

**DEPARTMENT OF THE INTERIOR****Fish and Wildlife Service****50 CFR Part 17**

RIN 1018-AV07

**Endangered and Threatened Wildlife and Plants; Revised Critical Habitat for the San Bernardino Kangaroo Rat (*Dipodomys merriami parvus*)****AGENCY:** Fish and Wildlife Service, Interior.**ACTION:** Proposed rule.

**SUMMARY:** We, the U.S. Fish and Wildlife Service (Service), propose to revise currently designated critical habitat for the San Bernardino kangaroo rat (*Dipodomys merriami parvus*) under the Endangered Species Act of 1973, as amended (Act). Currently, approximately 33,295 acres (ac) (13,485 hectares (ha)) are designated as critical habitat for the San Bernardino kangaroo rat in San Bernardino and Riverside counties, California. Under this proposal, approximately 9,079 ac (3,674 ha) of land located in San Bernardino and Riverside counties, California would fall within the boundaries of the revised critical habitat designation. Further, of the 9,079 ac of revised critical habitat, we are proposing to exclude 2,544 ac (1,029 ha) of land covered by the Woolly-Star Preserve Area Management Plans, the Former Norton Air Force Base Conservation Management Plan, the Cajon Creek Habitat Conservation Management Area Habitat Enhancement and Management Plan, and the Western Riverside County Multiple Species Habitat Conservation Plan from the final designation under section 4(b)(2) of the Act.

**DATES:** We will accept comments from all interested parties until August 20, 2007. We must receive requests for public hearings, in writing, at the address shown in the **ADDRESSES** section by August 3, 2007.

**ADDRESSES:** If you wish to comment, you may submit your comments and materials concerning this proposal by any one of several methods:

1. You may mail or hand-deliver your written comments and information to Jim Bartel, Field Supervisor, U.S. Fish and Wildlife Service, Carlsbad Fish and Wildlife Office, 6010 Hidden Valley Road, Carlsbad, CA 92011.

2. You may send comments by electronic mail (e-mail) to [fw8cfwocomments@fws.gov](mailto:fw8cfwocomments@fws.gov). Please include "Attn: San Bernardino kangaroo rat" in your e-mail subject header. If you do not receive a confirmation from the

system that we have received your message, contact us directly by calling our Carlsbad Fish and Wildlife Office at 760-431-9440.

3. You may fax your comments to Jim Bartel, Field Supervisor, Carlsbad Fish and Wildlife Office at 760-431-5901.

4. You may go to the Federal eRulemaking Portal: <http://www.regulations.gov>. Follow the instructions for submitting comments.

Comments and materials received, as well as supporting documentation used in the preparation of this proposed rule, will be available for public inspection, by appointment, during normal business hours at the Carlsbad Fish and Wildlife Office, 6010 Hidden Valley Road, Carlsbad, CA 92011 (telephone 760-431-9440).

**FOR FURTHER INFORMATION CONTACT:** Jim Bartel, Field Supervisor, Carlsbad Fish and Wildlife Office, 6010 Hidden Valley Road, Carlsbad, CA 92011; telephone 760-431-9440; facsimile 760-431-5901. Persons who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 800-877-8339.

**SUPPLEMENTARY INFORMATION:****Public Comments Solicited**

We intend that any final action resulting from this proposal to revise critical habitat for the San Bernardino kangaroo rat will be as accurate and as effective as possible. Therefore, comments or suggestions from the public, other concerned governmental agencies, the scientific community, industry, or any other interested party concerning this proposed rule are hereby solicited. Comments particularly are sought concerning:

(1) The reasons why habitat should or should not be designated as critical habitat under section 4 of the Act (16 U.S.C. 1531 *et seq.*), including whether there are areas we previously designated, but are not proposing for designation here, that should be designated as critical habitat;

(2) Specific information on the amount and distribution of San Bernardino kangaroo rat habitat; what areas occupied at the time of listing and that contain features essential for the conservation of the subspecies should be included in the designation and why; and what areas that were not occupied at the time of listing are essential to the conservation of the subspecies and why;

(3) Specific information on dispersal areas important for habitat connectivity, their role in the conservation and recovery of the subspecies, and reasons why such areas should or should not be included in the critical habitat designation;

(4) Our proposed exclusions totaling 2,544 ac (1,029 ha) of San Bernardino kangaroo rat habitat and whether the benefits of excluding these areas would outweigh the benefits of their inclusion under section 4(b)(2) of the Act (see Exclusions Under Section 4(b)(2) of the Act section for a detailed discussion). If the Secretary determines that the benefits of including these lands would outweigh the benefits of excluding them, they will not be excluded from final critical habitat;

(5) Any proposed critical habitat areas covered by existing or proposed conservation or management plans that we should consider for exclusion from the final designation under section 4(b)(2) of the Act. We specifically request information on any operative or draft habitat conservation plans for the San Bernardino kangaroo rat that have been prepared under section 10(a)(1)(B) of the Act, as well as any other management or conservation plan or agreement that benefits the kangaroo rat or its primary constituent elements;

(6) Specific information regarding the current status of plan implementation for the following management plans: the Woolly-Star Preserve Area Management Plans; the Former Norton Air Force Base CMP; the Cajon Creek Habitat Conservation Management Area HEMP; and Western Riverside MSHCP;

(7) Land use designations and current or planned activities in the subject areas and their possible impacts on proposed revised critical habitat;

(8) Any foreseeable economic, national security, or other potential impacts resulting from the proposed revised designation and, in particular, any impacts on small entities, and the benefits of including or excluding areas that exhibit these impacts; and

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

You may submit your comments and materials concerning this proposal by any one of several methods (see **ADDRESSES** section). Please note that comments must be received by the date specified in the **DATES** section in order to be considered and that the e-mail address [fw8cfwocomments@fws.gov](mailto:fw8cfwocomments@fws.gov) will be closed out at the termination of the public comment period.

Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may

be made publicly available at any time. While you may ask us to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

### Background

It is our intent to discuss only those topics directly relevant to the revision of designated critical habitat for the San Bernardino kangaroo rat in this proposed rule. For more information on the biology and ecology of the San Bernardino kangaroo rat, refer to the final listing rule published in the **Federal Register** on September 24, 1998 (63 FR 51005), and the proposed and final critical habitat rules published in the **Federal Register** on December 8, 2000, and April 23, 2002, respectively (65 FR 77178 and 67 FR 19812).

### Species Description

The San Bernardino kangaroo rat is one of the most highly differentiated of 19 recognized subspecies of Merriam's kangaroo rat (*Dipodomys merriami*). The subspecies occurs primarily on alluvial fans with appropriate physical and vegetative characteristics in San Bernardino and Riverside counties, California (Hall 1981, p. 586; Lidicker 1960, p. 190; Williams *et al.* 1993, p. 62).

### Species Distribution

The historical range of the San Bernardino kangaroo rat extends from the San Bernardino Valley in San Bernardino County to the Menifee Valley in Riverside County (Hall and Kelson 1959, p. 532; Lidicker 1960, p. 190). From the early 1880s to the early 1930s, the subspecies was a common resident of the San Bernardino and San Jacinto Valleys of southern California (Lidicker 1960, p. 190). Prior to 1960, the San Bernardino kangaroo rat was known from more than 25 localities within this range (McKernan 1997, p. 3; McKernan 1993, p. 36). Based on the distribution of apparent suitable soils and museum collections, the Service estimated at the time of emergency listing in 1998 that the historical range of the subspecies encompassed approximately 326,467 ac (130,587 ha) (63 FR 51005, September 24, 1998). Recent studies indicate that the San Bernardino kangaroo rat occupies a wider range of soil and vegetation types than was previously thought (Braden and McKernan 2000, p. 17), which suggests that the subspecies' historical range may have been larger than previously estimated at the time of listing. However, only portions of the historical range would have been occupied at any given time due to the

dynamic nature of alluvial habitat and resultant variation in habitat suitability.

At the time of emergency listing in 1998, the extant range of the San Bernardino kangaroo rat was thought to encompass approximately 3,247 ac (1,299 ha) of suitable habitat divided unequally among seven geographically distinct locations (63 FR 3835, January 27, 1998; McKernan 1997, p. 11). The extent of occupied habitat within San Bernardino County included 1,725 ac (690 ha) within the Santa Ana River, 20 ac (8 ha) in City Creek, 1,140 ac (456 ha) in Lytle and Cajon creeks, 5 ac (2 ha) within Etiwanda Creek, 5 ac (2 ha) in Reche Canyon, and 2 ac (0.8 ha) in South Bloomington. San Bernardino kangaroo rat distribution within Riverside County was limited to 350 acres (140 ha) within the San Jacinto River (McKernan 1997 as cited in 63 FR 3836). This determination was based upon the then-current understanding of what constituted suitable habitat for the subspecies and an evaluation of landscape-scale changes (*e.g.*, dams, flood-control channels, water diversions, roadway construction) that had altered the fluvial processes and/or habitat for this subspecies. Subsequently, we evaluated new information and the results of live-trapping that documented the occurrence of the San Bernardino kangaroo rat within mature alluvial fan sage scrub habitat (*sensu* Smith 1980 and Hanes *et al.* 1989). As a result, in the final rule to list the subspecies, we estimated the extant range of the San Bernardino kangaroo rat to encompass approximately 9,797 ac (3,919 ha) of suitable habitat within the Santa Ana River, Lytle and Cajon creeks, and the San Jacinto River (63 FR 51005, September 24, 1998).

When the final rule designating critical habitat for the San Bernardino kangaroo rat was published in 2002 (67 FR 19812, April 23, 2002), the rule reported that the designated critical habitat area is 33,295 ac (13,485 ha). However, the total area for each of the four critical habitat units given in that rule add up to 33,290 ac (13,480 ha) and we recognize this total as the existing critical habitat area in this revised rule. At the time of publication of the final critical habitat rule, research indicated that San Bernardino kangaroo rats can occupy mature alluvial sage scrub, coastal sage scrub, and even chaparral vegetation types (Braden and McKernan 2000, p. 16). Thus, within the 33,290 ac (13,480 ha) designated as critical habitat in 2002, approximately 32,480 ac (13,155 ha) were believed to be occupied by the subspecies (67 FR 19812). In the final designation, we

stated that systematic and general biological surveys resulted in the documentation of additional occurrences within and outside of areas previously known to be occupied by the subspecies and that based on this information, the San Bernardino kangaroo rat occupied a larger area than was known at the time of listing. However, since these additional occurrences are within the general areas described as occupied in the listing rule (Santa Ana River wash, Lytle and Cajon washes, and the San Jacinto River wash and adjacent upland areas), we consider the areas supporting these occurrences to have been occupied at the time of listing.

New occurrences of San Bernardino kangaroo rat have also been found since the final critical habitat designation in 2002. These occurrences are also within the general areas of the Santa Ana River wash, Lytle and Cajon washes, and San Jacinto River wash that were known to be occupied at the time of listing and known to be occupied at the time of the final critical habitat rule. Therefore, we consider the areas supporting these new occurrences to have been occupied at the time of listing.

### Previous Federal Actions

On March 30, 2005, the Pacific Legal Foundation filed suit against the Service challenging our failure to provide adequate delineation, justification, or sufficient analysis of economic and other impacts in the designation of critical habitat for the San Bernardino kangaroo rat and 26 other species. On March 23, 2006, a settlement agreement was reached requiring the Service to propose to revise critical habitat for the San Bernardino kangaroo rat as appropriate. The settlement stipulated that on or before June 1, 2007, the Service shall submit for publication in the **Federal Register** a proposed rule regarding any revisions to the designation of critical habitat, and that a final rule shall be submitted for publication in the **Federal Register** on or before June 1, 2008. For more information on previous Federal actions concerning the San Bernardino kangaroo rat, refer to the final listing rule published in the **Federal Register** on September 24, 1998 (63 FR 51005), and the final designation of critical habitat published in the **Federal Register** on April 23, 2002 (67 FR 19812).

### Critical Habitat

Critical habitat is defined in section 3 of the Act as (i) the specific areas within the geographical area occupied by a species, at the time it is listed in

accordance with the Act, on which are found those physical or biological features (I) essential to the conservation of the species and (II) that may require special management considerations or protection; and (ii) specific areas outside the geographical area occupied by a species at the time it is listed, upon a determination that such areas are essential to 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 any endangered species or threatened species to the point at which the measures provided under 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 transplantation, 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(a)(2) of the Act through the prohibition against destruction or adverse modification of critical habitat with regard to actions carried out, funded, or authorized by a Federal agency. Section 7(a)(2) of the Act requires consultation on Federal actions that are 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 government or public access to private lands. Section 7(a)(2) of the Act is a purely protective measure and does not require implementation of restoration, recovery, or enhancement measures.

To be included in a critical habitat designation, the habitat within the area occupied by the species at the time of listing must first have features that are essential to the conservation of the species. Critical habitat designations identify, to the extent known using the best scientific data available, habitat areas that provide essential life cycle needs of the species (i.e., areas on which are found the primary constituent elements, as defined at 50 CFR 424.12(b)).

Habitat occupied by the species at the time of listing may be included in critical habitat only if the essential features thereon may require special management considerations or protection. Thus, we do not include

areas where existing management is sufficient to conserve the species. (As discussed below, such areas may also be excluded from critical habitat under section 4(b)(2) of the Act.) Furthermore, when the best available scientific data do not demonstrate that the conservation needs of the species require additional areas, we will not designate critical habitat in areas outside the geographical area occupied by the species at the time of listing. However, an area currently occupied by the species, but not occupied at the time of listing, will likely, but not always, be essential to the conservation of the species, and therefore, may be included in the critical habitat designation.

The Service's Policy on Information Standards Under the Endangered Species Act, published in the **Federal Register** on July 1, 1994 (59 FR 34271), and Section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Pub.L. 106-554; H.R. 5658) and the associated Information Quality Guidelines issued by the Service, provide criteria, establish procedures, and provide guidance to ensure that decisions made by the Service represent the best scientific data available. They require Service 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 determining which areas are critical habitat, a primary source of information is generally the listing package for the species. Additional information sources may include the recovery plan for the species, articles in peer-reviewed journals, conservation plans developed by States and counties, scientific status surveys and studies, biological assessments, or other unpublished materials and expert opinion or personal knowledge. All information is used in accordance with the provisions of Section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Pub. L. 106-554; H.R. 5658) and the associated Information Quality Guidelines issued by the Service.

Section 4 of the Act requires that we designate critical habitat and make revisions thereto on the basis of the best scientific data available. Habitat is often dynamic, and species may move from one area to another over time. Furthermore, we recognize that designation of critical habitat may not include all habitat areas eventually determined necessary for the recovery of the species. For these reasons, critical habitat designations do not imply that

habitat outside the designation is unimportant or may not be required for recovery.

Areas that support populations of the San Bernardino kangaroo rat, but are outside the critical habitat designation, will continue to be subject to conservation actions implemented under section 7(a)(1) of the Act and to the regulatory protections afforded by the section 7(a)(2) jeopardy standard, as determined on the basis of the best available information at the time of the action. Federally funded or permitted projects affecting listed species outside their designated critical habitat areas may still result in jeopardy findings in some cases. 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, or other species conservation planning efforts if new information available to these planning efforts calls for a different outcome.

#### Methods

As required by section 4(b) of the Act, we used the best scientific and commercial data available in determining areas occupied at the time of listing that contain features essential to the conservation of the San Bernardino kangaroo rat, and areas unoccupied at the time of listing that are essential to the conservation of the subspecies, or both. We have also reviewed available information pertaining to the habitat requirements of this subspecies. These data included: research and survey observations published in peer reviewed articles; regional Geographic Information System (GIS) coverages; Riverside County Multiple Species Habitat Conservation Program (MSHCP) database; the University of California, Riverside, species database; the California Natural Diversity Database; and data from reports submitted by biologists holding section 10(a)(1)(A) recovery permits, including results from ongoing research on the San Bernardino kangaroo rat by the San Bernardino County Museum. We are not currently proposing any areas outside the geographical area presently occupied by the subspecies.

#### Primary Constituent Elements

In accordance with section 3(5)(A)(i) of the Act and regulations at 50 CFR 424.12, in determining which areas to propose as critical habitat within areas occupied by the species at the time of listing, we consider those physical and biological features (primary constituent elements) that are essential to the

conservation of the subspecies and that 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, and rearing (or development) of offspring; and (5) habitats that are protected from disturbance or are representative of the historic, geographical, and ecological distributions of a species.

The specific primary constituent elements (PCEs) required for the San Bernardino kangaroo rat are derived from the biological needs of the San Bernardino kangaroo rat as described below.

#### *Space for Individual and Population Growth and Normal Behavior*

San Bernardino kangaroo rats are typically found on alluvial fans, which are relatively flat or gently sloping masses of loose rock, gravel, and sand deposited by a stream as it flows into a valley or upon a plain (McKernan 1993, p. 1). This subspecies is also found on floodplains, washes, areas with braided channels, and in adjacent upland areas containing appropriate physical and vegetative characteristics (McKernan 1993, p. 1). These areas consist of sand, loam, sandy loam, or gravelly soils (McKernan 1993, p. 1) that are associated with alluvial processes (i.e., the scour and deposition of clay, silt, sand, gravel, or similar material by running water such as rivers and streams; or debris flows). San Bernardino kangaroo rats have a strong preference for, and are more abundant on, soils deposited by alluvial processes (McKernan 1997, p. 36). These soils allow San Bernardino kangaroo rats to dig simple, shallow burrow systems for shelter and rearing offspring, and surface pits for food storage that provide for individual and population growth and for normal behavior of this subspecies.

Few studies have been conducted on the burrowing behavior of the San Bernardino kangaroo rat; however, their burrowing habits are similar to the Merriam's kangaroo rat (of which the San Bernardino kangaroo rat is a subspecies) which has been extensively studied. Merriam's kangaroo rats have weak forelegs and are poor diggers; as a result, they dig simple shallow burrow systems where they spend approximately 75 percent of their lives (Reynolds 1958, pp. 113 and 122). Burrows consist of one or two chambers and average 6 inches in depth (Reynolds

1960, p. 51). Kenagy (1973, p. 1207) observed that Merriam's kangaroo rats occupied one to three simple burrows depending on the season. Merriam's kangaroo rats do not have the ability to burrow into hard soils, and because of this, the highest numbers of kangaroo rats can be found on loose, sandy soils (Reynolds 1958, p. 113; Huey 1951, p. 212). Light, textured soil that is favorable to burrowing is an important factor limiting the range of Merriam's kangaroo rats (Reynolds 1958, p. 114). Sandy loam soils are not too heavy to discourage digging, yet they are not light enough to facilitate tunnel cave-ins that can occur in other soil types (Reynolds 1958, p. 113). For these reasons, sandy loam soils found on alluvial fans and maintained by alluvial processes are crucial to the survival and normal behavior of the San Bernardino kangaroo rat.

