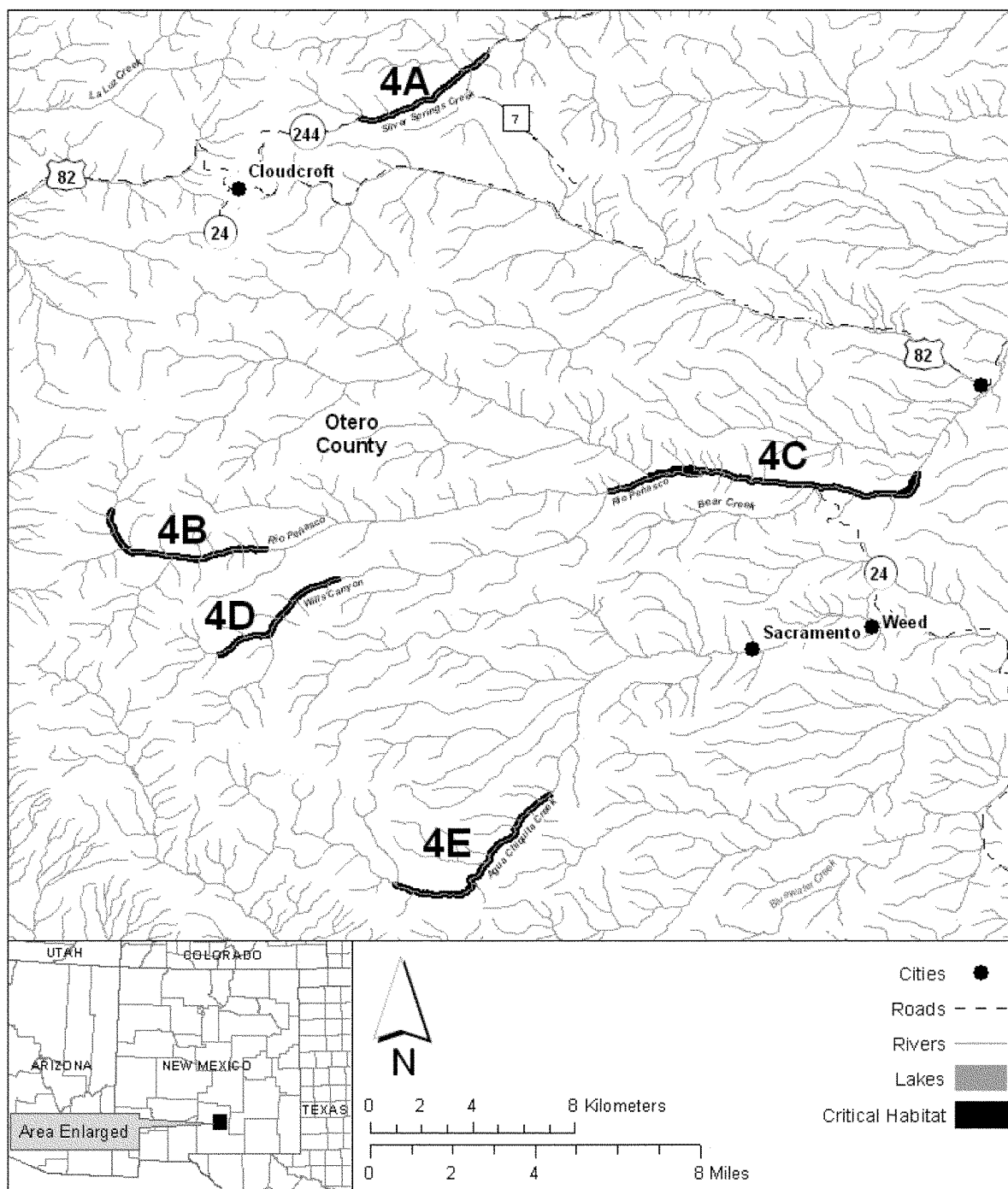
(8) Unit 3—Jemez Mountains, New Mexico. Map of Unit 3, follows:

## General Locations of Critical Habitat for the New Mexico Meadow Jumping Mouse Unit 3 - Jemez Mountains



(9) Unit 4—Sacramento Mountains, New Mexico. Map of Unit 4, follows:

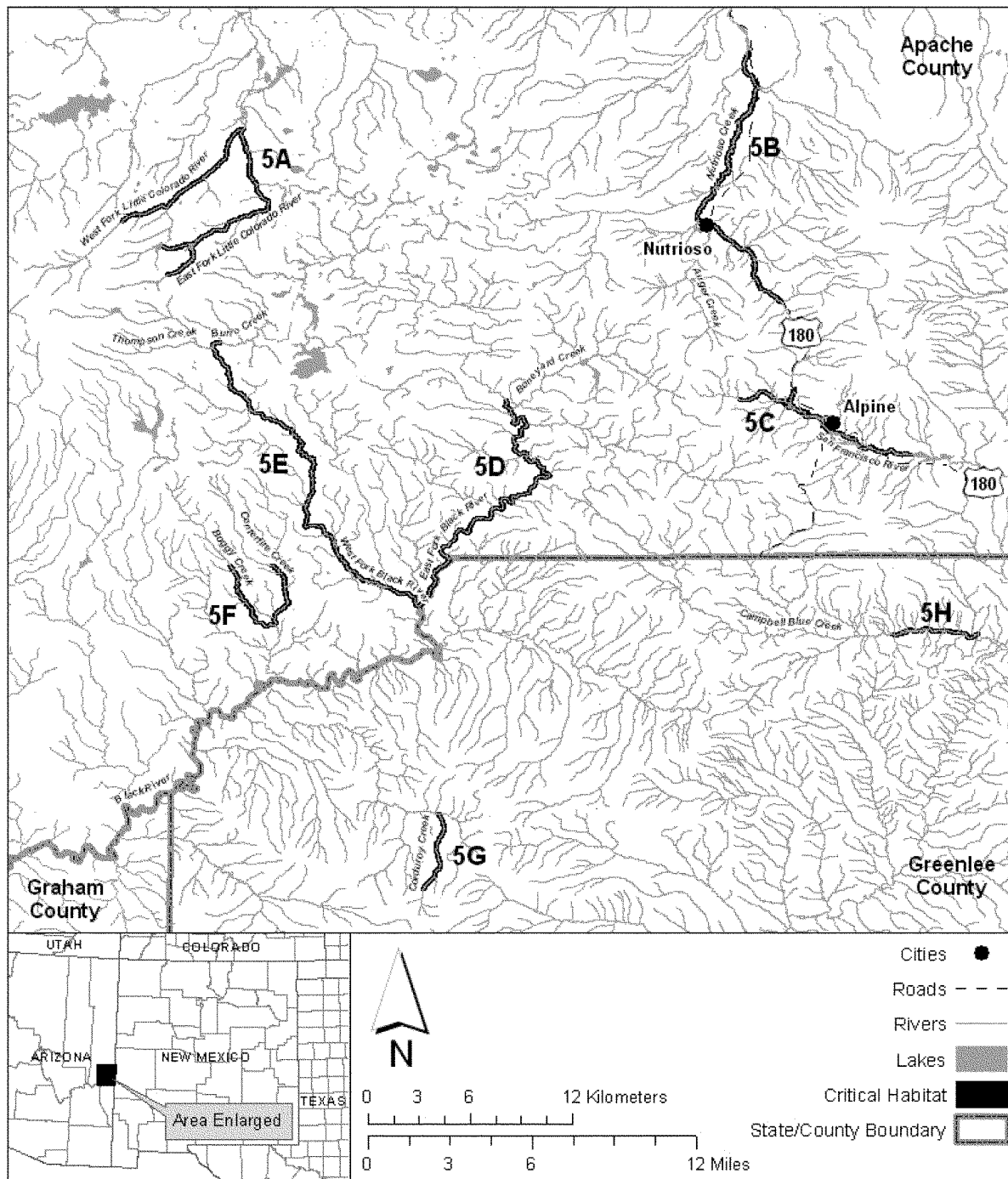
## General Locations of Critical Habitat for the New Mexico Meadow Jumping Mouse Unit 4 - Sacramento Mountains



(10) Unit 5—White Mountains, Arizona. Map of Unit 5, follows:



## General Locations of Critical Habitat for the New Mexico Meadow Jumping Mouse Unit 5 - White Mountains

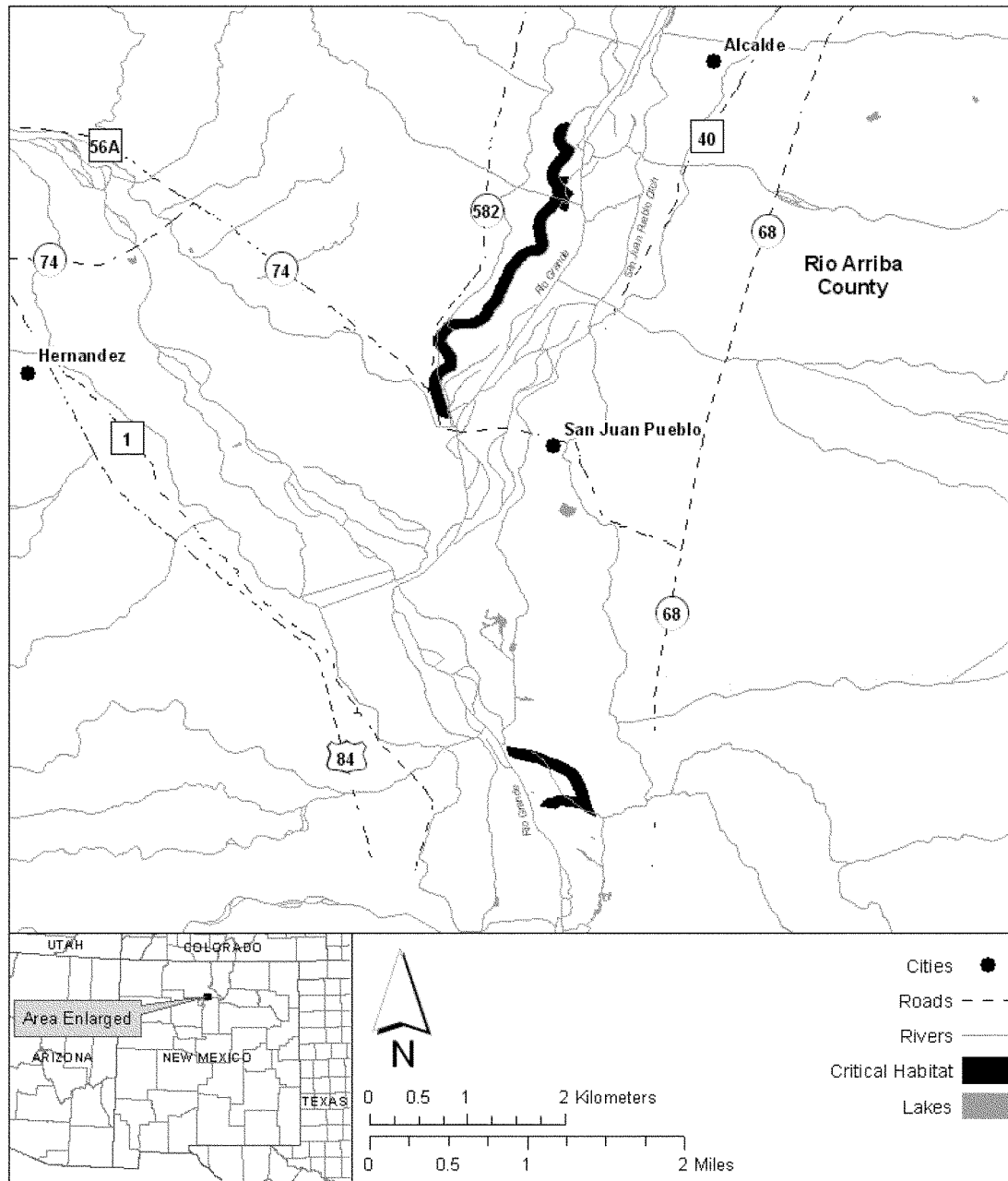


(11) Unit 6—Middle Rio Grande,  
Subunit 6A, Isleta Pueblo, New Mexico.  
Map of Unit 6, Subunit 6A, follows:

[illegible]

Mexico. Map of Unit 6, Subunit 6B, follows:

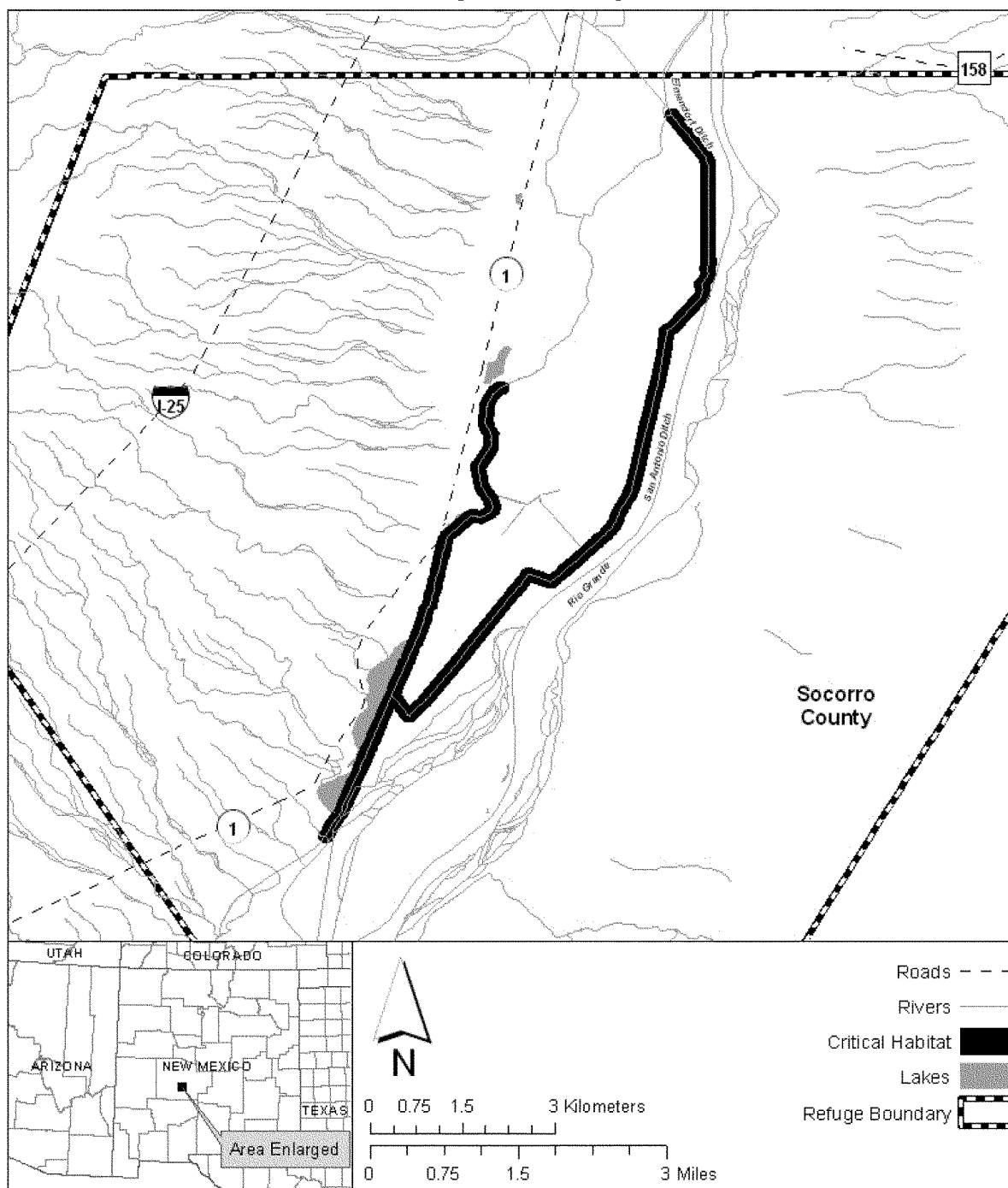
## General Locations of Critical Habitat for the New Mexico Meadow Jumping Mouse Unit 6B - Ohkay Owingeh