Alluvial sage scrub habitat is necessary for normal behavior of the San Bernardino kangaroo rat because this plant community provides cover and food resources within areas containing suitable soils for burrowing. Alluvial sage scrub is considered a distinct and rare plant community that dominates major outwash fans at the mouths of canyons along the coastal side of the San Gabriel, San Bernardino, and San Jacinto Mountains and some smaller floodplain and riverine areas of southern California (Hanes *et al.* 1989, p. 187). Described as a variant of coastal sage scrub (Smith 1980, p. 135), alluvial sage scrub is also referred to as alluvial scrub, Riversidean alluvial fan scrub, alluvial fan sage scrub, cismontane alluvial scrub, alluvial fan scrub, or Riversidean alluvial fan sage scrub. Alluvial sage scrub occurs on two types of floodplain soils, Riverwash Association soils and Soboba Association soils (Hanes *et al.* 1989, p. 188). Comprised of an assortment of low growing drought-deciduous shrubs, larger evergreen woody shrubs, and other perennial species tolerant of a relatively sterile, rapidly draining substrate, this relatively open vegetation type is adapted to periodic severe flooding and erosion (Hanes *et al.* 1989, p. 187; Smith 1980, p. 126).

Alluvial sage scrub vegetation includes plant species that are often associated with coastal sage scrub, chaparral, or desert transition communities (Smith 1980, p. 126). Common plant species found within these plant communities may include: *Lepidospartum squamatum* (scalebroom), *Eriogonum fasciculatum* (California buckwheat), *Eriodictyon crassifolium* (woolly yerba santa), *Eriodictyon trichocalyx* (hairy yerba

santa), *Yucca whipplei* (our Lord's candle), *Rhus ovata* (sugar bush), *Rhus integrifolia* (lemonadeberry), *Malosma laurina* (laurel sumac), *Juniperus californicus* (California juniper), *Baccharis salicifolia* (mulefat), *Penstemon spectabilis* (showy penstemon), *Heterotheca villosa* (golden aster), *Eriogonum elongatum* (tall buckwheat), *Encelia farinosa* (brittle bush), *Opuntia* spp. (prickly pear and cholla), *Adenostoma fasciculatum* (chamise), *Prunus ilicifolia* (holly-leaf cherry), *Quercus* spp. (oaks), *Salvia apiana* (white sage), annual forbs (e.g., *Phacelia* spp. (phacelia), *Lupinus* spp. (lupine), and *Plagiobothrys* spp. (popcorn flower)), and native and nonnative grasses.

Three phases of alluvial sage scrub have been described: pioneer, intermediate, and mature. The phases are thought to correspond to factors such as flood scour, distance from flood channel, time since last flood, and substrate features (Smith 1980, p. 136; Hanes *et al.* 1989, p. 187). Under natural conditions, flood waters periodically break out of the main river channel in a complex pattern, resulting in a braided appearance to the floodplain and a mosaic of vegetation stages. Pioneer sage scrub, the earliest phase, is subject to frequent hydrological disturbance and the sparse vegetation pattern is usually renewed by frequent floods (Smith 1980, p. 136; Hanes *et al.* 1989, p. 187). The intermediate phase, which is typically found on benches between the active channel and mature floodplain terraces, is subject to periodic flooding at longer intervals. The vegetation of early and intermediate stages is relatively open (less than 50 percent canopy cover) and supports the highest densities of the San Bernardino kangaroo rat (McKernan 1997, p. 50), likely due in part to few root systems to interfere with burrowing. Areas like these, with a significant amount of bare ground, can also facilitate movement for a bipedal species like the San Bernardino kangaroo rat. For Merriam's kangaroo rats, an abundance of perennial grass cover can create an unfavorable environment by interfering with ease of travel and escape from predators (Reynolds 1958, p. 114).

The oldest, or mature phase of alluvial sage scrub, which is found on elevated floodplain terraces, is rarely affected by flooding and supports the highest plant density (Smith 1980, p. 137). Although mature areas are generally used less frequently or occupied at lower densities by San Bernardino kangaroo rats (likely due to extensive root systems and heavy vegetative cover that inhibit burrowing

and predator escape) than those supporting earlier phases, these areas are essential for the conservation of the subspecies. Lower portions of the floodplain, where higher densities of San Bernardino kangaroo rats are found, are likely to become inundated or lost due to scour and sediment deposition during flooding events, and some animals may drown during the event. In a study to determine the effects of flooding on Merriam's kangaroo rats and two other heteromyid (family of rodents that includes the kangaroo rats, kangaroo mice, and pocket mice) species, Kenagy (1973, p. 1205) noted heavy burrow damage, and a 23 percent reduction in the number of chisel-toothed kangaroo rats (*Dipodomys microps*) trapped compared to pre-flood numbers. Elevated upland portions of the floodplain containing mature phase alluvial sage scrub with patches of suitable soils and vegetative cover can support some individuals, but the low density of animals suggests these areas likely remain occupied only because of their proximity to the more densely occupied lower elevation portions of the floodplain. More importantly for the preservation of the subspecies in channelized systems where bank-to-bank flooding can occur, individuals occupying the upland areas may be the only San Bernardino kangaroo rats remaining for recolonization of the lower floodplain after flooding has subsided (Pavelka 2006). Research conducted by Braden and McKernan (2000, p. 16) during 1998 and 1999 demonstrated that areas with late phases of floodplain vegetation, such as mature alluvial fan sage scrub and associated coastal sage scrub and chaparral, including some areas of moderate to dense vegetation such as nonnative grasslands, are at least periodically occupied by the subspecies. Due to the dynamic nature of the alluvial floodplain, all elevations within the floodplain and the associated phases of alluvial sage scrub habitat are essential to the conservation and long-term survival of the San Bernardino kangaroo rat.

A limited amount of data exists pertaining to population dynamics of the San Bernardino kangaroo rat. Information is not currently available on several aspects of the subspecies' life history such as fecundity (the capacity of an organism to produce offspring), survival, population age and sex structure, intra- and interspecific competition, and causes and rates of mortality. With respect to population density, Braden and McKernan (2000) documented substantial annual

variation on a trapping grid in San Bernardino County, where densities ranged from 2 to 26 animals per ha (2.47 ac). The reasons for these greatly disparate values during the 15-month study are unknown. These fluctuations bring to light several important aspects of the subspecies' distribution and life history which should be considered when identifying areas essential for the conservation of the subspecies: (1) A low population density observed in an area at one point in time does not mean the area is occupied at the same low density during any other month, season, or year; (2) a low population density is not an indicator of low habitat quality or low overall value of the land for the conservation of the subspecies; (3) an abundance of San Bernardino kangaroo rats can decrease rapidly; and (4) one or more factors (e.g., food availability, fecundity, disease, predation, genetics, environment) are strongly influencing the subspecies' population dynamics in one or more areas. High-amplitude, high-frequency fluctuations in small, isolated populations make the San Bernardino kangaroo rat extremely susceptible to local extirpation.

Areas that contain low densities of San Bernardino kangaroo rats may be important for dispersal, genetic exchange, colonization of newly suitable habitat, and re-colonization of areas after severe storm events. The dynamic nature of the alluvial habitat leads to a situation where not all of the habitat associated with alluvial processes is suitable for the species at any point in time. However, areas generally considered unsuitable habitat, such as out-of-production vineyards and margins of orchards, can and do develop into suitable habitat for the subspecies through natural processes (67 FR 19812). The San Bernardino kangaroo rat has been documented in areas containing suitable soils that have been altered due to human disturbance not typically associated with the subspecies, including nonnative grasslands; margins of orchards and out-of-use vineyards from adjacent, mature stage alluvial sage scrub with greater than 50 percent canopy cover; and areas of wildland/urban interface within floodplains or terraces and adjacent to occupied habitat (67 FR 19812, April 23, 2002). These upland areas can support individuals for repopulation of wash areas extirpated by flood events (Pavelka 2006). This can occur directly by dispersal of adult individuals, or indirectly through dispersal of offspring (Pavelka 2006).

Little is known about home range size, dispersal distances, or other spatial requirements of the San Bernardino

kangaroo rat. However, home ranges for the Merriam's kangaroo rat in the Palm Springs, California, area averaged 0.8 ac (0.3 ha) for males and 0.8 ac (0.3 ha) for females (Behrends *et al.* 1986, p. 204). Furthermore, Blair (1943, p. 26) reported much larger home ranges for Merriam's kangaroo rats in New Mexico, where home ranges averaged 4.1 ac (1.7 ha) for males and 3.9 ac (1.6 ha) for females. Space requirements for the San Bernardino kangaroo rat likely vary according to season, age and sex of animal, food availability, and other factors. Although outlying areas of their home ranges may overlap, *Dipodomys* adults actively defend small core areas near their burrows (Jones 1993, p. 583). Home range overlap between males and between males and females is extensive, but female-female overlap is slight (Jones 1993, p. 584). The degree of competition between San Bernardino kangaroo rats and sympatric (living in the same geographical area) species of kangaroo rats for food and other resources is not presently known. While we do not have sufficient information to quantify the home range required by the San Bernardino kangaroo rat, through the delineation of critical habitat in wash and upland areas, it is likely that we have included sufficient areas to provide the space needed to maintain the home range for this subspecies in this proposed revised critical habitat designation.

#### Food

As stated in the previous sections, the alluvial sage scrub plant community occupied by the San Bernardino kangaroo rat provides food resources for the subspecies. However, little is known about the specific diet of San Bernardino kangaroo rats. They emerge from their burrow systems at sunset and feed at night, when they are most active. San Bernardino kangaroo rats are generally granivorous (feed on seeds and grains) and like most Merriam's kangaroo rats, often store large quantities of seeds in surface pits for later consumption (Reichman and Price 1993, p. 540; Reynolds 1958, p. 126). This species feeds primarily on the seeds of alluvial sage scrub species, but green vegetation and insects can also be important seasonal food sources. Insects, when available, have been documented to constitute as much as 50 percent of a kangaroo rat's diet (Reichman and Price 1993, p. 540).

Wilson *et al.* (1985, p. 731) reported that in comparison to other rodents, Merriam's kangaroo rat, and heteromyids in general, have relatively low reproductive output that can be linked to food resources. Rainfall and

the availability of food have been cited as factors affecting kangaroo rat populations. Droughts lasting more than a year can cause rapid declines in population numbers after seed caches are depleted (Goldingay *et al.* 1997, p. 56).

#### Cover or Shelter

San Bernardino kangaroo rats depend on proper soils for burrowing and vegetative cover for shelter from predation. Potential predators include the common barn owl (*Tyto alba*), great horned owl (*Bubo virginianus*), long-eared owl (*Asio otus*), gray fox (*Urocyon cinereoargenteus*), coyote (*Canis latrans*), long-tailed weasel (*Mustela frenata*), bobcat (*Felis rufus*), badger (*Taxidea taxus*), San Diego gopher snake (*Pituophis melanoleucus annectens*), California king snake (*Lampropeltis getulus californiae*), red diamond rattlesnake (*Crotalus ruber*), southern Pacific rattlesnake (*Crotalus viridis*), and domestic cats (*Felis catus*) (Bolger *et al.* 1997, p. 560; 67 FR 19812, April 23, 2002).

#### Primary Constituent Elements for the San Bernardino Kangaroo Rat

Under the Act and its implementing regulations, we are required to identify the known physical and biological features (PCEs) within the geographical area occupied by the San Bernardino kangaroo rat at the time of listing, which may require special management considerations or protection.

Based on our current knowledge of the life history, biology, and ecology of the San Bernardino kangaroo rat and the requirements of the habitat to sustain the essential life history functions of the subspecies, we have determined that the PCEs specific to the San Bernardino kangaroo are:

(1) Alluvial fans, washes, and associated floodplain areas containing soils consisting predominately of sand, loamy sand, sandy loam, and loam, which provide burrowing habitat necessary for sheltering and rearing offspring, storing food in surface caches, and movement between occupied patches;

(2) Upland areas adjacent to alluvial fans, washes, and associated floodplain areas containing alluvial sage scrub habitat and associated vegetation, such as coastal sage scrub and chamise chaparral, with up to approximately 50 percent canopy cover providing protection from predators, while leaving bare ground and open areas necessary for foraging and movement of this subspecies; and

(3) Upland areas adjacent to alluvial fans, washes, and associated floodplain

areas, which may include marginal habitat such as alluvial sage scrub with greater than 50 percent canopy cover with patches of suitable soils (PCE 1) that support individuals for re-population of wash areas following flood events. These areas may include agricultural lands, areas of inactive aggregate mining activities, and urban/wildland interfaces.

This proposed revision to the critical habitat designation is designed for the conservation of PCEs necessary to support the life history functions that were the basis for the proposal and the areas containing the PCEs. Because not all life history functions require all the PCEs, not all proposed revised critical habitat units will contain all the PCEs.

#### Special Management Considerations or Protection

When designating critical habitat, we assess whether the areas determined to be occupied at the time of listing contain features essential to the conservation of the subspecies that may require special management considerations or protection. We have also considered how revising the current designation of critical habitat highlights habitat in need of special management considerations or protection.

The majority of all remaining suitable habitat, and the long-term persistence of the San Bernardino kangaroo rat, is threatened by the direct and indirect effects of: sand and gravel mining; construction, operation, and maintenance of flood control structures; water conservation activities; urban and industrial development; agricultural activities; and off-road vehicle activity. With an expanding human population in the region, it is likely that these activities will continue to threaten the habitat and PCEs upon which the San Bernardino kangaroo rat depends.

Sand and gravel mining operations have degraded San Bernardino kangaroo rat habitat in all of the proposed revised critical habitat units, with major operations occurring in the Santa Ana River and Lytle Creek washes. Mining activities directly affect the PCEs for the subspecies by altering soil composition and structure, and by stripping away vegetative cover (PCEs 1 and 2). Furthermore, flood control structures are often built to protect mining operations from flood damage. This alters the hydrology essential for maintaining proper soil and alluvial sage scrub habitat for the San Bernardino kangaroo rat (PCEs 1 and 2). Special management considerations or protection may be required to minimize effects of mining activities on alluvial

sage scrub habitat and the natural hydrological processes that maintain proper alluvial sage scrub conditions for the San Bernardino kangaroo rat. Such management may include restoring habitat in areas degraded from past mining activities to conditions suitable for this subspecies.

Flood control and water conservation activities related to increasing human population and development have had major impacts on San Bernardino kangaroo rat habitat and the alluvial processes that maintain habitat in each of the proposed revised critical habitat units. Flood control berms, levees, and concrete-lined channels increase severity (velocity and scour) of flood events in lower elevations within the flood plain, and cut off upland portions of alluvial sage scrub habitat from hydrological processes that maintain suitable San Bernardino kangaroo rat conditions (PCEs 1, 2, and 3). In the absence of periodic flooding and scouring, upland alluvial sage scrub habitat increases in cover and in density of nonnative vegetation to the point where the open canopy and ground conditions (PCE 2) preferred by the subspecies no longer exist (Service 2004, p. 293). Some flood control structures, such as concrete channels, can prevent movement and dispersal between occupied areas of the alluvial wash and floodplain. Decades of groundwater pumping have severely depleted groundwater reserves within San Bernardino kangaroo rat habitat and have resulted in an ever-increasing need to recharge groundwater supplies by percolation of local or imported water sources into the local groundwater basin (Service 2004, p. 293). Further habitat degradation occurs where groundwater recharge ponds (percolation basins) have been constructed. Recharge structures are unsuitable for the San Bernardino kangaroo rat due to periodic standing water. These structures are especially evident in the Santa Ana River and San Jacinto River washes. Special management considerations or protection may be required to minimize effects of flood control and water conservation activities on alluvial sage scrub habitat and the natural hydrological processes that maintain proper alluvial sage scrub conditions for the San Bernardino kangaroo rat.

Development projects pose a serious threat to San Bernardino kangaroo rat habitat in all three proposed revised critical habitat units. As the human population of the surrounding area continues to increase, the threat of development encroaching upon alluvial washes and associated upland areas will persist (PCEs 1, 2, and 3). Large-scale

development projects, like the Lytle Creek North Master Planned Community (described below), permanently eliminate and fragment habitat containing the PCEs for the subspecies. Furthermore, continued fragmentation of habitat is likely to promote higher levels of predation by native animals (Bolger *et al.* 1997, p. 560) and urban-associated animals (e.g., domestic cats, opossums (*Didelphis virginianus*), and striped skunks (*Mephitis mephitis*)) as the interface between natural habitat and urban areas is increased (Churcher and Lawton 1987, p. 452). Roadways and bridges built to accommodate the growing population in the area constrict channel width and contribute to the removal of alluvial fan habitat from normal hydrological processes (PCE 1). The downstream alluvial benches become isolated behind the fill used to construct the bridge within the channel area and do not experience natural flood-borne scour and deposition. Pier and footing placement within channels is a typical necessary bridge design feature.

Instream piers create scour areas in front of the piers, increase water velocity through the embankments and piers (which can result in downstream erosion), and create a permanent shadow over habitat under the bridge. These factors typically result in permanently degraded habitat for San Bernardino kangaroo rat even though high flows are seasonal in this area. Special management considerations or protection may be required to minimize the impacts of development within the alluvial wash and adjacent upland areas. Areas of the alluvial washes and floodplains adjacent to development may require exclusionary fencing and signage to minimize human and domestic animal disturbance of San Bernardino kangaroo rat habitat. Because this subspecies is active at night, lights from adjacent developed areas should be minimized and directed away from San Bernardino kangaroo rat habitat.

Agricultural activities adjacent to all three proposed revised critical habitat units occasionally result in the discing of patches of suitable or occupied habitat that may be distributed throughout upland agricultural areas. Discing destroys San Bernardino kangaroo rat burrows and degrades remaining vegetation associations (Service 2004, p. 293) (PCEs 1 and 2). This can contribute to the susceptibility of local populations to extinction during large-scale flood events by restricting San Bernardino kangaroo rats to areas most vulnerable to flooding (i.e., lower

elevations of the floodplain) (Service 2004, p. 293). Special management considerations or protection may be required to minimize effects of agricultural activities on alluvial sage scrub habitat.

Unauthorized off-road vehicle activity continues to be a threat to San Bernardino kangaroo rat habitat in the San Jacinto River wash area. Most of this activity occurs within the wash downstream of the East Main Street/Lake Park Drive Bridge. Off-road activity that goes unchecked directly damages plant communities, the soil crust, and the burrow systems of kangaroo rats, thereby degrading habitat (Bury *et al.* 1977, p. 16; Service 2004, p. 293) (PCEs 1 and 2). Special management considerations or protection, such as exclusionary fencing, additional enforcement, and signage placed around areas of the wash, may be needed to minimize impacts from unauthorized off-road vehicle use.

#### **Criteria Used To Identify Critical Habitat**

We are proposing to revise critical habitat for the San Bernardino kangaroo rat in areas that we have determined were occupied at the time of listing, and that contain sufficient primary constituent elements (PCEs) to support life history functions essential for the conservation of the species. Lands are proposed for revised designation based on sufficient PCEs being present to support the life processes of the species. Some lands contain all PCEs and support multiple life processes. Some lands contain only a portion of the PCEs necessary to support the particular use of that habitat.

We define occupied habitat as: (a) Those areas containing occurrence data from the time of listing (1980 to 1998); (b) those areas containing occurrence data since the time of listing (1998 to present); (c) areas adjacent to and between occurrence points that maintain connectivity of occurrences in one continuous patch of suitable habitat. As discussed in the Background section of this proposed rule, occurrences discovered since the listing of the subspecies in 1998 are within areas known to be occupied at the time of listing (Santa Ana River wash, Lytle and Cajon washes, and San Jacinto River area).

In this proposed revised designation we have focused primarily on core populations (i.e., areas where the subspecies has been repeatedly detected through live trapping) that are considered necessary for conservation and recovery of the San Bernardino kangaroo rat. We believe protecting

these core populations is what is necessary for recovery of the species. Protecting peripheral populations, or areas of degraded habitat where sitings are sporadic is not necessary for recovery.

Utilizing 2005 aerial imagery and occurrence data used to determine areas of occupancy, we delineated proposed revised critical habitat on maps to include non-degraded alluvial fans, washes, floodplains, and adjacent upland areas containing the PCEs required by the San Bernardino kangaroo rat. We then made site visits accompanied by subspecies experts to confirm the presence of PCEs in the areas delineated on the maps. Areas determined not to contain any of the PCEs (i.e., degraded) during site visits are not included in the areas proposed as revised critical habitat. Because of the importance of upland habitat for source populations to re-populate wash areas following flood events, we include non-degraded (containing one or more PCEs) upland habitat adjacent to occupied wash habitat containing appropriate soils and vegetation community in this proposed revised designation.

When determining the proposed revisions to critical habitat boundaries, we made every effort to avoid including developed areas such as buildings, paved areas, and other structures that lack PCEs for the San Bernardino kangaroo rat. Areas currently being used for sand/gravel mining operations (e.g., pits, staging areas) do not contain the PCEs required by the San Bernardino kangaroo rat. The scale of the maps prepared under the parameters for publication within the Code of Federal Regulations may not reflect the exclusion of such developed areas. Any developed structures and the land under them inadvertently left inside critical habitat boundaries shown on the maps of this proposed revision to critical habitat have been excluded by text in this rule and are not proposed for designation as critical habitat. Therefore, Federal actions limited to these areas would not trigger section 7 consultation, unless they may affect the subspecies or PCEs in adjacent critical habitat.

#### **Summary of Proposed Changes to Currently Designated Critical Habitat**

The areas identified in this proposed rule constitute a proposed revision of the critical habitat designation for the San Bernardino kangaroo rat, published on April 23, 2002 (67 FR 19812). For maps showing existing and proposed revised critical habitat visit our Web site at <http://carlsbad.fws.gov>.



Our proposed revised critical habitat designation is substantially smaller than the existing designation. Given the new information that has become available to us in the five years since the previous designation, we find that we erroneously designated some areas. We find that areas previously proposed but not proposed in this rule are not essential to the conservation of the species, because of new information (see Criteria Used To Identify Critical Habitat section). The changes in this rule are due to several factors. Better biological information has allowed us to more specifically define PCEs for this species, and site visits in December 2006 and January 2007 allowed us to more precisely define these areas on the ground. This allowed us to remove areas that do not meet our criteria for features that are essential to the conservation of the species. The 2002 critical habitat designation included areas that supported few occurrence records. Such areas of low density occupation, or sporadic occupancy, have been removed from the proposed revised designation, for such areas do not represent core populations and, therefore, are not necessary for the conservation and recovery of the species. Finally, we have employed refined mapping techniques in the current revision, which have allowed us to more precisely map areas that contain PCEs. This more refined approach has allowed us to remove areas that do not meet the definition of critical habitat.

The main differences in this proposed revised designation include the following:

(1) On the basis of our new analyses, we have determined that portions of existing Unit 1 (Santa Ana River), Unit 2 (Lytle and Cajon Creeks), and Unit 3 (San Jacinto River), and all of Unit 4 (Etiwanda Alluvial Fan and Wash) do not contain PCEs in the quality and quantity needed for conservation of the species or do not support core populations of the taxon. These areas total 24,211 ac (9,798 ha) of habitat originally designated as critical habitat in 2002. Therefore we are not proposing to include these areas in our proposed revision to critical habitat. The following paragraphs provide unit by unit explanations for why areas previously designated as critical habitat no longer fit our definition of critical habitat for the San Bernardino kangaroo rat.

We have removed approximately 5,311 ac (2,149 ha) within Unit 1 from our proposed revision to critical habitat, largely because portions of the Unit do not contain the PCEs, but also because occurrence data for some areas indicates

that they do not support a core population of San Bernardino kangaroo rat. South of Mill Creek, a flood control levee has cut off habitat from fluvial processes, which has resulted in overgrown vegetation and water retention basins that are unsuitable habitat conditions for the subspecies. A large area extending from the existing critical habitat in and south of Plunge Creek west to the confluence of City Creek with the Santa Ana River has been degraded through mining operations, flood control structures (and the subsequent loss of fluvial influence), and water retention basins. The habitat downstream of the Tippecanoe Avenue Bridge is heavily channelized with steep banks inhibiting the use of upland habitat; we do not have data indicating that this area is occupied. Because these areas do not contain PCEs and/or do not support core populations, we are not including them in the proposed revision to critical habitat.

We have removed approximately 9,284 ac (3,757 ha) within Unit 2 from our proposed revision to critical habitat, largely because portions of the Unit do not contain the PCEs, but also because occurrence data for some areas indicates that they do not support a core population of San Bernardino kangaroo rat. Two areas northeast of the main Lytle-Cajon Creek unit contain habitat that has been degraded and these areas are largely unoccupied. The southernmost portion of Lytle Creek contains habitat that has been degraded through surface mining and flood control structures, making this area unsuitable for the subspecies. The upper reaches of both Lytle and Cajon Creeks contain large rocky substrates that do not provide habitat for this subspecies and we have no recent occurrence data for these upstream areas. Portions of habitat along the Lytle Creek arm have been degraded from sand and gravel mining operations and associated infrastructure. Approximately 670 ac (271 ha) of existing critical habitat north of Lytle Creek and east of I-15 is currently under development for the Lytle Creek North development project, and was addressed through formal section 7 consultation with the Service. A large expanse of a remnant flood plain south of Lytle Creek and I-15, and west of Riverside Avenue is partially developed and does not contain the PCEs for the subspecies. This area is void of fluvial influence and is cut off from the core population by roadways. Because these areas do not contain PCEs and/or do not support core populations, we are not including them in the proposed revision to critical habitat.

We have removed approximately 4,796 ac (1,941 ha) within Unit 3 from our proposed revision to critical habitat, largely because portions of the Unit do not contain the PCEs, but also because occurrence data for some areas indicates that they do not support a core population of San Bernardino kangaroo rat. Bautista Creek and the downstream reach of the San Jacinto River are largely channelized, and do not provide suitable habitat or contain the PCEs essential to the San Bernardino kangaroo rat. These channelized areas prevent connectivity with the core population in the San Jacinto wash. We have do not have occurrence data or habitat condition data for the two tributaries on Tribal land north of the San Jacinto wash and are not proposing critical habitat on Tribal lands (see *Government-to-Government Relationship with Tribes* section). Portions of the habitat downstream of the Bautista Creek confluence have been or are in the process of being developed or are being used for water conservation activities and therefore this habitat does not contain the PCEs. Because these areas do not contain PCEs and/or do not support core populations, we are not including them in the proposed revision to critical habitat.

We have removed approximately 4,820 ac (1,951 ha) within Unit 4 from our proposed revision to critical habitat because Unit 4 consists largely of unoccupied areas that are not essential to the conservation of the San Bernardino kangaroo rat. Occupied areas within this unit do not contain the PCEs necessary for the subspecies.

(2) We re-evaluated and revised the PCEs as needed in light of *Homebuilder's Ass'n of Northern Cal. v. U.S. Fish and Wildlife Service*, 268 F. Supp.2d 1197 (E.D. Cal. 2003), other applicable law, and current Service guidelines and policies. We propose to revise the PCEs to provide more specificity with regards to the location of and necessity for suitable soil types, vegetative habitat, and upland areas related to the biological needs of the subspecies. We also include a range of the preferred percentage of vegetative cover. Revisions to the PCEs alone did not result in the removal of existing critical habitat from this proposed revised critical habitat designation.

#### **Proposed Revisions to the Critical Habitat Designation**

We are proposing approximately 9,079 ac (3,674 ha) within three units as critical habitat for the San Bernardino kangaroo rat. These units, which generally correspond to the units in the 2002 designation, if finalized, would



entirely replace the current critical habitat designation for the San Bernardino kangaroo rat in 50 CFR 17.95(a). The critical habitat areas described below constitute our best assessment currently of areas occupied at the time of listing containing the PCEs that may require special management considerations or

protection. The three units proposed as critical habitat are: (1) Unit 1—Santa Ana River Wash, (2) Unit 2—Lytle/Cajon Creek Wash, and (3) Unit 3—San Jacinto River Wash.

Of the 9,079 ac (3,674 ha) being proposed as revised critical habitat, we are proposing to exclude approximately 2,544 ac (1,029 ha) from the final critical habitat designation under section 4(b)(2)

of the Act. See Exclusions Under Section 4(b)(2) of the Act section for a detailed discussion.

The approximate area (ac, ha) encompassed within each proposed revised critical habitat unit, land ownership, and areas proposed for exclusion from the final critical habitat designation are shown in Table 1.

**TABLE 1.—AREA (ACRES (AC), HECTARES (HA)) BEING PROPOSED AS REVISED CRITICAL HABITAT, LAND OWNERSHIP, AND AREA BEING PROPOSED FOR EXCLUSION FROM THE FINAL CRITICAL HABITAT DESIGNATION FOR THE SAN BERNARDINO KANGAROO RAT IN SAN BERNARDINO AND RIVERSIDE COUNTIES, CALIFORNIA**  
[Area estimates reflect all land within proposed critical habitat unit boundaries]

Critical habitat unit	Land ownership	Area proposed as revised critical habitat	Area being considered for exclusion from final critical habitat
1. Santa Ana River Wash, San Bernardino County .....	Federal (BLM) <sup>1</sup> .....	559 ac (226 ha) .....	00 ac (00 ha).
	Local <sup>2</sup> .....	268 ac (109 ha) .....	268 ac (109 ha).
	Private .....	2,797 ac (1,132 ha) .....	742 ac (300 ha).
	Subtotal .....	3,624 ac (1,467 ha).	
2. Lytle/Cajon Creek Wash, San Bernardino County .....	Federal (USFS) <sup>3</sup> .....	89 ac (36 ha) .....	00 ac (00 ha).
	Private .....	4,597 ac (1,860 ha) .....	1,271 ac (514 ha).
	Subtotal .....	4,686 ac (1,896 ha)..	
3. San Jacinto River Wash, Riverside County .....	Water District <sup>4</sup> .....	506 ac (205 ha) .....	00 ac (00 ha).
	Local Flood <sup>5</sup> .....	94 ac (38 ha) .....	94 ac (38 ha).
	Private .....	169 ac (68 ha) .....	169 ac (68 ha).
	Subtotal .....	769 ac (311 ha)..	
Total .....		9,079 ac (3,674 ha) .....	2,544 ac (1,029 ha).

1—BLM = Bureau of Land Management.

2—Local = Local Reuse Authority.

3—USFS = U.S. Forest Service.

4—Water District = Eastern Municipal Water District and Lake Hemet Municipal Water District.

5—Local Flood = Riverside County Flood Control.

**TABLE 2.—OCCUPANCY OF PROPOSED REVISED CRITICAL HABITAT UNITS FOR THE SAN BERNARDINO KANGAROO RAT.**

Critical habitat unit	Occupied at the time of listing?	Occupied currently?	Acres (hectares)
1. Santa Ana River Wash, San Bernardino County .....	Yes .....	Yes .....	3,624 ac (1,467 ha).
2. Lytle/Cajon Creek Wash, San Bernardino County .....	Yes .....	Yes .....	4,686 ac (1,896 ha).
3. San Jacinto River Wash, Riverside County .....	Yes .....	Yes .....	769 ac (311 ha).
Total .....			9,079 ac (3,674 ha)

Below, we present brief descriptions of all units and reasons why they meet the definition of critical habitat for the San Bernardino kangaroo rat.

*Unit 1: Santa Ana River Wash*

Unit 1 consists of approximately 3,624 ac (1,467 ha) and is located in San Bernardino County. This unit includes the Santa Ana River and portions of City, Plunge, and Mill creeks. The area includes lands within the cities of San Bernardino, Redlands, Highland, and Colton. Although Seven Oaks Dam (northeast of Unit 1) impedes sediment transport and reduces the magnitude,

frequency, and extent of flood events from the Santa Ana River, the system still retains partial fluvial dynamics because contributions from Mill Creek are not impeded by a dam or debris basin. This critical habitat unit was occupied at the time of listing, is currently occupied, and contains all of the PCEs (PCEs 1, 2, and 3) essential to the conservation of the San Bernardino kangaroo rat. Additionally, this unit contains the highest densities of San Bernardino kangaroo rat in the Santa Ana wash. The PCEs contained within this unit may require special management considerations or

protection to minimize impacts associated with flood control operations, water conservation projects, sand and gravel mining, and urban development.

Approximately 742 ac (300 ha) of Unit 1 occurs within the Woolly-Star Preserve Area (WSPA), a section of the flood plain downstream of Seven Oaks Dam that was preserved by the flood control districts of Orange, Riverside, and San Bernardino counties. The WSPA was established in 1988 by the Army Corps of Engineers (ACOE) to minimize the effects of Seven Oaks Dam on the federally endangered plant,

*Eriastrum densifolium* ssp. *sanctorum* (Santa Ana River woolly-star). This area of alluvial fan scrub in the wash near the low-flow channel of the river was designated for preservation because these sections of the wash were thought to have the highest potential to maintain the hydrology necessary for the periodic regeneration of early phases of alluvial fan sage scrub. A 1993 Management Plan for the Santa Ana River WSPA has been completed, and a draft multi-species habitat management plan (MSHMP) for WSPA lands, which includes protection for the San Bernardino kangaroo rat, is to be completed as an additional conservation measure pursuant to our December 19, 2002, biological opinion on operations for Seven Oaks Dam (Service 2002b, p. 8). As a result, we are proposing to exclude WSPA lands (741 ac (300 ha)) that fall within the area proposed as revised critical habitat from the final revised critical habitat designation based on the benefits to the subspecies provided by these plans (see Exclusions Under Section 4(b)(2) of the Act for a detailed discussion).

In 1994, the Bureau of Land Management (BLM) designated three parcels in the Santa Ana River, a total of approximately 760 ac (305 ha), as an ACEC (Area of Critical Environmental Concern). One parcel is located south of the Seven Oaks barrow pit, another is farther west and south of Plunge Creek, and the third is located farther west between two large mining pits. The primary goal of this ACEC designation is to protect and enhance the habitat of federally listed plant species occurring in the area while providing for the administration of valid existing water conservation rights. Although the establishment of this ACEC is important in regard to conservation of sensitive species and communities in this area, the administration of valid existing water conservation rights conflicts with the BLM's ability to manage their lands for the San Bernardino kangaroo rat. Existing rights include a withdrawal of Federal lands for water conservation through an act of Congress on February 20, 1909 (Public Law 248, 60th Cong., 2nd sess.). The entire ACEC is included in this withdrawn land and may be used for water conservation measures such as the construction of percolation basins. Although the BLM is coordinating with the Service to conserve San Bernardino kangaroo rat habitat, at this time we do not consider these lands to be managed for the benefit of the San Bernardino kangaroo rat or its PCEs; therefore, we are not proposing to exclude these lands

from the final revised critical habitat designation.

We are currently coordinating with the BLM, ACOE, San Bernardino Valley Conservation District, Cemex Construction Materials, Robertson's Ready Mix, and other local interests in an attempt to establish the Santa Ana River Wash Conservation Area. The objective of these discussions is to consolidate a large block of alluvial fan scrub occupied by three federally endangered species (the San Bernardino kangaroo rat, *E. d. ssp. sanctorum*, and *Dodecahema leptoceras* (slender-horned spineflower)) and one federally threatened species (the coastal California gnatcatcher (*Poliophtila californica* ssp. *californica*)). The area under consideration includes the majority of the Santa Ana wash from just downstream of the Seven Oaks Dam and the confluence of Mill Creek with the Santa Ana River, downstream to the City Creek confluence. The area is envisioned to include BLM's ACEC lands and the ACOE's preservation lands for *E. d. ssp. sanctorum*. This cooperative agreement, expected to be completed within the next 1 to 2 years, would reconfigure and consolidate sand and gravel mining operations in this unit to reduce adverse effects to these listed species and remaining alluvial sage scrub communities. While this effort is likely to benefit the San Bernardino kangaroo rat through the establishment of preserve lands that will be managed for the subspecies, the final configuration has not been completed. Therefore, we are not proposing to exclude any lands within the proposed Santa Ana River Wash Conservation Area from the final revised critical habitat designation.

Approximately 268 ac (109 ha) of occupied habitat in the Santa Ana River wash has been set aside for conservation in perpetuity by the U.S. Air Force as part of on-base site remediation efforts at the former Norton Air Force Base (AFB) in San Bernardino, California. These areas are managed specifically for the San Bernardino kangaroo rat and *E. d. ssp. sanctorum* pursuant to the Former Norton Air Force Base Conservation Management Plan (CMP) completed in March 2002. We are proposing to exclude these 268 ac (109 ha) from the final revised critical habitat designation based on benefits provided to San Bernardino kangaroo rat habitat under the CMP (see Exclusions Under Section 4(b)(2) of the Act for a detailed discussion).

#### *Unit 2: Lytle/Cajon Creek Wash*

Unit 2, which encompasses approximately 4,686 ac (1,896 ha) in

San Bernardino County, includes the northern extent of this subspecies' remaining distribution. This unit contains habitat along and between Lytle and Cajon creeks from the Interstate 15 Bridge in Lytle Creek and the Kenwood Avenue Cajon Boulevard junction in Cajon Creek, downstream to Highland Avenue. Proposed Unit 2 was occupied at the time of listing, is currently occupied, and contains all of the PCEs (PCEs 1, 2, and 3) essential to the survival and conservation of the San Bernardino kangaroo rat. Additionally, this unit includes some of the last remaining alluvial fans, flood plain terraces, historic braided river channels, and associated alluvial sage scrub and upland vegetation that provides habitat for the San Bernardino kangaroo rat in the Lytle/Cajon Creek wash. Proposed Unit 2 also contains the highest densities of San Bernardino kangaroo rat in the Lytle/Cajon wash. The PCEs within this unit may require special management considerations or protection to minimize impacts associated with flood control operations, water conservation projects, sand and gravel mining, and urban development.