(13) Unit 6—Middle Rio Grande,  
Subunit 6—C, Bosque del Apache NWR,

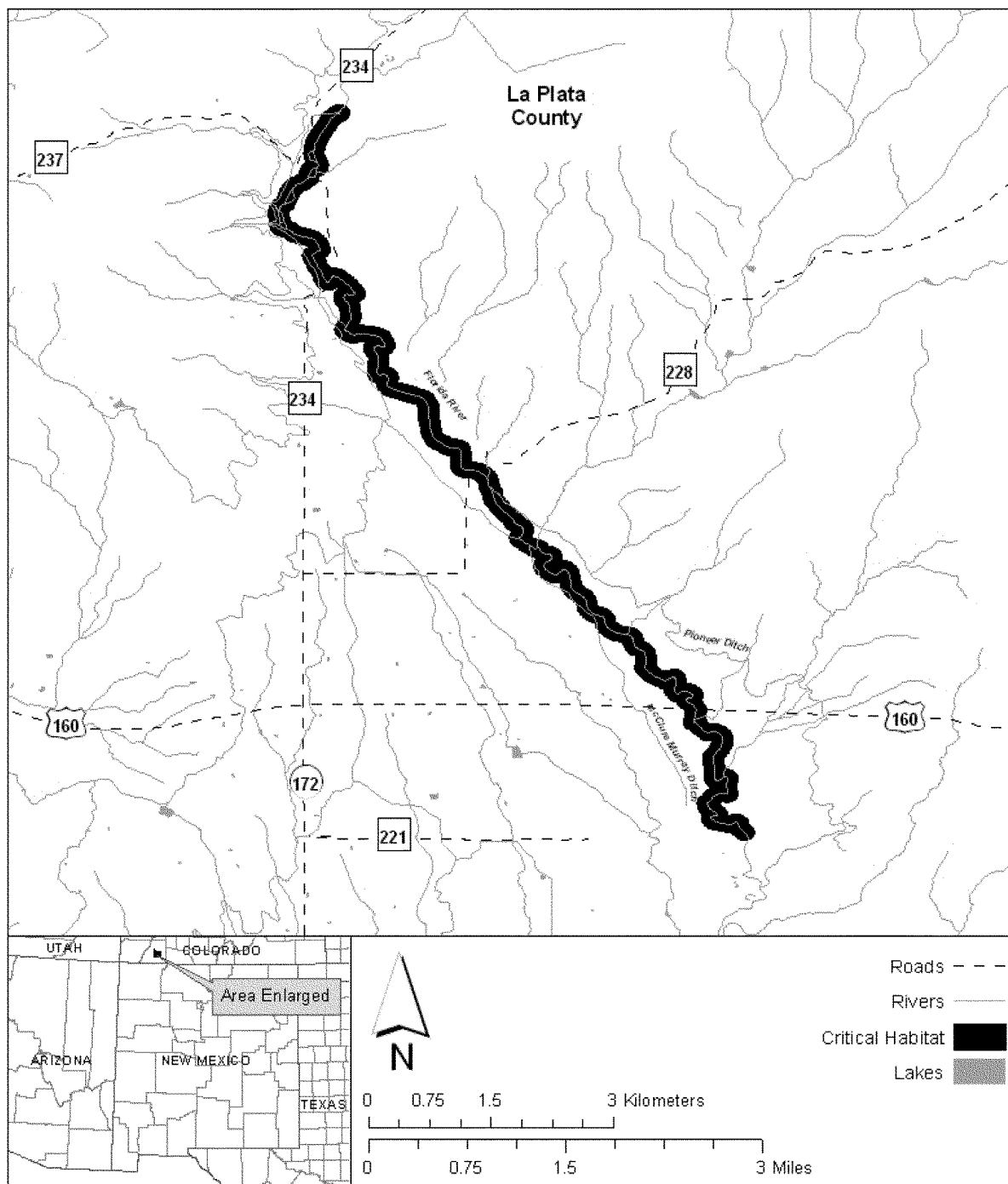
New Mexico. Map of Unit  
6, Subunit 6—C, follows:

## General Locations of Critical Habitat for the New Mexico Meadow Jumping Mouse Unit 6C - Bosque del Apache NWR



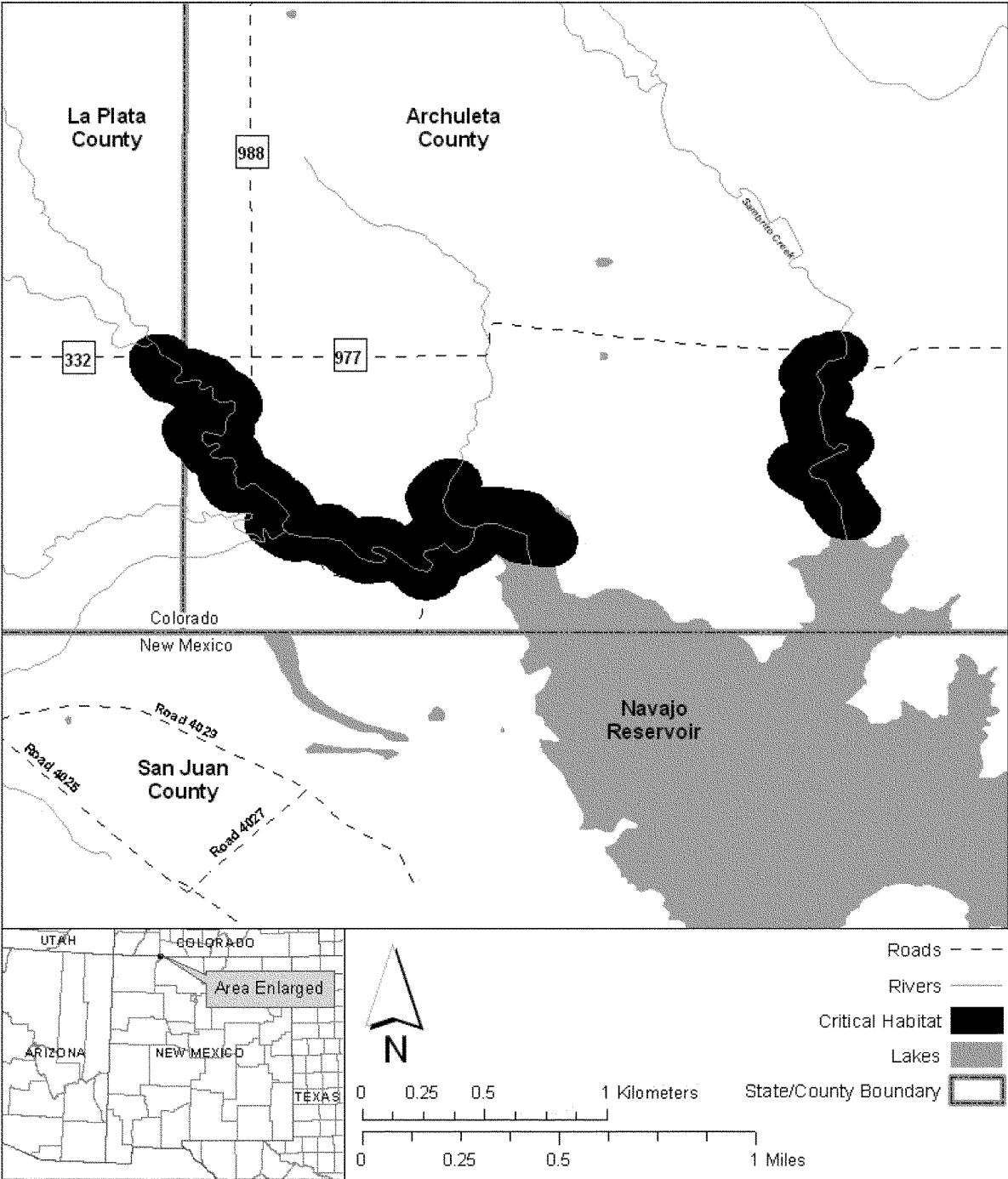
(14) Unit 7—Florida River, Colorado.  
Map of Unit 7 follows:

## General Locations of Critical Habitat for the New Mexico Meadow Jumping Mouse Unit 7 - Florida River



(15) Unit 8—Sambrito Creek,  
Colorado. Map of Unit 8, follows:

**General Locations of Critical Habitat for the  
New Mexico Meadow Jumping Mouse  
Unit 8 - Sambrito Creek**



\* \* \* \* \*

Dated: June 7, 2013.

**Michael J. Bean,**Acting Principal Deputy Assistant Secretary  
for Fish and Wildlife and Parks.

[FR Doc. 2013-14366 Filed 6-19-13; 8:45 am]

BILLING CODE 4310-55-C

**DEPARTMENT OF THE INTERIOR****Fish and Wildlife Service****50 CFR Part 17**[Docket No. FWS-R2-ES-2013-0023;  
4500030113]

RIN 1018-AY50

**Endangered and Threatened Wildlife  
and Plants; Listing Determination for  
the New Mexico Meadow Jumping  
Mouse****AGENCY:** Fish and Wildlife Service,  
Interior.**ACTION:** Proposed rule.

**SUMMARY:** We, the U.S. Fish and Wildlife Service (Service), propose to list the New Mexico meadow jumping mouse (*Zapus hudsonius luteus*) as an endangered species under the Endangered Species Act (Act). If we finalize this rule as proposed, it would extend the Act's protections to this subspecies and its critical habitat. The effect of these regulations will be to conserve the New Mexico meadow jumping mouse and protect its habitat under the Act.