The hydro-geomorphological processes that apparently rejuvenate and maintain the dynamic mosaic of alluvial fan sage scrub are still largely intact in Lytle and Cajon creeks (i.e., stream flows are not impeded by dams or debris basins), and the remaining habitat allows dispersal between these two drainages, which is important for genetic exchange between populations (67 FR 19812, April 23, 2002). This unit is adjacent to large tracts of undeveloped land and contains upland areas occupied by the subspecies (PCEs 1, 2, and 3).

Several areas in Unit 2 will be or are protected and being managed to some extent for the San Bernardino kangaroo rat. The Cajon Creek Habitat Conservation Management Area (HCMA) includes 1,378 ac (558 ha) to offset approximately 2,270 ac (920 ha) of sand and gravel mining proposed within and adjacent to Cajon Creek. Of the 1,378-ac (558-ha) Cajon Creek HCMA, approximately 610 ac (245 ha) is the Cajon Creek Conservation Bank established to help conserve populations of 24 species associated with alluvial fan scrub including the San Bernardino kangaroo rat. Furthermore, the remaining 768 ac (311 ha) have been set aside as permanent conservation lands. These conservation lands will be managed in perpetuity for alluvial fan scrub habitat and associated listed species (including the San Bernardino kangaroo rat) pursuant to

the Habitat Enhancement and Management Plan (HEMP) (M. Blane and Associates 1996) and associated Memorandum of Understanding and Implementation Agreement for the Cajon Creek Habitat Management Area (MOU) (CalMat Co. 1996). According to the Service's GIS data based on information provided by Vulcan Materials, the footprint of the Cajon Creek HCMA is approximately 1,271 ac (514 ha). Thus, we are proposing to exclude these 1,271 ac (514 ha) from the final revised critical habitat designation based on benefits provided by the HEMP and MOU (see Exclusions Under Section 4(b)(2) of the Act for a detailed discussion). We may consider excluding the remaining 107 ac (43 ha) if we receive additional information during the public comment period that leads to a determination that the benefits of exclusion would outweigh the benefits of including these lands in our revised critical habitat designation.

In 2003, the Service issued a biological opinion for the Lytle Creek North Master Planned Community, which falls within the boundary of existing San Bernardino kangaroo rat habitat (Service 2003a, FW-SB-1640.11). The project includes an approximately 677 ac (274 ha) master planned community with over 2,400 residential units. Construction activities are proposed to be phased over an estimated 5 to 10 years.

As an off-site measure for this project, the Lytle Creek Development Company will dedicate approximately 213 ac (86 ha) of largely undeveloped habitat within Lytle Creek (within proposed Unit 2) as a conservation area for the San Bernardino kangaroo rat. Forty acres (16 ha) of this lies within the floodplain and will be managed for the San Bernardino kangaroo rat in perpetuity (Service 2003a, p. 42). However, to date, no conservation easements or endowments have been secured for the lands proposed as conservation areas, and a long-term management plan has not yet been completed. Therefore, we are not proposing to exclude from the final revised designation the 213 ac (86 ha) of conservation land that will be established as a result of this project. However, we may consider excluding these conservation lands from the final designation (under section 4(b)(2) of the Act) if we receive a finalized management plan that benefits this subspecies by the end of the public comment period.

On June 15, 1999, we issued our biological opinion on the construction and extension of the north levee at Sunwest Materials' (now CEMEX) Lytle

Creek Quarry (Service 1999, 1-6-99-F-42). The armored, engineered levee (over 10,000 feet (3,048 meters) in length) protects mining operations from flooding and replaces a shorter, earthen embankment (Service 1999, p. 3). As a conservation measure for this project, Sunwest Materials delivered to the California Department of Fish and Game a conservation easement deed to approximately 26 ac (11 ha) delineated as Conservation Area 1 to protect biological resources in perpetuity (Service 1999, p. 7). In addition, Sunwest Materials is to record a biological resource deed restriction on approximately 12 ac (5 ha) of land to permanently preclude activities that would interfere with habitat value (Service 1999, p. 8). However, since a management plan benefiting the San Bernardino kangaroo rat has not yet been developed for these lands we are not proposing to exclude these 38 ac (16 ha) from the final revised critical habitat designation. We may consider excluding these conservation lands from the final designation (under section 4(b)(2) of the Act) if we receive a finalized management plan that benefits this subspecies by the end of the public comment period.

#### *Unit 3: San Jacinto River Wash*

Unit 3 encompasses approximately 769 ac (311 ha) in Riverside County and includes areas along the San Jacinto River in the vicinity of San Jacinto, Hemet, and Valle Vista. This unit, which represents the southern extent of the currently known distribution of the subspecies, encompasses the San Jacinto River wash from the Blackburn Road/Lake Hemet Main Canal area, downstream to the East Main Street Bridge. This unit includes all of the PCEs (PCEs 1, 2, and 3) essential to the conservation of the San Bernardino kangaroo rat, was occupied at the time of listing, and is currently occupied. Additionally, this unit contains one of only three extant populations of San Bernardino kangaroo rat and is the only population in Riverside County. Historically, the San Bernardino kangaroo rat has occurred along the San Jacinto River from the upper reach of habitat in the river downstream past State Route 79. In Bautista Creek, the subspecies has occurred upstream of the Bautista flood control basin until the topography of the canyon becomes too steep. The PCEs within this unit may require special management considerations or protection to minimize impacts associated with flood control operations, channelization, water conservation projects

(groundwater recharge ponds), off-road activity, and urban development.

Lands within Unit 3 are adjacent to lands of the Soboba Band of Luiseño Indians Reservation. We are not proposing these lands as critical habitat for the San Bernardino kangaroo rat (see Government-to-Government Relationship with Tribes section for a detailed discussion).

At the confluence of the San Jacinto River and Bautista Creek, the Eastern Municipal Water District (EMWD) will implement an integrated water recharge and recovery program that includes the construction of recharge basins and well sites. The Service issued a biological opinion for this project on November 16, 2006 (Service 2006, FWS-WRIV-4051.5). The project will impact approximately 35 ac (14 ha) of land within the floodplain and 2 ac (0.8 ha) of upland habitat (Service 2006, p. 21) adjacent to proposed revised critical habitat Unit 3. These impact areas, totaling approximately 37 ac (15 ha), are within the currently designated critical habitat but are not proposed as revised critical habitat because they have been addressed by the section 7 consultation and biological opinion, which found that the action did not adversely modify the currently designated critical habitat. However, the habitat will be permanently lost through the action, and to offset that loss of occupied habitat for the San Bernardino kangaroo rat, EMWD will protect and manage approximately 117 ac (47 ha) of land in three separate conservation areas along the San Jacinto River (Service 2006, p. 22). EMWD will preserve these lands in the form of a conservation easement and develop a management plan to be implemented in perpetuity to provide for the long-term conservation of the San Bernardino kangaroo rat (Service 2006, pp. 6-7). These conservation areas will combine with an existing parcel of conservation land (16 ac (6 ha)) set aside under a previous biological opinion of a seasonal storage and recovery project proposed by EMWD (Service 2000b, FWS-WRIV-1045.1). We may consider excluding any or all portions of these 133 ac (54 ha) of conservation lands addressed through these two section 7 consultations and issued biological opinions from the final revised designation (under section 4(b)(2) of the Act) if we receive finalized management plans that benefit this subspecies by the end of the public comment period.

All private lands proposed as revised critical habitat in the San Jacinto River wash fall within the boundaries of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). Therefore, we are proposing

to exclude private lands under the jurisdiction of permittees to the MSHCP and all lands owned and managed by permittees to the MSHCP within this area (263 ac (106 ha)) based on the benefits provided to the San Bernardino kangaroo rat by the Western Riverside County MSHCP (see Exclusions Under Section 4(b)(2) of the Act for a detailed discussion).

### Effects of Critical Habitat Designation

#### Section 7 Consultation

Section 7(a)(2) of the Act requires Federal agencies, including the Service, to ensure that actions they fund, authorize, or carry out are not likely to destroy or adversely modify critical habitat. In our regulations at 50 CFR 402.02, we define destruction or adverse modification as “a direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species. Such alterations include, but are not limited to, alterations adversely modifying any of those physical or biological features that were the basis for determining the habitat to be critical.” However, recent decisions by the 5th and 9th Circuit Court of Appeals have invalidated this definition (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, 442F (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. Pursuant to current national policy and the statutory provisions of the Act, destruction or adverse modification is determined on the basis of whether, with implementation of the proposed Federal action, the affected critical habitat would remain functional (or retain the current ability for the PCEs to be functionally established) to serve the intended conservation role for the species.

Section 7(a) of the Act requires Federal agencies, including the Service, to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened and with respect to its critical habitat, if any is proposed or designated. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402.

Section 7(a)(4) of the Act requires Federal agencies to confer with us on any action that is likely to jeopardize the continued existence of a proposed species or result in destruction or adverse modification of proposed critical habitat. This is a procedural

requirement only. However, once a proposed species becomes listed, or proposed critical habitat is designated as final, the full prohibitions of section 7(a)(2) apply to any Federal action. The primary utility of such conference procedures is to maximize the opportunity for a Federal agency to adequately consider proposed species and critical habitat and avoid potential delays in implementing their proposed action because of the section 7(a)(2) compliance process, should those species be listed or the critical habitat designated.

Under conference procedures, the Service may provide advisory conservation recommendations to assist the agency in eliminating conflicts that may be caused by the proposed action. The Service may conduct either informal or formal conferences. Informal conferences are typically used if the proposed action is not likely to have any adverse effects to the proposed species or proposed critical habitat. Formal conferences are typically used when the Federal agency or the Service believes the proposed action is likely to cause adverse effects to proposed species or critical habitat, inclusive of those that may cause jeopardy or adverse modification.

The results of an informal conference are typically transmitted in a conference report, while the results of a formal conference are typically transmitted in a conference opinion. Conference opinions on proposed critical habitat are typically prepared according to 50 CFR 402.14, as if the proposed critical habitat were designated. We may adopt the conference opinion as the biological opinion when the critical habitat is designated, if no substantial new information or changes in the action alter the content of the opinion (see 50 CFR 402.10(d)). As noted above, any conservation recommendations in a conference report or opinion are strictly advisory.

If a species is listed or critical habitat is designated, section 7(a)(2) of the Act requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of such a species or to destroy or adversely modify its critical habitat. 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. As a result of this consultation, compliance with the requirements of section 7(a)(2) will be documented through the Service's 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 are likely to adversely affect listed species or critical habitat.

When we issue a biological opinion concluding that a project is likely to result in jeopardy to a listed species or the destruction or adverse modification of critical habitat, we also provide reasonable and prudent alternatives to the project, if any are identifiable. “Reasonable and prudent alternatives” are defined at 50 CFR 402.02 as alternative actions identified during consultation that can be implemented in a manner consistent with the intended purpose of the action, that are consistent with the scope of the Federal agency's legal authority and jurisdiction, that are economically and technologically feasible, and that the Director believes would avoid jeopardy to the listed species or destruction or adverse modification of 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 reinitiate consultation on previously reviewed actions in instances where a new species is listed or critical habitat is subsequently designated that may be affected and the Federal agency has retained discretionary involvement or control over the action or such discretionary involvement or control is authorized by law. Consequently, some Federal agencies may request reinitiation of consultation with us on actions for which formal consultation has been completed, if those actions may affect subsequently listed species or designated critical habitat or adversely modify or destroy proposed critical habitat.

Federal activities that may affect the San Bernardino kangaroo rat or its designated critical habitat will require section 7 consultation under the Act. Activities on State, Tribal, local, or private lands requiring a Federal permit (such as a permit from the ACOE under section 404 of the Clean Water Act or a permit under section 10(a)(1)(B) of the Act from the Service) or involving some other Federal action (such as funding from the Federal Highway Administration, Federal Aviation Administration, or the Federal Emergency Management Agency) will also be subject to the section 7 consultation process. Federal actions not affecting listed species or critical habitat, and actions on State, Tribal, local, or private lands that are not

federally funded, authorized, or permitted, do not require section 7 consultations.

*Application of the Jeopardy and Adverse Modification Standards for Actions Involving Effects to the San Bernardino Kangaroo Rat and Its Critical Habitat*

**Jeopardy Standard**

The Service has applied an analytical framework for San Bernardino kangaroo rat jeopardy analyses, which relies heavily on the importance of core area populations to the survival and recovery of the subspecies. This section 7(a)(2) analysis is focused not only on these populations but also on the habitat conditions necessary to support them.

The jeopardy analysis usually expresses the survival and recovery needs of the San Bernardino kangaroo rat in a qualitative fashion without making distinctions between what is necessary for survival and what is necessary for recovery. Generally, if a proposed Federal action is incompatible with the viability of the affected core area population(s), inclusive of associated habitat conditions, a jeopardy finding is warranted because of the relationship of each core area population to the survival and recovery of the species as a whole.

**Adverse Modification Standard**

For the reasons described in the Director's December 9, 2004 memorandum, the key factor related to the adverse modification determination is whether, with implementation of the proposed Federal action, the affected critical habitat would remain functional (or retain the current ability for the PCEs to be functionally established) to serve its intended conservation role for the species. Generally, the conservation role of San Bernardino kangaroo rat critical habitat units is to support viable core area populations.

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

Activities that may destroy or adversely modify critical habitat are those that alter the PCEs to an extent that the conservation value of critical habitat for the San Bernardino kangaroo rat is appreciably reduced. Activities that, when carried out, funded, or

authorized by a Federal agency, may affect critical habitat and therefore should result in consultation for the San Bernardino kangaroo rat include, but are not limited to:

(1) Actions that would result in loss or fragmentation of suitable habitat. Such activities could include, but are not limited to: Urban and industrial development; sand and gravel mining; off-road activity; and, groundwater recharge operations. These activities could eliminate or reduce habitat necessary for the growth and reproduction of the San Bernardino kangaroo rat. Resulting fragmentation could isolate populations, increasing risk of stochastic extinction and decreasing movement between remaining patches of suitable habitat.

(2) Actions that would alter natural hydrological and geomorphological processes necessary to maintain alluvial sage scrub habitat. Such activities could include, but are not limited to: Channel alteration; flood control operations; and construction of flood control structures such as dams, levees, and detention basins. These activities could eliminate or reduce preferred habitat conditions for the growth and reproduction of the San Bernardino kangaroo rat. Periodic high flows and flood events provide sediment scour, sediment deposition, and thinning of vegetation which maintains alluvial sage scrub habitat.

(3) Actions that would appreciably decrease habitat value or quality through indirect and edge effects. Such activities could include, but are not limited to: Urban, industrial, and agricultural development; and construction of roads and railways. These activities could have indirect effects that reduce preferred habitat conditions and could lead to increases in human activity, increased light levels during nighttime foraging, increased predation by domestic and feral animals associated with residential development, invasion of exotic plants, and otherwise eliminate or reduce preferred habitat conditions for the San Bernardino kangaroo rat. Measures to minimize the impacts of these activities to the species and its habitat could include the installation of fencing to decrease predation by domestic and feral animals, placement of lighting structures (e.g. street lights) such that the light is directed away from habitat, and the installation of best management practices to reduce the amount of water entering habitat due to sheet flow.

We consider all of the units proposed as revised critical habitat, as well as those that have been proposed for exclusion, to be within the geographical range of the subspecies occupied at the

time of listing, and to contain features essential to the conservation of the San Bernardino kangaroo rat. Federal agencies already consult with us on activities in areas currently occupied by the San Bernardino kangaroo rat, or if the subspecies may be affected by the action, to ensure that their actions do not jeopardize the continued existence of the San Bernardino kangaroo rat.

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

Section 4(b)(2) of the Act states that critical habitat shall be designated, and revised, 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 legislative history is clear that the Secretary is afforded 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, in considering whether to exclude a particular area from the designation, we must identify the benefits of including the area in the designation, identify the benefits of excluding the area from the designation, and determine whether the benefits of exclusion outweigh the benefits of inclusion. If an exclusion is contemplated, then we must determine whether excluding the area would result in the extinction of the species. In the following sections, we address a number of general issues that are relevant to the exclusions we have considered. In addition, the Service is conducting an economic analysis of the impacts of the proposed revised critical habitat designation and related factors, which will be available for public review and comment. Based on public comment on that document, the proposed revised designation itself, and the information in the final economic analysis, additional areas beyond those identified in this assessment may be excluded from critical habitat by the Secretary under the provisions of section 4(b)(2) of the Act. This is provided for in the Act and in our implementing regulations at 50 CFR 424.19.

### *Benefits of Designating Critical Habitat*

#### **Educational Benefits**

A benefit of including lands in critical habitat is that the designation of critical habitat serves to educate landowners, State and local governments, and the public regarding the potential conservation value of an area. This helps focus and promote conservation efforts by other parties by clearly delineating areas of high conservation value for the San Bernardino kangaroo rat. In general, the educational benefit of a critical habitat designation always exists, although in some cases it may be redundant with other educational effects. For example, HCPs have significant public input and may largely duplicate the educational benefit of a critical habitat designation. This benefit is closely related to a second, more indirect benefit: that designation of critical habitat would inform State agencies and local governments about areas that could be conserved under State laws or local ordinances.

However, we believe that there would be little additional informational benefit gained from the designation of critical habitat for the exclusions we are proposing in this rule because these areas are included in this proposed rule as having habitat containing the features essential to the conservation of the subspecies. Consequently, we believe that the informational benefits are already provided, even though these areas may not be designated as critical habitat. Additionally, the purpose normally served by the designation, that of informing State agencies and local governments about areas that would benefit from protection and enhancement of habitat for the San Bernardino kangaroo rat, is already well established among State and local governments, and Federal agencies in those areas that we are proposing to exclude from revised critical habitat in this rule on the basis of other existing habitat management protections.

The information provided in this section applies to all the discussions below that discuss the benefits of inclusion and exclusion of critical habitat.

#### **Recovery Benefits**

The process of designating critical habitat as described in the Act requires that the Service identify those lands on which are found the physical or biological features essential to the conservation of the species which may require special management considerations or protection. In identifying those lands, the Service must consider the recovery needs of the

species, such that the habitat that is identified, if managed, could provide for the survival and recovery of the species. Furthermore, once critical habitat has been designated, Federal agencies must consult with the Service under section 7(a)(2) of the Act to ensure that their actions will not adversely modify designated critical habitat or jeopardize the continued existence of the species. As noted in the Ninth Circuit's *Gifford Pinchot* decision, the Court ruled that the jeopardy and adverse modification standards are distinct, and that adverse modification evaluations require consideration of impacts to the recovery of species. Thus, through the section 7(a)(2) consultation process, critical habitat designations provide recovery benefits to species by ensuring that Federal actions will not destroy or adversely modify designated critical habitat.

The identification of those lands which are necessary for the conservation of the species and can, if managed, provide for the recovery of a species is beneficial. The process of proposing and finalizing a critical habitat rule provides the Service with the opportunity to determine lands essential for conservation as well as identify the primary constituent elements or features essential for conservation on those lands. The designation process includes peer review and public comment on the identified features and lands. This process is valuable to land owners and managers in developing conservation management plans for identified lands, as well as any other occupied habitat or suitable habitat that may not have been included in the Service's determination of essential habitat.

However, the designation of critical habitat does not require that any management or recovery actions take place on the lands included in the designation. Even in cases where consultation has been initiated under section 7(a)(2) of the Act, the end result of consultation is to avoid jeopardy to the species and/or adverse modification of its critical habitat, but not per se to manage remaining lands or institute recovery actions on remaining lands. Conversely, management plans institute proactive actions over the lands they encompass and are put in place to remove or reduce known threats to a species or its habitat and therefore implement recovery actions. We believe that the conservation of a species and/or its habitat that could be achieved through the designation of critical habitat, in some cases, is less than the conservation that could be achieved through the implementation of a

management plan, which includes species specific provisions and considers enhancement or recovery of listed species as the management standard over the same lands. Consequently, implementation of any HCP or management plan that considers enhancement or recovery as the management standard will often provide as much or more benefit than a consultation for critical habitat designation conducted under the standards required by the Ninth Circuit in the *Gifford Pinchot* decision.

The information provided in this section applies to all the discussions below that discuss the benefits of inclusion and exclusion of critical habitat.

#### **Conservation Partnerships on Non-Federal Lands**

Most federally listed species in the United States will not recover without the cooperation of non-Federal landowners. More than 60 percent of the United States is privately owned (National Wilderness Institute 1995), and at least 80 percent of endangered or threatened species occur either partially or solely on private lands (Crouse *et al.* 2002). Stein *et al.* (1995) found that only about 12 percent of listed species were found almost exclusively on Federal lands (90 to 100 percent of their known occurrences restricted to Federal lands) and that 50 percent of federally listed species are not known to occur on Federal lands at all.

Given the distribution of listed species with respect to land ownership, conservation of listed species in many parts of the United States is dependent upon working partnerships with a wide variety of entities and the voluntary cooperation of many non-Federal landowners (Wilcove and Chen 1998; Crouse *et al.* 2002; James 2002). Building partnerships and promoting voluntary cooperation of landowners is essential to understanding the status of species on non-Federal lands and is necessary to implement recovery actions such as reintroducing listed species, habitat restoration, and habitat protection.

Many non-Federal landowners derive satisfaction in contributing to endangered species recovery. The Service promotes these private-sector efforts through the Department of the Interior's Cooperative Conservation philosophy. Conservation agreements with non-Federal landowners (HCPs, safe harbor agreements, other conservation agreements, easements, and State and local regulations) enhance species conservation by extending species protections beyond those

available through section 7 consultations. In the past decade, we have encouraged non-Federal landowners to enter into conservation agreements, based on a view that we can achieve greater species conservation on non-Federal land through such partnerships than we can through regulatory methods (61 FR 63854; December 2, 1996).

Many private landowners, however, are wary of the possible consequences of encouraging endangered species to their property, and there is mounting evidence that some regulatory actions by the Federal government, while well-intentioned and required by law, can (under certain circumstances) have unintended negative consequences for the conservation of species on private lands (Wilcove *et al.* 1996; Bean 2002; Conner and Mathews 2002; James 2002; Koch 2002; Brook *et al.* 2003). Many landowners fear a decline in their property value due to real or perceived restrictions on land-use options where threatened or endangered species are found. Consequently, harboring endangered species is viewed by many landowners as a liability, resulting in anti-conservation incentives because maintaining habitats that harbor endangered species represents a risk to future economic opportunities (Main *et al.* 1999; Brook *et al.* 2003). According to some researchers, the designation of critical habitat on private lands significantly reduces the likelihood that landowners will support and carry out conservation actions (Main *et al.* 1999, Bean 2002, Brook *et al.* 2003). The magnitude of this negative outcome is greatly amplified in situations where active management measures (such as reintroduction, fire management, and control of invasive species) are necessary for species conservation (Bean 2002). The Service believes that the judicious use of excluding specific areas of non-federally owned lands from critical habitat designations can contribute to species recovery and provide a superior level of conservation than critical habitat alone.

The purpose of designating critical habitat is to contribute to the conservation of threatened and endangered species and the ecosystems upon which they depend. The outcome of the designation, triggering regulatory requirements for actions funded, authorized, or carried out by Federal agencies under section 7 of the Act, can sometimes be counterproductive to its intended purpose on non-Federal lands. Thus the benefits of excluding areas that are covered by partnerships or voluntary conservation efforts can often be high.

### **General Principles of Section 7 Consultations Used in the 4(b)(2) Balancing Process**

The most direct, and potentially largest, regulatory benefit of critical habitat is that federally authorized, funded, or carried out activities require consultation under section 7(a)(2) of the Act to ensure that they are not likely to destroy or adversely modify critical habitat. There are two limitations to this regulatory effect. First, it only applies where there is a Federal nexus—if there is no Federal nexus, designation itself does not restrict actions that destroy or adversely modify critical habitat. Second, it only limits destruction or adverse modification. By its nature, the prohibition on adverse modification is designed to ensure those areas that contain the physical and biological features essential to the conservation of the species or unoccupied areas that are essential to the conservation of the species are not eroded. Critical habitat designation alone, however, does not require specific steps toward recovery.

Once consultation under section 7(a)(2) of the Act is triggered, the process may conclude informally when the Service concurs in writing that the proposed Federal action is not likely to adversely affect the listed species or its critical habitat. However, if the Service determines through informal consultation that adverse impacts are likely to occur, then formal consultation would be initiated. Formal consultation concludes with a biological opinion issued by the Service on whether the proposed Federal action is likely to jeopardize the continued existence of a listed species or result in destruction or adverse modification of critical habitat, with separate analyses being made under both the jeopardy and the adverse modification standards. For critical habitat, a biological opinion that concludes in a determination of no destruction or adverse modification may contain discretionary conservation recommendations to minimize adverse effects to PCEs, but it would not contain any mandatory reasonable and prudent measures or terms and conditions. Mandatory measures and terms and conditions to implement such measures are only specified when the proposed action would result in the incidental take of a listed animal species. Reasonable and prudent alternatives to the proposed Federal action would only be suggested when the biological opinion results in a jeopardy or adverse modification conclusion.

We also note that for 30 years prior to the Ninth Circuit Court's decision in *Gifford Pinchot*, the Service conflated

the jeopardy standard with the standard for destruction or adverse modification of critical habitat when evaluating Federal actions that affect currently-occupied critical habitat. The Court ruled that the two standards are distinct and that adverse modification evaluations require consideration of impacts on the recovery of species. Thus, under the *Gifford Pinchot* decision, critical habitat designations may provide greater benefits to the recovery of a species. However, as discussed above, we believe the conservation achieved through implementing habitat conservation plans (HCPs) or other habitat management plans is typically greater than would be achieved through multiple site-by-site, project-by-project, section 7(a)(2) consultations involving consideration of critical habitat.

The information provided in this section applies to all the discussions below that discuss the benefits of inclusion and exclusion of critical habitat in that it provides the framework for the consultation process.

### *Benefits of Excluding Lands With HCPs or Other Approved Management Plans From Critical Habitat*

The benefits of excluding lands with HCPs or other approved management plans from critical habitat designation include relieving landowners, communities, and counties of any additional regulatory burden that might be imposed by a critical habitat designation. Most HCPs and other conservation plans take many years to develop and, upon completion, are consistent with the recovery objectives for listed species that are covered within the plan area. Many conservation plans also provide conservation benefits to unlisted sensitive species. Imposing an additional regulatory review as a result of the designation of critical habitat may undermine these conservation efforts and partnerships designed to proactively protect species to ensure that listing under the Act will not be necessary. Designation of critical habitat within the boundaries of management plans that provide conservation measures for a species could be viewed as a disincentive to those entities currently developing these plans or contemplating them in the future, because one of the incentives for undertaking conservation is greater ease of permitting where listed species are affected. Addition of a new regulatory requirement would remove a significant incentive for undertaking the time and expense of management planning. In fact, designating critical habitat in areas covered by a pending HCP or



conservation plan could result in the loss of some species' benefits if participants abandon the planning process, in part because of the strength of the perceived additional regulatory compliance that such designation would entail. The time and cost of regulatory compliance for a critical habitat designation do not have to be quantified for them to be perceived as additional Federal regulatory burden sufficient to discourage continued participation in plans targeting listed species' conservation.

A related benefit of excluding lands within management plans from critical habitat designation is the unhindered, continued ability to seek new partnerships with future plan participants including States, counties, local jurisdictions, conservation organizations, and private landowners, which together can implement conservation actions that we would be unable to accomplish otherwise. If lands within approved management plan areas are designated as critical habitat, it would likely have a negative effect on our ability to establish new partnerships to develop these plans, particularly plans that address landscape-level conservation of species and habitats. By preemptively excluding these lands, we preserve our current partnerships and encourage additional conservation actions in the future.

Furthermore, an HCP or Natural Community Conservation Planning (NCCP) HCP application must itself be consulted upon. Such a consultation would review the effects of all activities covered by the HCP which might adversely impact the species under a jeopardy standard, including possibly significant habitat modification (see definition of "harm" at 50 CFR 17.3), even without the critical habitat designation. In addition, Federal actions not covered by the HCP in areas occupied by listed species would still require consultation under section 7(a)(2) of the Act and would be reviewed for possibly significant habitat modification in accordance with the definition of harm referenced above.

The information provided in this section applies to all the discussions below that discuss the benefits of inclusion and exclusion of critical habitat.

#### *Exclusions Under Section 4(b)(2) of the Act*

After consideration under section 4(b)(2) of the Act, we are proposing to exclude the following areas of habitat from final revised critical habitat for the San Bernardino kangaroo rat: lands covered under the Woolly-Star Preserve

Area Management Plans; the Former Norton Air Force Base CMP; the Cajon Creek Habitat Conservation Management Area HEMP; and Western Riverside MSHCP. We believe that these lands' value for conservation has been addressed by existing protective actions and are appropriate for exclusion under the provisions of section 4(b)(2). We specifically solicit comment, however, on the proposed exclusion of these areas. A detailed analysis of our exclusion of these lands under section 4(b)(2) of the Act is provided in the paragraphs that follow.

#### *Relationship of Critical Habitat to Habitat Conservation Plan Lands and Approved Management Plans — Exclusions Under Section 4(b)(2) of the Act*

We consider a current plan to provide adequate management or protection if it meets three criteria: (1) The plan is complete and provides the same or better level of protection from adverse modification or destruction than that provided through a consultation under section 7(a)(2) of the Act; (2) there is a reasonable expectation that the conservation management strategies and actions will be implemented based on past practices, written guidance, or regulations; and (3) the plan provides conservation strategies and measures consistent with currently accepted principles of conservation biology. We believe that the plans described below fulfill these criteria, and we are considering the exclusion of non-federal lands covered by these plans that provide for the conservation of the San Bernardino kangaroo rat. We are requesting comments on the benefit to the San Bernardino kangaroo rat from conservation measures established by the following plans: the Woolly-Star Preserve Area Management Plans; the Former Norton Air Force Base CMP; the Cajon Creek Habitat Conservation Management Area HEMP; and the Western Riverside MSHCP.

#### **Woolly-Star Preserve Area Management Plans**

Approximately 742 ac (300 ha) of the 765 ac (310 ha) Woolly-star Preserve Area (WSPA) is within critical habitat Unit 1. The WSPA is within the 100 to 500-year floodplain of the upper Santa Ana River immediately downstream from the Seven Oaks Dam. The WSPA was established in 1988 by the Army Corps of Engineers (ACOE) as part of the conservation measures developed during consultation to address impacts to the federally endangered *Eriastrum densifolium* ssp. *sanctorum* (Santa Ana River woolly-star) as a result of

construction of the Seven Oaks Dam (Service File: 1-6-88-F-6, June 22, 1989).

A management plan for *Eriastrum densifolium* ssp. *sanctorum* (which requires alluvial scrub habitat similar to that preferred by the San Bernardino kangaroo rat) was prepared in coordination with the Service and California Department of Fish and Game (CDFG) (Chambers Group, Inc. 1993). The 1993 Management Plan for the Santa Ana River Woolly-Star was created to be implemented on the 765-ac (310-ha) WSPA (Chambers Group, Inc. 1993). This plant inhabits early and intermediate successional stages of alluvial fan scrub habitat, which are the preferred habitat areas for the San Bernardino kangaroo rat. The overall strategy for the management plan on WSPA lands is to avoid physical disturbances to alluvial habitat and to allow for disturbances by natural processes (Chambers Group, Inc. 1993, p. 3-1). The 1993 Management Plan for *E. d. ssp. sanctorum* includes a description of management tasks that benefit habitat for *E. d. ssp. sanctorum*. Though not addressed directly by the plan, these management tasks benefit the San Bernardino kangaroo rat as well. These management tasks include: identification and implementation of habitat renewal methods; control of exotic species; reduction of off-highway vehicle activity, trash dumping, and other negative human impacts; and a public awareness program (Chambers Group, Inc. 1993, p. 3-2). Lands within the WSPA were placed under a conservation easement that is jointly held by the local sponsors (i.e., the flood control districts of San Bernardino, Riverside and Orange counties) (Lovell 2007). Since the inception of the 1993 Management Plan for the Santa Ana River Woolly-Star, on-going biological studies have been conducted on the WSPA to increase understanding of *E. d. ssp. Sanctorum*.

The ACOE has committed to the development and implementation of a Multi-species Habitat Management Plan (MSHMP) for the WSPA that will update the 1993 plan and include habitat management for the San Bernardino kangaroo rat and the federally endangered slender-horned spinyflower (*Dodecahema leptoceras*) as part of the conservation measures they proposed during consultation regarding the effects of operation and maintenance of the dam on the *E. d. ssp. sanctorum*, *D. leptoceras*. The goals of the draft MSHMP specific to the San Bernardino kangaroo rat include: (1) The maintenance and/or expansion of the current species distribution within the

WSPA; (2) optimization of habitat conditions; and, (3) maintenance and/or enhancement of populations of San Bernardino kangaroo rat within the WSPA. General objectives in support of the San Bernardino kangaroo rat management goals are to: (1) Monitor the San Bernardino kangaroo rat and relevant habitat elements according to standardized protocols; (2) conduct studies to fill gaps in knowledge related to species biology and habitat; (3) measure San Bernardino kangaroo rat response to experimental treatments and potential management measures; (4) establish priority of areas for implementation of habitat management to maintain and/or enhance suitability for the species; and (5) refine management measures over time using an adaptive management framework. Information gathered through the implementation of the MSHMP will be used to support science-based management decisions and evaluation of management success. Various potential management alternatives may be implemented such as protective management, disturbance control, nonnative grass control, habitat enhancement/restoration, and habitat renewal. The management of this area is anticipated to help to maintain and protect alluvial wash and upland habitat (PCEs 1, 2, and 3) required by the San Bernardino kangaroo rat. This MSHMP is currently in draft form and will replace the 1993 management plan. The MSHMP will be reviewed by the resource agencies for their concurrence prior to implementation (Service 2002b, p. 8). The ACOE is responsible for the development and implementation of the MSHMP.

Protocol surveys (live-trapping) conducted during 2005 and 2006 confirm that portions of the WSPA are currently occupied by the San Bernardino kangaroo rat (Service unpublished GIS data), and habitat surveys suggest that much of this area is likely to support the San Bernardino kangaroo rat (MEC Analytical Systems, Inc. 2000, fig. 24). Ongoing surveys and habitat management to benefit the San Bernardino kangaroo rat are anticipated as part of the MSHCP currently in development. The Service is working with the ACOE and their biological consultants on baseline species surveys, trials of habitat manipulations and management practices followed by trapping surveys to show both density and distribution of the San Bernardino kangaroo rat within the WSPA. These actions are being undertaken as part of the development of a final MSHMP.

The 1998 final listing rule for the San Bernardino kangaroo rat identified

habitat loss, destruction, degradation, and fragmentation due to sand and gravel mining operations, flood control projects, and urban development as primary threats to the San Bernardino kangaroo rat. As described above, the WSPA Management Plans provide enhancement of the habitat by removing or reducing threats to this subspecies and the PCEs. The WSPA Management Plans preserve habitat that supports identified core populations of this subspecies and therefore provide for recovery.

#### *Benefits of Inclusion*

We believe there would be minimal benefit in retaining this area as critical habitat for the San Bernardino kangaroo rat in the Woolly-Star Preserve Area within Unit 1 because this habitat within the Santa Ana River wash is already conserved and is being managed for the benefit of the species as explained above.

The primary benefit of including an area within a critical habitat designation is the protection provided by section 7(a)(2) of the Act which directs Federal agencies to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of a threatened or endangered species, and do not result in the destruction or adverse modification of critical habitat. However, the inclusion of these 742 ac (300 ha) WSPA lands in the revised critical habitat designation for the San Bernardino kangaroo rat would be unlikely to provide any additional protection for the species since the protection provided would be a limitation on the adverse effects that occur, as opposed to a requirement to provide a conservation benefit. The conservation measures for the San Bernardino kangaroo rat included in the WSPA Management Plans are affirmative obligations that provide a conservation benefit to the subspecies. We anticipate that these conservation measures will exceed any conservation value provided as a result of regulatory protections that have been or may be afforded through critical habitat designation.

Another potential benefit of critical habitat would be to signal the importance of these lands to Federal agencies, scientific organizations, State and local governments, and the public to encourage conservation efforts to benefit the San Bernardino kangaroo rat and its habitat. However, by publication of this proposed rule, we are educating the public of the location of core populations and areas most important for the recovery of this subspecies. Furthermore, as discussed above, the

importance of protecting the biological resource values of these lands, including the San Bernardino kangaroo rat, has already been clearly and effectively communicated to Federal, State, and local agencies and other interested organizations and members of the public through the current critical habitat designation, this proposed rule, and the WSPA Management Plans' approval and implementation process.

In short, we expect the Woolly-Star Preserve Area Management Plans to provide protection to and management of the San Bernardino kangaroo rat and its PCEs within areas considered essential for conservation of the subspecies on WSPA lands in the Santa Ana River wash area. We expect the WSPA Management Plans to provide a greater level of conservation for the San Bernardino kangaroo rat on lands in this area than retaining the lands as critical habitat.