**DATES:** We will accept comments received or postmarked on or before August 19, 2013. Comments submitted electronically using the Federal eRulemaking Portal (see **ADDRESSES** section, below) must be received by 11:59 p.m. Eastern Time on the closing date. We must receive requests for public hearings, in writing, at the address shown in the **ADDRESSES** section by August 5, 2013.

**ADDRESSES:** You may submit comments by one of the following methods:

(1) *Electronically:* Go to the Federal eRulemaking Portal: <http://www.regulations.gov>. In the Search box, enter FWS-R2-ES-2013-0023, which is the docket number for this rulemaking. You may submit a comment by clicking on "Comment Now!"

(2) *By hard copy:* Submit by U.S. mail or hand-delivery to: Public Comments Processing, Attn: FWS-R2-ES-2013-0023; Division of Policy and Directives Management; U.S. Fish and Wildlife Service; 4401 N. Fairfax Drive, MS 2042-PDM; Arlington, VA 22203.

We request that you send comments only by the methods described above. We will post all comments on <http://www.regulations.gov>. This generally means that we will post any personal information you provide us (see the Public Comments section below for more information).

**FOR FURTHER INFORMATION CONTACT:**

Wally Murphy, Field Supervisor, U.S. Fish and Wildlife Service, New Mexico Ecological Services Field Office, 2105 Osuna NE., Albuquerque, NM 87113; by telephone 505-346-2525; or by facsimile 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.

**SUPPLEMENTARY INFORMATION:****Executive Summary**

*Why we need to publish a rule.* Under the Act, if a species is determined to be an endangered or threatened species throughout all or a significant portion of its range, we are required to promptly publish a proposal in the **Federal Register** and make a determination on our proposal within 1 year. Critical habitat shall be designated, to the maximum extent prudent and determinable, for any species determined to be an endangered or threatened species under the Act. Listing a species as an endangered or threatened species and designations and revisions of critical habitat can only be completed by issuing a rule. Elsewhere in today's **Federal Register** (and available online at [www.regulations.gov](http://www.regulations.gov) at Docket Number FWS-R2-ES-2013-0014), we propose to designate critical habitat for the New Mexico meadow jumping mouse (*Zapus hudsonius luteus*) under the Act.

*This rule consists of:* A proposed rule to list the New Mexico meadow jumping mouse as an endangered species. The New Mexico meadow jumping mouse is currently a candidate species for which we have on file sufficient information on biological vulnerability and threats to support preparation of a listing proposal, but for which development of a listing regulation has been precluded by other higher priority listing activities. This rule reassesses all available information regarding status of and threats to the New Mexico meadow jumping mouse.

*The basis for our action.* Under the Act, we can determine that a species is an endangered or threatened species based on whether we find that it is in danger of extinction throughout all or a significant portion of its range now (endangered) or likely to become

endangered in the foreseeable future (threatened). As part of our analysis we consider whether it is threatened or endangered because of any factors affecting its continued existence.

*We will seek peer review.* We are seeking comments from knowledgeable individuals with scientific expertise to review our analysis of the best available science and application of that science and to provide any additional scientific information to improve this proposed rule. Because we will consider all comments and information received during the comment period, our final determinations may differ from this proposal.

**Information Requested**

We intend that any final action resulting from this proposed rule will be based on the best scientific and commercial data available and be as accurate and as effective as possible. Therefore, we request comments or information from the public, other concerned governmental agencies, Native American tribes, the scientific community, industry, or any other interested parties concerning this proposed rule. We particularly seek comments concerning:

(1) The New Mexico meadow jumping mouse's biology, range, and population trends, including:

(a) Biological or ecological requirements of the species, including habitat requirements for feeding, breeding, and sheltering;

(b) Genetics and taxonomy;

(c) Historical and current range including distribution patterns;

(d) Historical and current population levels, and current and projected trends; and

(e) Past and ongoing conservation measures for the species, its habitat, or both.

(2) Factors that may affect the continued existence of the species, which may include habitat modification or destruction, overutilization, disease, predation, the inadequacy of existing regulatory mechanisms, or other natural or manmade factors.

(3) Biological, commercial trade, or other relevant data concerning any threats (or lack thereof) to this species and existing regulations that may be addressing those threats.

(4) Additional information concerning the historical and current status, range, distribution, and population size of this species, including the locations of any additional populations of this species.

Please include sufficient information with your submission (such as scientific journal articles or other publications) to