#### *Benefits of Exclusion*

In contrast to section 7(a)(2) of the Act, the WSPA Management Plans commit the local sponsors of the WSPA to manage these lands for the benefit of the San Bernardino kangaroo rat and other covered species. These commitments go well beyond a simple requirement to avoid adverse modification of critical habitat; they involve conservation and management of land within Unit 1 located in the WSPA (Service 2004, p. 296). Excluding these 742 ac (300 ha) of lands from critical habitat designation would help strengthen partnerships and recognize the ACOE and local sponsors' commitment under the 1993 Management Plan for *Eriastrum densifolium* ssp. *sanctorum* and the MSHMP to manage WSPA lands for the San Bernardino kangaroo rat consistent with the conservation goals and objectives of these plans.

#### *Benefits of Exclusion Outweigh the Benefits of Inclusion*

We have reviewed and evaluated the proposed exclusion of approximately 742 ac (300 ha) of lands within the WSPA covered under the 1993 Management Plan for *Eriastrum densifolium* ssp. *sanctorum* and to be covered under the MSHMP. We have determined that the benefits of excluding these lands in Unit 1 outweigh the benefits of retaining these lands as critical habitat. The PCEs required by the San Bernardino kangaroo rat will benefit from the implementation of conservation measures outlined in these plans. In summary, these conservation measures include avoidance and minimization of

physical disturbances to alluvial habitat and allowance for disturbances by natural processes within the WSPA lands, which are under existing conservation easements that benefit the San Bernardino kangaroo rat. This will benefit the San Bernardino kangaroo rat by preserving soil, vegetation, and upland habitat (PCEs 1, 2, and 3) within the WSPA. Such specific conservation actions and management for the San Bernardino kangaroo rat and its PCEs exceed any conservation value provided as a result of regulatory protections that have been or may be afforded through critical habitat designation.

The exclusion of these lands from critical habitat would also help preserve the partnerships that we have developed with the local jurisdictions and project proponents during dedication of the WSPA and development of the management plans. The benefits of excluding these lands from revised critical habitat outweigh the minimal benefits of retaining these lands as critical habitat, including the educational benefits of critical habitat designation through informing the public of areas important for the long-term conservation of the San Bernardino kangaroo rat. Such educational benefits can still be accomplished through materials provided on our Web site. Further, many educational benefits will be achieved through this proposal's notice and public comment period, which will occur whether or not this particular area is designated.

#### *Exclusion Will Not Result in Extinction of the Subspecies*

We do not believe that the exclusion of 742 ac (300 ha) from the final revised designation of critical habitat for the San Bernardino kangaroo rat would result in the extinction of the subspecies because the WSPA Management Plans provide for the conservation of the subspecies and its PCEs on occupied areas in Unit 1 (Santa Ana River). The jeopardy standard of section 7 of the Act and routine implementation of conservation measures through the section 7 process also provide assurances that the subspecies will not go extinct. The protections afforded to the San Bernardino kangaroo rat under the jeopardy standard will remain in place for the areas proposed for exclusion from revised critical habitat.

#### *Former Norton Air Force Base Conservation Management Plan (CMP)*

The Norton Air Force Base was formally transferred to private ownership in 2003. Prior to closure, the U.S. Air Force completed installation remediation which included the closure

of an area known as "Landfill 2." In accordance with mitigation measures outlined in our November 26, 1996, biological opinion (1-6-96-F-10) on the closure of Landfill 2, the U.S. Air Force developed a management plan (the Former Norton Air Force Base Conservation Management Plan (CMP), completed in 2002) for approximately 268 ac (109 ha) of habitat occupied by the San Bernardino kangaroo rat in the Santa Ana River wash area (Unit 1). Approximately 54 ac (22 ha) in two parcels were designated Core Management Areas (CMA-1 and CMA-2), and 214 ac (87 ha) make up an Open Space Management Area (OSMA). Under the CMP completed in March 2002, these areas are managed specifically for the San Bernardino kangaroo rat and *E. d. ssp. sanctorum* (U.S. Air Force 2002, pp. 1-4).

CMA-1 (approximately 29 ac (12 ha)) and CMA-2 (approximately 25 ac (10 ha)) are located along the southern edge of the OSMA. CMA-1 includes both flood plain habitat on the 'wet' side of an existing flood control levee and fenced upland habitat behind the levee along the northern edge of the Santa Ana River. CMA-2 is located entirely within the Santa Ana River floodplain. Approximately 13 ac (5 ha) of CMA-2 are owned by the Inland Valley Development Agency (IVDA) and the remainder of the CMA lands and the OSMA are owned by the San Bernardino International Airport (SBIA) Authority. These areas provide important upland habitat that supports individual San Bernardino kangaroo rats necessary to re-populate the active floodplain following large-scale floods that scour out lower-elevation terrace habitat adjacent to the active river channel (Service 2003b, p. 18) (PCE 3). Lands within these CMAs are to be permanently protected by conservation easements (U.S. Air Force 2002). The CMAs are adjacent to the approximately 214-ac (87 ha) OSMA that surrounds the existing runway of the SBIA.

The OSMA is an aircraft over-run area and is managed in accordance to Federal Aviation Administration (FAA) guidelines for such lands. However, the SBIA Authority manages the OSMA in such a way as to minimize adverse impacts to the San Bernardino kangaroo rat as described in the CMP and the biological opinion for formal consultation on base closure (FWS-SB-1723.10, August 5, 2003). The 214 ac (87 ha) OSMA is in the immediate vicinity of the eastern runway, and safety regulations require that most of this land remain undeveloped (U.S. Air Force 2002, p. 5-5). The OSMA is protected from flooding by levees, but

routine mowing required by the Federal Aviation Administration (FAA) keeps vegetation from becoming dense and senescent, which creates open habitat that may be suitable for San Bernardino kangaroo rats (Service 2003b, p. 17). No discing or other ground disturbance is allowed within the OSMA area and implementation of the prescribed mowing regime with the equipment currently used is unlikely to result in crushing of San Bernardino kangaroo rat burrows (Service 2003b, p. 18).

Upon closure of the Former Norton Air Force Base in 2003, the SBIA Authority and the Inland Valley Development Agency assumed responsibility for the management of the CMAs pursuant to the CMP (Service 2003b, p. 6). Management practices currently conducted on SBIA and IVDA property are described in the CMP and include: (1) Subspecies monitoring every 2 to 3 years following the Service-approved protocol; (2) vegetation surveys and adaptive control of invasive weedy plants; (3) trash removal; and (4) installation of protective signage and maintenance of barriers to reduce and prevent trespassing (U.S. Air Force 2002, pp. 5-11). In accordance with the CMP, the SBIA Authority provides us with annual reports regarding the status of the CMP and OSMA (documents on file in the CFWO). The SBIA Authority has routinely removed exotic or weedy plant species within the CMAs, controlled coyote access to fenced portions of CMA-1 and the OSMA which reduces predation on the San Bernardino kangaroo rat in these areas, removed all dumped trash as soon as possible in accordance with the CMP and FAA guidelines, and promptly addressed any trespass issues as needed (e.g., fences and signage repaired). Human activities incompatible with the purpose of the CMAs are restricted (U.S. Air Force 2002, pp. 5-12). These management actions and the eventual placement of a conservation easement on the CMA parcels are anticipated to ensure that habitat containing the PCEs for the San Bernardino kangaroo rat is conserved within the CMAs and the OSMA through the protection and management of alluvial washes and upland habitat (PCEs 1, 2, and 3) required by the subspecies.

The 1998 final listing rule for the San Bernardino kangaroo rat identified habitat loss, destruction, degradation, and fragmentation due to sand and gravel mining operations, flood control projects, and urban development as primary threats to the San Bernardino kangaroo rat. As described above, the Former Norton Air Force Base CMP provides enhancement of the habitat by

removing or reducing threats to this subspecies and the PCEs. The CMP preserves habitat that supports identified core populations of this subspecies and therefore provides for recovery.

#### *Benefits of Inclusion*

We believe there would be minimal benefit in retaining this area as critical habitat for the San Bernardino kangaroo rat on the 268 ac (109 ha) of critical habitat lands on the San Bernardino International Airport. These lands within Unit 1 (Santa Ana River) are already conserved and managed for the benefit of the subspecies as explained above. The primary benefit of including an area within a critical habitat designation is the protection provided by section 7(a)(2) of the Act, which directs Federal agencies to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of a threatened or endangered species, and do not result in the destruction or adverse modification of critical habitat. However, the inclusion of these 268 ac (109 ha) of CMA and OSMA lands in the revised critical habitat designation for the San Bernardino kangaroo rat would be unlikely to provide any additional protection for the species since the protection provided would be a limitation on the adverse effects that occur, as opposed to a requirement to provide a conservation benefit. The conservation measures for the San Bernardino kangaroo rat included in the Former Norton Air Force Base CMP are affirmative obligations that provide a conservation benefit to the species. We anticipate that these conservation measures will exceed any conservation value provided as a result of regulatory protections that have been or may be afforded through critical habitat designation.

Another potential benefit of critical habitat would be to signal the importance of these lands to Federal agencies, scientific organizations, State and local governments, and the public, as a means to encourage conservation efforts to benefit the San Bernardino kangaroo rat and its habitat. However, by publication of this proposed rule, we are educating the public of the location of core populations and areas most important for the recovery of this subspecies. Furthermore, as discussed above, the importance of protecting the biological resource values of these lands, including the San Bernardino kangaroo rat, has already been clearly and effectively communicated to Federal, State, and local agencies, as well as other interested organizations

and members of the public through the current designation, this proposed rule, and the CMP's approval and implementation process.

In short, we expect the Former Norton Air Force Base CMP to provide protection to and management of the San Bernardino kangaroo rat and its PCEs within areas considered essential for conservation of the subspecies on private lands in the Santa Ana River area. We expect the CMP to provide a greater level of conservation for the San Bernardino kangaroo rat on private lands in this area than retaining the lands as critical habitat.

#### *Benefits of Exclusion*

In contrast to section 7(a)(2) of the Act, the Former Norton Air Force Base CMP commits the owners of the land (currently the SBIA Authority) to manage 268 ac (109 ha) of land for the benefit of the San Bernardino kangaroo rat and other covered species. These commitments go well beyond a simple requirement to avoid adverse modification of critical habitat; they involve protection, management, and enhancement of the identified land within Unit 1. Excluding these 268 ac (109 ha) of lands from critical habitat designation would help strengthen partnerships and recognize the former Norton Air Force Base and SBIA Authority's commitment under the CMP to manage CMA and OSMA lands consistent with the conservation goals and objectives of the CMP as described above.

#### *Benefits of Exclusion Outweigh the Benefits of Inclusion*

We have reviewed and evaluated the proposed exclusion of approximately 268 ac (109 ha) of lands within the Former Norton Air Force Base CMP area from the revised designation of critical habitat. We have determined that the benefits of excluding these lands in Unit 1 outweigh the benefits of retaining these lands as critical habitat. The PCEs required by the San Bernardino kangaroo rat will benefit from the implementation of conservation measures outlined in the CMP. In summary, these conservation measures include: the establishment of approximately 54 ac (23 ha) of CMA lands into a permanent conservation easement; San Bernardino kangaroo rat monitoring; control of invasive plant species; trash removal; installation of protective signage; and exclusion of harmful human activities within the CMAs. Additionally, conservation measures within the 214 ac (87 ha) OMSA include implementation of a mowing regime to thin vegetation and

prevention of soil disturbances. Such specific conservation actions and management for the San Bernardino kangaroo rat and its PCEs exceed any conservation value provided as a result of regulatory protections that have been or may be afforded through critical habitat designation.

The exclusion of these lands from critical habitat would also help preserve the partnerships that we have developed with the local jurisdictions and project proponents during the closure of Landfill 2 on Norton Air Force Base and development of the CMP. The benefits of excluding these lands from revised critical habitat outweigh the minimal benefits of retaining these lands as critical habitat, including the educational benefits of critical habitat designation through informing the public of areas important for the long-term conservation of the San Bernardino kangaroo rat. Such educational benefits can still be accomplished through materials provided on our Web site. Further, many educational benefits will be achieved through this proposal's notice and public comment period, which will occur whether or not this particular area is designated.

#### *Exclusion Will Not Result in Extinction of the Subspecies*

We do not believe that the exclusion of 268 ac (109 ha) from the final revised designation of critical habitat for the San Bernardino kangaroo rat would result in the extinction of the subspecies because the Former Norton Air Force Base CMP provides for the conservation of this subspecies and its PCEs on occupied areas in Unit 1 (Santa Ana River). The jeopardy standard of section 7 of the Act and routine implementation of conservation measures through the section 7 process also provide assurances that the subspecies will not go extinct. The protections afforded to the San Bernardino kangaroo rat under the jeopardy standard will remain in place for the areas proposed for exclusion from revised critical habitat.

#### *Cajon Creek Habitat Conservation Management Area, Habitat Enhancement and Management Plan (HEMP)*

The Cajon Creek Habitat Conservation Management Area (HCMA), managed by Vulcan Materials Company (formerly CalMat Co.), Western Division, was created in 1996 to offset approximately 2,270 ac (920 ha) of sand and gravel mining proposed within and adjacent to Cajon Creek. The HCMA includes approximately 1,378 ac (558 ha) of lands, which are managed to protect or restore alluvial scrub habitat within the

100-year flood plain to help conserve populations of 24 species associated with alluvial fan scrub including the San Bernardino kangaroo rat. Pioneer, intermediate, and mature phase alluvial scrub habitats can be found in the Cajon Creek HCMA, along with all three of the PCEs required by the San Bernardino kangaroo rat (M. Blane and Associates 1996, p. 11).

Of these HCMA lands, 768 ac (311 ha) were set aside to offset impacts from the proposed mining to alluvial fan sage scrub habitat and associated listed species including the San Bernardino kangaroo rat (Service 1998c, p. 2) and the 610-acre Cajon Creek Conservation Bank was established. These lands will be conserved and managed in perpetuity for alluvial fan scrub habitat and associated listed species (including the San Bernardino kangaroo rat) pursuant to the Habitat Enhancement and Management Plan (HEMP) completed in July 1996, and the associated Memorandum of Understanding and Implementation Agreement for the Cajon Creek Habitat Management Area (MOU) signed on October 21, 1996 (Service 1998c, p. 2). The lands set aside to off-set mining impacts were placed under a permanent conservation easement. The approximately 610 ac (245 ha) Cajon Creek Conservation Bank was placed under a 10-year conservation easement on February 16, 1998. The original intent of the Service, Corps and Vulcan Materials Company was to place those lands within the bank under permanent conservation easement once all credits had been sold. The MOU addressing the permanent conservation of the Cajon Creek Conservation Bank and the conservation easement were recently extended by Vulcan Materials until 2025 (Vulcan Materials Co. 2006, p. 1). More than half of the total credits available within the Cajon Creek Conservation Bank have been sold (M. Blane and Associates 2006, p. 5). Those credits not purchased by the end of the term will be available for purchase by the resource agencies (i.e., USFWS and CDFG).

The HEMP and MOU state that the Cajon Creek HCMA is made up of a 610-ac (245-ha) conservation bank and 768 ac (311 ha) of additional conservation lands, totaling 1,378 ac (558 ha) (M. Blane and Associates 1996, p. 3-4; CalMat Co. 1996, p. 5). However, according to our GIS data based on information provided by Vulcan Materials, the footprint of the Cajon Creek HCMA is approximately 1,271 ac (514 ha). We are proposing to exclude these 1,271 ac (514 ha) from the final revised critical habitat designation based on benefits provided through

conservation and management of these lands described in the HEMP and MOU. We may exclude the remaining 107 ac (43 ha) if we receive additional information during the public comment period on this proposal.

Habitat protection and enhancement measures are explained in the HEMP (M. Blane and Associates 1996, p. 21). Habitat protection measures are used to minimize unauthorized human intrusion and impacts associated with such intrusion (M. Blane and Associates 1996, p. 21). More specifically, protection measures involve restricted access to the Conservation Management Area to minimize off-road vehicle use, target shooting, trash dumping, and other activities that result in degradation of natural areas (M. Blane and Associates 1996, p. 25). Restrictive barriers and signage are placed along borders and near access points. Removal of unnecessary roads and subsequent revegetation of those roads will further discourage unauthorized access (M. Blane and Associates 1996, p. 28). Furthermore, trash existing on Conservation Management Area lands and adjacent lands within San Bernardino County Flood Control property will be removed as stated in the HEMP (M. Blane and Associates 1996, p. 28). Habitat enhancement measures are intended to restore the biological integrity of degraded alluvial scrub habitat and associated plant and animal species (including the San Bernardino kangaroo rat) within the Conservation Management Area and to protect it from further degradation (M. Blane and Associates 1996, p. 21). Specifically, habitat enhancement includes weed control involving removal of exotic plants on Conservation Management Area lands and adjacent lands and alluvial scrub revegetation activities as described in the HEMP (M. Blane and Associates 1996, p. 22). The above protection and enhancement measures ensure that alluvial fans, washes, and associated upland habitat (PCEs 1, 2, and 3) required by this subspecies are conserved.

The Cajon Creek HCMA has been and continues to be managed in accordance with the HEMP and MOU by Vulcan Materials Company, who provides us with an annual report of management activities within the HCMA. Plan implementation has resulted in revegetation of previously mined areas, trash removal and overall decrease in trash dumping, placement of signage and barriers in areas vulnerable to unauthorized access, and successful invasive weed eradication (M. Blane and Associates 2006, p. 12). The

continued implementation of the Cajon Creek HCMA HEMP will ensure the conservation of habitat for the San Bernardino kangaroo rat.

The 1998 final listing rule for the San Bernardino kangaroo rat identified habitat loss, destruction, degradation, and fragmentation due to sand and gravel mining operations, flood control projects, and urban development as primary threats to the San Bernardino kangaroo rat. As described above, the Cajon Creek Habitat Conservation Management Area HEMP provides enhancement of the habitat by removing or reducing threats to this subspecies and the PCEs. The HEMP preserves habitat that supports identified core populations of this subspecies and therefore provides for recovery.

#### *Benefits of Inclusion*

We believe there would be minimal benefit in retaining as critical habitat for the San Bernardino kangaroo rat lands within the 1,271 ac (514 ha) of the Cajon Creek HCMA, covered by the HEMP, in Unit 2 because this habitat within the Lytle/Cajon wash is already conserved and managed for the benefit of the subspecies as explained above.

The primary benefit of including an area within a critical habitat designation is the protection provided by section 7(a)(2) of the Act, which directs Federal agencies to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of a threatened or endangered species, and do not result in the destruction or adverse modification of critical habitat. However, the inclusion of 1,271 ac (514 ha) of Cajon Creek HCMA lands in the revised critical habitat designation for the San Bernardino kangaroo rat would be unlikely to provide any additional protection for the subspecies since the protection provided would be a limitation on the adverse effects that occur, as opposed to a requirement to provide a conservation benefit. The conservation measures for the San Bernardino kangaroo rat included in HEMP are affirmative obligations that provide a conservation benefit to the subspecies. We anticipate that these conservation measures will exceed any conservation value provided as a result of regulatory protections that have been or may be afforded through critical habitat designation.

Another potential benefit of critical habitat would be to signal the importance of these lands to Federal agencies, scientific organizations, State and local governments, and the public, as a means to encourage conservation efforts to benefit the San Bernardino

kangaroo rat and its habitat. However, by publication of this proposed rule, we are educating the public of the location of core populations and areas most important for the recovery of this subspecies. Furthermore, as discussed above, the importance of protecting the biological resource values of these lands, including the San Bernardino kangaroo rat, has already been clearly and effectively communicated to Federal, State, and local agencies, as well as other interested organizations and members of the public through the current designation, this proposed rule, and the HEMP's approval and implementation process.

In short, we expect the Cajon Creek HCMA HEMP to provide protection to and management of the San Bernardino kangaroo rat and its PCEs within areas considered essential for conservation of the subspecies on private lands in the Lytle/Cajon wash area. We expect the HEMP to provide a greater level of conservation for the San Bernardino kangaroo rat on private lands in this area than retaining these lands as critical habitat.

#### *Benefits of Exclusion*

In contrast to section 7(a)(2) of the Act, the Cajon Creek Habitat Conservation Management Area HEMP commits Vulcan Materials Co. to manage the Conservation Management Area lands for the benefit of alluvial scrub habitat, the San Bernardino kangaroo rat, and other covered species. These commitments go well beyond a simple requirement to avoid adverse modification of critical habitat; they include protection, management, and enhancement of land within Unit 2 located in the Conservation Management Area. Excluding these 1,271 ac (514 ha) of lands from critical habitat designation would help strengthen partnerships and recognize the Vulcan Materials Co. commitment under the HEMP to manage Conservation Management Area lands consistent with the conservation goals and objectives of the HEMP.

#### *Benefits of Exclusion Outweigh the Benefits of Inclusion*

We have reviewed and evaluated the proposed exclusion of approximately 1,271 ac (514 ha) of Cajon Creek HCMA lands, covered under the HEMP, from the revised designation of critical habitat. We have determined that the benefits of excluding these lands in Unit 2 outweigh the benefits of retaining these lands as critical habitat. The PCEs required by the San Bernardino kangaroo rat will benefit from the implementation of protection and

enhancement measures outlined in the HEMP. In summary, these measures include restricted access, restrictive barriers and signage, trash removal, weed control, and revegetation of unnecessary roads and previously mined areas. These specific conservation actions and management for the San Bernardino kangaroo rat and its PCEs exceed any conservation value provided as a result of regulatory protections that have been or may be afforded through critical habitat designation.

The exclusion of these lands from critical habitat would also help preserve the partnerships that we have developed with the local jurisdictions and project proponents during creation of the Cajon Creek HCMA and development of the HEMP. The benefits of excluding these lands from revised critical habitat outweigh the minimal benefits of retaining these lands as critical habitat, including the educational benefits of critical habitat designation through informing the public of areas important for the long-term conservation of the San Bernardino kangaroo rat. Such educational benefits can still be accomplished through materials provided on our Web site. Further, many educational benefits will be achieved through this proposal's notice and public comment period, which will occur whether or not this particular area is designated.

#### *Exclusion Will Not Result in Extinction of the Subspecies*

We do not believe that the exclusion of 1,271 ac (514 ha) from the final revised designation of critical habitat for the San Bernardino kangaroo rat would result in the extinction of the subspecies because the Cajon Creek Habitat Conservation Management Area HEMP provides for the conservation of the subspecies and its PCEs on occupied areas in Unit 2 (Lytle/Cajon wash). The jeopardy standard of section 7 of the Act and routine implementation of conservation measures through the section 7 process also provide assurances that the subspecies will not go extinct. The protections afforded to the San Bernardino kangaroo rat under the jeopardy standard will remain in place for the areas proposed for exclusion from revised critical habitat.

#### **Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP)**

The Western Riverside County MSHCP is a large-scale, multi-jurisdictional habitat conservation plan (HCP) encompassing 1.26-million ac (510,000 ha) in western Riverside

County. The MSHCP addresses 146 listed and unlisted "covered species," including the San Bernardino kangaroo rat. Participants in the MSHCP include 14 cities in western Riverside County; the County of Riverside, including the Riverside County Flood Control and Water Conservation Agency (County Flood Control), Riverside County Transportation Commission, Riverside County Parks and Open Space District, and Riverside County Waste Department; California Department of Parks and Recreation; and the California Department of Transportation (Caltrans). The MSHCP was designed to establish a multi-species conservation program that minimizes and mitigates the expected loss of habitat and the incidental take of covered species. On June 22, 2004, the Service issued a single incidental take permit (TE-088609-0) under section 10(a)(1)(B) of the Act to 22 permittees under the MSHCP for a period of 75 years.

The MSHCP will establish approximately 153,000 ac (61,916 ha) of new conservation lands (Additional Reserve Lands) to complement the approximately 347,000 ac (140,426 ha) of existing natural and open space areas designated by the MSHCP as Public/Quasi-Public (PQP) lands. PQP lands include those under Federal ownership, primarily the U.S. Forest Service and Bureau of Land Management, and also permittee-owned open-space areas (e.g., State Parks, County Flood Control, and County Park lands). Collectively, the Additional Reserve Lands and PQP lands form the overall MSHCP Conservation Area.

The precise configuration of the 153,000 ac (61,916 ha) of Additional Reserve Lands is not mapped or precisely identified in the MSHCP, but rather is based on textual descriptions within the bounds of a 310,000 ac (125,453 ha) Criteria Area that is interpreted as implementation of the MSHCP proceeds. The proposed critical habitat Unit 3 (San Jacinto River) for the San Bernardino kangaroo rat is located within the MSHCP Plan Area.

Specific conservation objectives in the MSHCP for the San Bernardino kangaroo rat include providing 4,400 ac (1,797 ha) of occupied or suitable habitat within the historic flood plains of the San Jacinto River and Bautista Creek and their tributaries in the MSHCP Conservation Area. This acreage goal can be provided through private lands within the Criteria Area that are targeted for inclusion within the MSHCP Conservation Area as potential Additional Reserve Lands and/or through coordinated management of PQP lands. Additionally, the MSHCP

requires surveys for the San Bernardino kangaroo rat as part of the project review process for public and private projects where suitable habitat is present within a defined mammal species survey area (see Mammal Species Survey Area Map, Figure 6–5 of the MSHCP, Volume I). For locations with positive survey results, 90 percent of those portions of the property that provide long-term conservation value for the species will be avoided until it is demonstrated that the conservation objectives for the species are met (Additional Survey Needs and Procedures; MSHCP Volume 1, section 6.3.2).

The survey requirements, avoidance and minimization measures, and management for the San Bernardino kangaroo rat (and its PCEs) provided for in the Western Riverside County MSHCP exceed any conservation value provided as a result of regulatory protections that have been or may be afforded through critical habitat designation. We propose to exclude approximately 263 ac (106 ha) of private and permittee-owned PQP lands from revised critical habitat designation (in Unit 3 within the MSHCP Plan Area) under section 4(b)(2) of the Act. The areas proposed for exclusion are in separate parcels in the San Jacinto River wash distributed between the Blackburn Road/Lake Hemet Main Canal area, downstream to the East Main Street Bridge. Lands within these excluded areas are owned by or fall within the jurisdiction of MSHCP permittees. Projects in these areas conducted or approved by MSHCP permittees are subject to the conservation requirements of the MSHCP, including the Additional Survey Needs and Procedures policy.

Lands within the MSHCP plan area owned by Eastern Municipal Water District and Lake Hemet Municipal Water District are not subject to the conservation requirements of the MSHCP through any discretionary authority of the permittees. Therefore, lands within proposed Unit 3 owned by these two water districts (506 ac (205 ha)) are not being proposed for exclusion from the final revised designation under the Western Riverside County MSHCP.

The 1998 final listing rule for the San Bernardino kangaroo rat identified habitat loss, destruction, degradation, and fragmentation due to sand and gravel mining operations, flood control projects, and urban development as primary threats to the San Bernardino kangaroo rat. As described above, the Western Riverside County MSHCP provides enhancement of the habitat by removing or reducing threats to this

subspecies and the PCEs. The MSHCP preserves habitat that supports identified core populations of this subspecies and therefore provides for recovery.

#### *Benefits of Inclusion*

We believe there would be minimal benefit in retaining critical habitat for the San Bernardino kangaroo rat on private and permittee-owned PQP lands in Unit 3 because habitat essential for this subspecies in the San Jacinto River area in Western Riverside County is within the area subject to conservation measures under the Western Riverside County MSHCP.

The primary benefit of including an area within a critical habitat designation is the protection provided by section 7(a)(2) of the Act, which directs Federal agencies to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of a threatened or endangered species, and do not result in the destruction or adverse modification of critical habitat. The inclusion of these 263 ac (106 ha) of private and permittee-owned PQP lands in the revised critical habitat designation for the San Bernardino kangaroo rat would be unlikely to provide any additional protection for the species since the protection provided would be a limitation on the adverse effects that occur as opposed to a requirement to provide a conservation benefit. Under the Western Riverside County MSHCP, known locations of San Bernardino kangaroo rat in the San Jacinto River area will be conserved through the survey requirements, and avoidance and minimization measures. The conservation measures for the San Bernardino kangaroo rat included in the MSHCP are affirmative obligations that will provide a conservation benefit to the species when implemented. Additionally, new occurrences documented through survey efforts that are subsequently determined to be important to the overall conservation of the subspecies may be included in the Additional Reserve Lands. We anticipate that these conservation measures will exceed any conservation value provided as a result of regulatory protections that have been or may be afforded through critical habitat designation.

Another potential benefit of critical habitat would be to signal the importance of these lands to Federal agencies, scientific organizations, State and local governments, and the public, as a means to encourage conservation efforts to benefit the San Bernardino kangaroo rat and its habitat. However,

by publication of this proposed rule, we are educating the public of the location of core populations and areas most important for the recovery of this subspecies. Furthermore, as discussed above, the importance of protecting the biological resource values of these lands, including the San Bernardino kangaroo rat, has already been clearly and effectively communicated to Federal, State, and local agencies, as well as other interested organizations and members of the public through the current designation, this proposed rule, and the Western Riverside County MSHCP's approval and implementation process.

In short, we expect the Western Riverside County MSHCP to provide protection to and management of the San Bernardino kangaroo rat and its PCEs within areas considered essential for conservation of the subspecies on private and permittee-owned PQP lands in the San Jacinto River area. We expect the MSHCP to provide a greater level of conservation for the San Bernardino kangaroo rat on private and permittee-owned PQP lands in this area than retaining these lands as critical habitat.

#### *Benefits of Exclusion*

In contrast to section 7(a)(2) of the Act, the Western Riverside County MSHCP commits the permittees to manage their own lands and direct development and other projects on private lands for which they have discretionary authority in western Riverside County, California, for the benefit of the San Bernardino kangaroo rat and other covered species. These commitments go well beyond a simple requirement to avoid adverse modification of critical habitat; they involve directing the conservation and management of land within Unit 3 in accordance with the species-specific objectives of the MSHCP for the San Bernardino kangaroo rat. Excluding these 263 ac (106 ha) of private and permittee-owned PQP lands, which are subject to the MSHCP, from revised critical habitat designation also provides incentive to the permittees to maintain and strengthen the partnerships created by their official participation in the MSHCP planning process, especially considering the high level of cooperation by the participants in the MSHCP to conserve this subspecies.

#### *Benefits of Exclusion Outweigh the Benefits of Inclusion*

We have reviewed and evaluated the proposed exclusion of approximately 263 ac (106 ha) of private and permittee-owned PQP lands within the MSHCP Plan Area from the revised designation



of critical habitat. We have determined that the benefits of excluding these lands from Unit 3 outweigh the benefits of retaining these lands as critical habitat. The PCEs required by the San Bernardino kangaroo rat will benefit by the conservation measures outlined in the MSHCP. In summary, these conservation measures include providing 4,440 ac (1,797 ha) of occupied or suitable habitat (as defined in the Western Riverside MSHCP) for the San Bernardino kangaroo rat within the MSHCP Conservation Area; ensuring at least 75 percent of the area included in the MSHCP Conservation Area is occupied and that 20 percent of the occupied habitat supports a medium or higher population density ( $\geq 5$  to 15 individuals per ha; McKernan 1997) of the subspecies measured across any 8-year period (the approximate length of the weather cycle); maintaining, or, if feasible, restoring ecological processes within the historic flood plain of the San Jacinto River and Bautista Creek, their tributaries, and other locations within the Criteria Area where the San Bernardino kangaroo rat is detected in the future; and conducting surveys and implementing other required procedures to ensure avoidance of impacts to at least 90 percent of suitable habitat areas determined important to the long-term conservation of the San Bernardino kangaroo rat within the Criteria Area (Service 2004, p. 297). These specific conservation actions, survey requirements, avoidance and minimization measures, and management for the San Bernardino kangaroo rat and its PCEs exceed any conservation value provided as a result of regulatory protections that have been or may be afforded through critical habitat designation.

The exclusion of these lands from critical habitat would also help preserve the partnerships that we have developed with the local jurisdictions and project proponents in the development of the MSHCP. The benefits of excluding these lands from revised critical habitat outweigh the minimal benefits of retaining these lands as critical habitat, including the educational benefits of critical habitat designation through informing the public of areas important for the long-term conservation of the San Bernardino kangaroo rat. Such educational benefits can still be accomplished through materials provided on our Web site. Further, many educational benefits will be achieved through this proposal's notice and public comment period, which will occur whether or not these particular areas are designated.

#### *Exclusion Will Not Result in Extinction of the Species*

We do not believe that the exclusion of 263 ac (106 ha) from the final revised designation of critical habitat for the San Bernardino kangaroo rat would result in the extinction of the subspecies because the Western Riverside County MSHCP provides for the conservation of this subspecies and its PCEs on occupied areas in Unit 3 (San Jacinto River), as well as areas discovered to be occupied by the San Bernardino kangaroo rat during surveys of suitable habitat within a defined-boundary, mammal-species survey area. Importantly, as we stated in our biological opinion, while some loss of modeled habitat for the San Bernardino kangaroo rat is anticipated due to implementation of the MSHCP, we concluded that implementation of the plan will not jeopardize the continued existence of this subspecies.

The jeopardy standard of section 7 and routine implementation of conservation measures through the section 7 process also provide assurances that the subspecies will not go extinct. The protections afforded to the San Bernardino kangaroo rat under the jeopardy standard will remain in place for the areas proposed for exclusion from revised critical habitat.

#### **Economics**

An analysis of the economic impacts of proposing revised critical habitat for the San Bernardino kangaroo rat is being prepared. We will announce the availability of the draft economic analysis as soon as it is completed, at which time we will seek public review and comment. At that time, copies of the draft economic analysis will be available for downloading from the Internet at <http://carlsbad.fws.gov> or by contacting the Carlsbad Fish and Wildlife Office directly (see **ADDRESSES** section).

#### **Peer Review**

In accordance with our joint policy 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 such review is to ensure that our revised critical habitat designation is based on scientifically sound data, assumptions, and analyses. We will send copies of this proposed rule to these peer reviewers immediately following publication in the **Federal Register**. We will invite these peer reviewers to comment during the public comment period on the specific

assumptions and conclusions regarding the proposed revised designation of critical habitat.

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

#### *Public Hearings*

The Act provides for one or more public hearings on this proposal, if requested. Requests for public hearings must be made in writing at least 15 days prior to the close of the public comment period. We will schedule public hearings on this proposal, if any are requested, and announce the dates, times, and places of those hearings in the **Federal Register** and local newspapers at least 15 days prior to the first hearing.

Persons needing reasonable accommodations to attend and participate in the public hearings should contact the Carlsbad Fish and Wildlife Office at 760-431-9440 as soon as possible. To allow sufficient time to process requests, please call no later than one week before the hearing date.

#### **Clarity of the Rule**

Executive Order 12866 (Regulatory Planning and Review) requires each agency to write regulations and notices that are easy to understand. We invite your comments on how to make this proposed rule easier to understand, including answers to questions such as the following: (1) Are the requirements in the proposed rule clearly stated? (2) Does the proposed rule contain technical jargon that interferes with the clarity? (3) Does the format of the proposed rule (grouping and order of the sections, use of headings, paragraphing, and so forth) aid or reduce its clarity? (4) Is the description of the notice in the **SUPPLEMENTARY INFORMATION** section of the preamble helpful in understanding the proposed rule? (5) What else could we do to make this proposed rule easier to understand?

Send a copy of any comments on how we could make this proposed rule easier to understand to: Office of Regulatory Affairs, Department of the Interior, Room 7229, 1849 C Street, NW., Washington, DC 20240. You may e-mail your comments to this address: [Exsec@ios.doi.gov](mailto:Exsec@ios.doi.gov).

#### **Required Determinations**

##### *Regulatory Planning and Review*

In accordance with Executive Order 12866, this document is a significant rule in that it may raise novel legal and

policy issues, but it is not anticipated to have an annual effect on the economy of \$100 million or more or affect the economy in a material way. Due to the tight timeline for publication in the **Federal Register**, the Office of Management and Budget (OMB) has not formally reviewed this rule. We are preparing a draft economic analysis of this proposed action, which will be available for public comment, to determine the economic consequences of designating the specific area as critical habitat. This economic analysis also will be used to determine compliance with Executive Order 12866, Regulatory Flexibility Act, Small Business Regulatory Enforcement Fairness Act, Executive Order 12630, Executive Order 13211, and Executive Order 12875.

Further, Executive Order 12866 directs Federal agencies promulgating regulations to evaluate regulatory alternatives (Office of Management and Budget, Circular A-4, September 17, 2003). Pursuant to Circular A-4, once it has been determined that the Federal regulatory action is appropriate, then the agency will need to consider alternative regulatory approaches. Since the determination of critical habitat is a statutory requirement under the Act, we must then evaluate alternative regulatory approaches, where feasible, when promulgating a designation of critical habitat.

In developing our designations of critical habitat, we consider economic impacts, impacts to national security, and other relevant impacts under section 4(b)(2) of the Act. Based on the discretion allowable under this provision, we may exclude any particular area from the designation of critical habitat providing that the benefits of such exclusion outweigh the benefits of specifying the area as critical habitat and that such exclusion would not result in the extinction of the subspecies. As such, we believe that the evaluation of the inclusion or exclusion of particular areas, or combination thereof, constitutes our regulatory alternative analysis.

Within these areas, the types of Federal actions or authorized activities that we have identified as potential concerns are listed above in the section on Section 7 Consultation. The availability of the draft economic analysis will be announced in the **Federal Register** and in local newspapers so that it is available for public review and comments. At that time, the draft economic analysis will be available from the internet Web site at <http://carlsbad.fws.gov> or by contacting

the Carlsbad Fish and Wildlife Office directly (see **ADDRESSES** section).

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

Under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*, as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996), whenever an agency is required to 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 Regulatory Flexibility Act (RFA) to require Federal agencies to provide a statement of the factual basis for certifying that the rule will not have a significant economic impact on a substantial number of small entities.

At this time, the Service lacks the available economic information necessary to provide an adequate factual basis for the required RFA finding. Therefore, the RFA finding is deferred until completion of the draft economic analysis prepared under section 4(b)(2) of the Act and Executive Order 12866. This draft economic analysis will provide the required factual basis for the RFA finding. Upon completion of the draft economic analysis, the Service will publish a notice of availability of the draft economic analysis of the proposed designation and reopen the public comment period for the proposed designation. The Service will include with the notice of availability, as appropriate, an initial regulatory flexibility analysis or a certification that the rule will not have a significant economic impact on a substantial number of small entities accompanied by the factual basis for that determination. The Service has concluded that deferring the RFA finding until completion of the draft economic analysis is necessary to meet the purposes and requirements of the RFA. Deferring the RFA finding in this manner will ensure that the Service makes a sufficiently informed determination based on adequate economic information and provides the necessary opportunity for public comment.

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

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501), the Service makes the following findings:

(a) 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; AFDC 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 on to State governments.

(b) We do not believe that this rule will significantly or uniquely affect small governments because the majority of the areas being proposed are under private and county ownership. None of these government entities fit the definition of "small governmental jurisdiction." As such, a Small Government Agency Plan is not required. However, we will further evaluate this issue as we conduct our economic analysis and review and revise this assessment as warranted.

#### *Executive Order 13211*

On May 18, 2001, the President issued an Executive Order (E.O. 13211; Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use) on regulations that significantly affect energy supply, distribution, and use. Executive Order 13211 requires agencies to prepare Statements of Energy Effects when undertaking certain actions. While this proposed rule to designate critical habitat for the San Bernardino kangaroo rat is a significant regulatory action under Executive Order 12866, it is not expected 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.

#### *Takings*

In accordance with Executive Order 12630 ("Government Actions and Interference with Constitutionally Protected Private Property Rights"), we have analyzed the potential takings implications of designating revised critical habitat for the San Bernardino kangaroo rat in a takings implications assessment. The takings implications assessment concludes that this revised designation of critical habitat for the San Bernardino kangaroo rat does not pose significant takings implications. However, we will further evaluate this issue as we conduct our economic analysis and review and revise this assessment as warranted.

#### *Federalism*

In accordance with Executive Order 13132 (Federalism), this rule does not have significant Federalism effects. A

Federalism assessment is not required. In keeping with Department of the Interior and Department of Commerce policy, we requested information from, and coordinated development of, this proposed revised critical habitat designation with appropriate State resource agencies in California. The designation may have some benefit to these governments in that the areas that contain the features essential to the conservation of the subspecies are more clearly defined, and the PCEs of the habitat necessary to the conservation of the subspecies are specifically identified. While making this definition and identification does not alter where and what federally sponsored activities may occur, it may assist these local governments in long-range planning (rather than waiting for case-by-case section 7 consultations to occur).

#### *Civil Justice Reform*

In accordance with Executive Order 12988 (Civil Justice Reform), the Office of the Solicitor has determined that this rule does not unduly burden the judicial system and meets the requirements of sections 3(a) and 3(b)(2) of the Order. We have proposed designating revised critical habitat in accordance with the provisions of the Act. This proposed rule uses standard property descriptions and identifies the PCEs within the designated areas to assist the public in understanding the habitat needs of the San Bernardino kangaroo rat.

#### *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. 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 (NEPA) (42 U.S.C. 4321 et seq.)*

It is our position that, outside the jurisdiction of the Tenth Federal Circuit, we do not need to prepare environmental analyses as defined by the NEPA 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 assertion was upheld by the Ninth Circuit Court of Appeals (*Douglas County v. Babbitt*, 48

F.3d 1495 (9th Cir. Ore. 1995), cert. denied 116 S. Ct. 698 (1996)).

#### *Government-to-Government Relationship With Tribes*

In accordance with the President's memorandum of April 29, 1994, "Government-to-Government Relations with Native American Tribal Governments" (59 FR 22951), Executive Order 13175, 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.

The current designation of critical habitat for the San Bernardino kangaroo rat includes 710 ac (290 ha) of land within the Soboba Band of Luiseño Indians Reservation. At the time of designation, we included these lands as essential to the conservation of the San Bernardino kangaroo rat because we believed that the area supported several populations and provided continuity between two adjacent areas of essential habitat. These lands are adjacent to known occupied areas that we are proposing as critical habitat within the San Jacinto wash (Unit 3). However, given the lack of subspecies' location and habitat information on Soboba Band of Luiseño Indians Reservation lands available at the time of the drafting of this proposed rule, we were unable to thoroughly assess either the status of the subspecies on those lands or the management practices currently employed by the Tribe. Though we continue to believe these Tribal lands are likely occupied, at least in part, by the San Bernardino kangaroo rat, due to the continuity of these lands with known occupied habitat, we do not know whether these lands contain the features that are essential to the conservation of the subspecies. As a result, and in light of Secretarial Order 3206, we are not including these Tribal lands in the area proposed as revised critical habitat for the San Bernardino kangaroo rat. We are committed to maintaining a positive working relationship with the Tribes and will continue our attempts to work with them on conservation measures

benefiting the San Bernardino kangaroo rat.

#### References Cited

A complete list of all references cited in this rulemaking is available upon request from the Field Supervisor, Carlsbad Fish and Wildlife Office (see **ADDRESSES** section).

#### Author(s)

The primary author of this package is the Carlsbad Fish and Wildlife 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—[AMENDED]

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

**Authority:** 16 U.S.C. 1361–1407; 16 U.S.C. 1531–1544; 16 U.S.C. 4201–4245; Pub. L. 99–625, 100 Stat. 3500; unless otherwise noted.

2. In § 17.95(a), revise the entry for “San Bernardino Kangaroo Rat (*Dipodomys merriami parvus*)” to read as follows:

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

(a) *Mammals.*

\* \* \* \* \*

San Bernardino Kangaroo Rat  
(*Dipodomys merriami parvus*)

(1) Critical habitat units are depicted for San Bernardino and Riverside counties, California, on the maps below.

(2) The PCEs of critical habitat for the San Bernardino kangaroo rat are the habitat components that provide:

(i) Alluvial fans, washes, and associated floodplain areas containing soils consisting predominately of sand, loamy sand, sandy loam, and loam, which provide burrowing habitat necessary for sheltering and rearing offspring, storing food in surface caches, and movement between occupied patches;

(ii) Upland areas adjacent to alluvial fans, washes, and associated floodplain areas containing alluvial sage scrub habitat and associated vegetation, such as coastal sage scrub and chamise chaparral, with up to approximately 50 percent canopy cover providing

protection from predators, while leaving bare ground and open areas necessary for foraging and movement of this subspecies; and

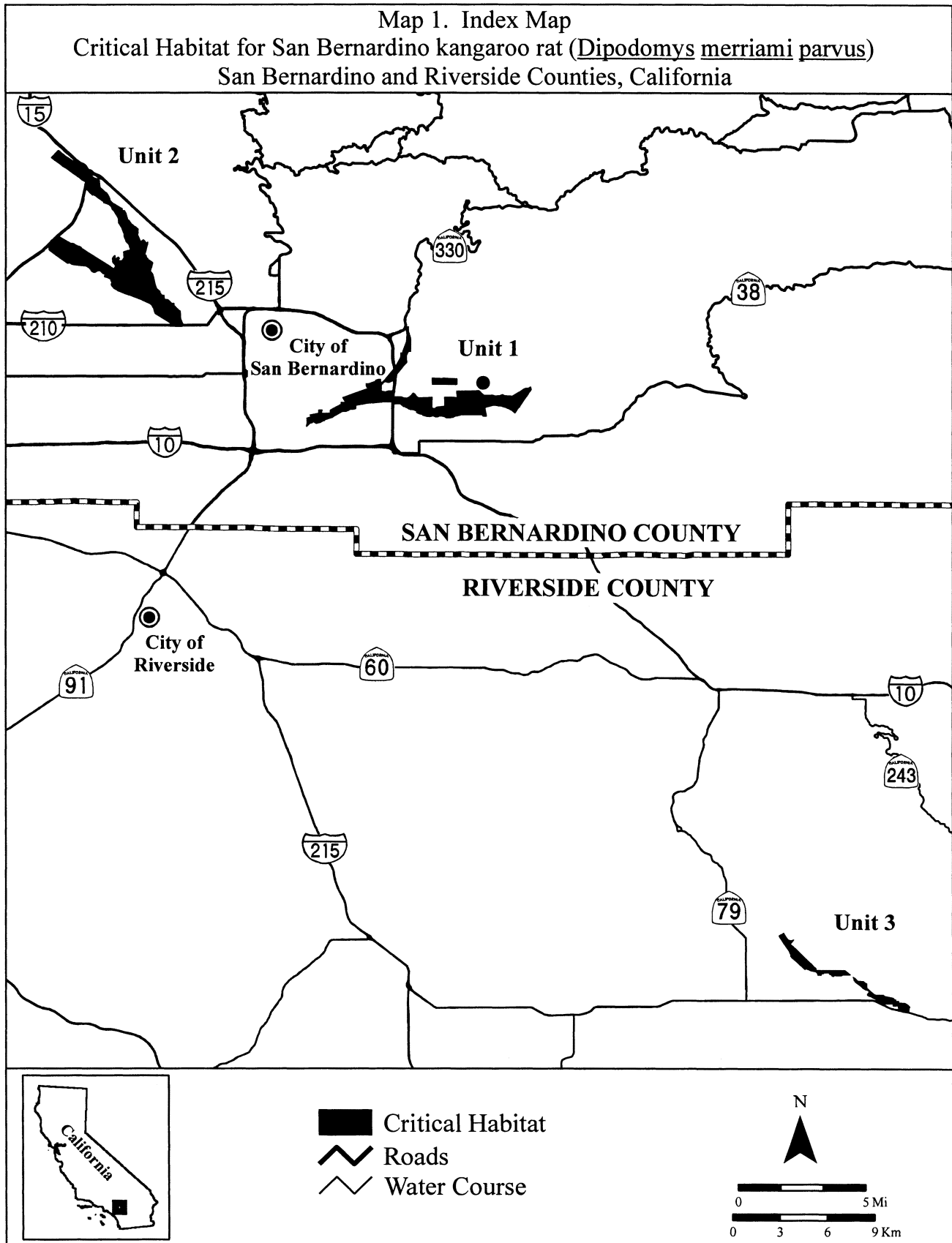
(iii) Upland areas adjacent to alluvial fans, washes, and associated floodplain areas, which may include marginal habitat such as alluvial sage scrub with greater than 50 percent canopy cover with patches of suitable soils that support individuals for re-population of wash areas following flood events. These areas may include agricultural lands, areas of inactive aggregate mining activities, and urban/wildland interfaces.

(3) Critical habitat does not include manmade structures (such as buildings, aqueducts, airports, roads, other paved areas, and the land on which such structures are located) existing on the effective date of this rule and not containing one or more of the PCEs.

(4) Data layers defining map units were created on a base of NAIP (USDA) 1:24,000 maps, and critical habitat units were then mapped using Universal Transverse Mercator (UTM) coordinates.

(5) Note: Index map of critical habitat units for the San Bernardino kangaroo rat (Map 1) follows:

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(6) Unit 1: Santa Ana River Wash, San Bernardino County, California. From USGS 1:24,000 quadrangles San Bernardino North and Devore.

(i) Land bounded by the following Universal Transverse Mercator (UTM) North American Datum of 1927

(NAD27) coordinates (E, N): 482590, 3777012; 482552, 3776943; 482558, 3776715; 482692, 3776286; 482707, 3776201; 482717, 3775426; 482568, 3775426; 482435, 3775170; 482428, 3774953; 482444, 3774750; 482466, 3774716; 482231, 3774477; 482161, 3774375; 481828, 3773959; 481701, 3773548; 481670, 3773552; 481632, 3773557; 481544, 3773563; 481307, 3773467; 481190, 3773483; 481147, 3773505; 481135, 3773507; 481097, 3773509; 481019, 3773481; 480850, 3773325; 480850, 3773289; 480835, 3773289; 480834, 3772979; 480834, 3772974; 480837, 3772974; 480837, 3772904; 481087, 3772866; 481311, 3772937; 481467, 3772911; 481609, 3772957; 481612, 3772958; 481659, 3772966; 481687, 3772961; 481648, 3772551; 481660, 3772547; 481827, 3772547; 482106, 3772547; 482223, 3772495; 482278, 3772489; 482335, 3772483; 482363, 3772483; 482446, 3772484; 482448, 3772484; 482448, 3772482; 482492, 3772485; 482495, 3772486; 482498, 3772486; 482511, 3772489; 482541, 3772494; 482546, 3772497; 482552, 3772499; 482567, 3772509; 482587, 3772519; 482608, 3772536; 482613, 3772539; 482644, 3772563; 482698, 3772609; 482754, 3772665; 482775, 3772683; 482788, 3772698; 482815, 3772725; 482846, 3772767; 482862, 3772784; 482876, 3772777; 482894, 3772767; 482925, 3772752; 482946, 3772739; 482958, 3772730; 482985, 3772705; 482993, 3772695; 483015, 3772663; 483035, 3772628; 483037, 3772625; 483040, 3772621; 483067, 3772578; 483083, 3772563; 483094, 3772552; 483097, 3772550; 483098, 3772549; 483125, 3772532; 483133, 3772527; 483156, 3772520; 483172, 3772514; 483184, 3772512; 483185, 3772511; 483202, 3772508; 483255, 3772513; 483265, 3772514; 483292, 3772514; 484048, 3772536; 484062, 3772536; 484058, 3772150; 484052, 3771841; 484100, 3771844; 484101, 3771827; 484278, 3771815; 484337, 3771896; 484862, 3771943; 484861, 3772142; 484857, 3772538; 485653, 3772529; 485653, 3772539; 485647, 3772793; 485647, 3772821; 485644, 3772926; 486049, 3772935; 486455, 3772944; 487040, 3772956; 487329, 3772655; 487916, 3772655; 488068, 3772614; 488207, 3772623; 488355, 3772642; 488515,

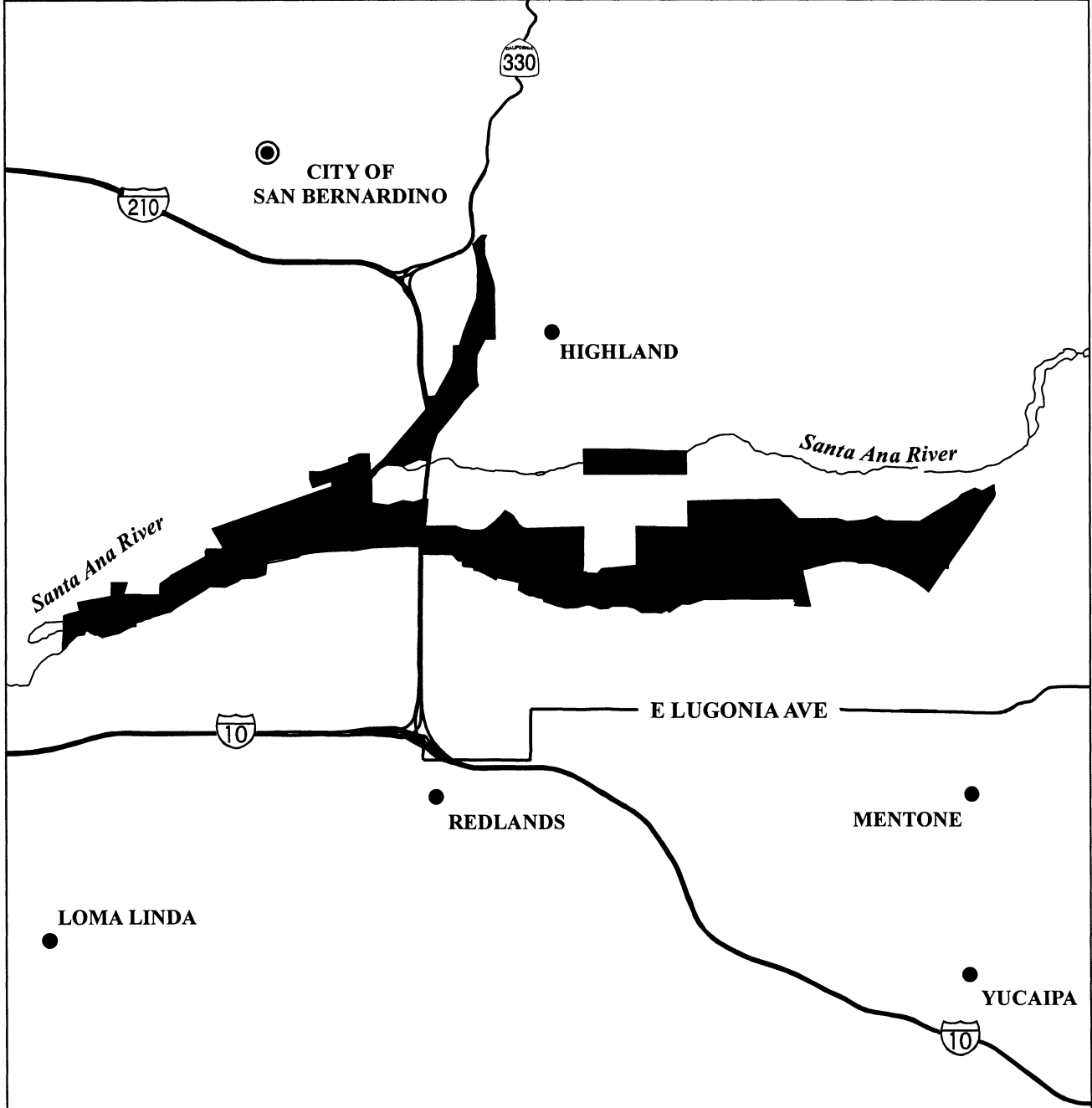
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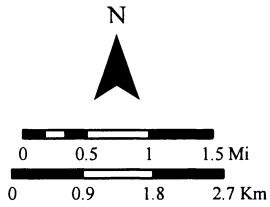
(ii) Note: Map of Unit 1—Santa Ana River Wash (Map 2) follows:

BILLING CODE 4310-55-P

Map 2.  
Critical Habitat for San Bernardino kangaroo rat (*Dipodomys merriami parvus*)  
Unit 1, San Bernardino County, California



-  Critical Habitat
-  Roads
-  Water Course





(7) Unit 2: Lytle/Cajon Creek Wash, San Bernardino County, California. From USGS 1:24,000 quadrangles San Bernardino South, Redlands, Yucaipa, and Harrison Mountain.

(i) Land bounded by the following Universal Transverse Mercator (UTM) North American Datum of 1927

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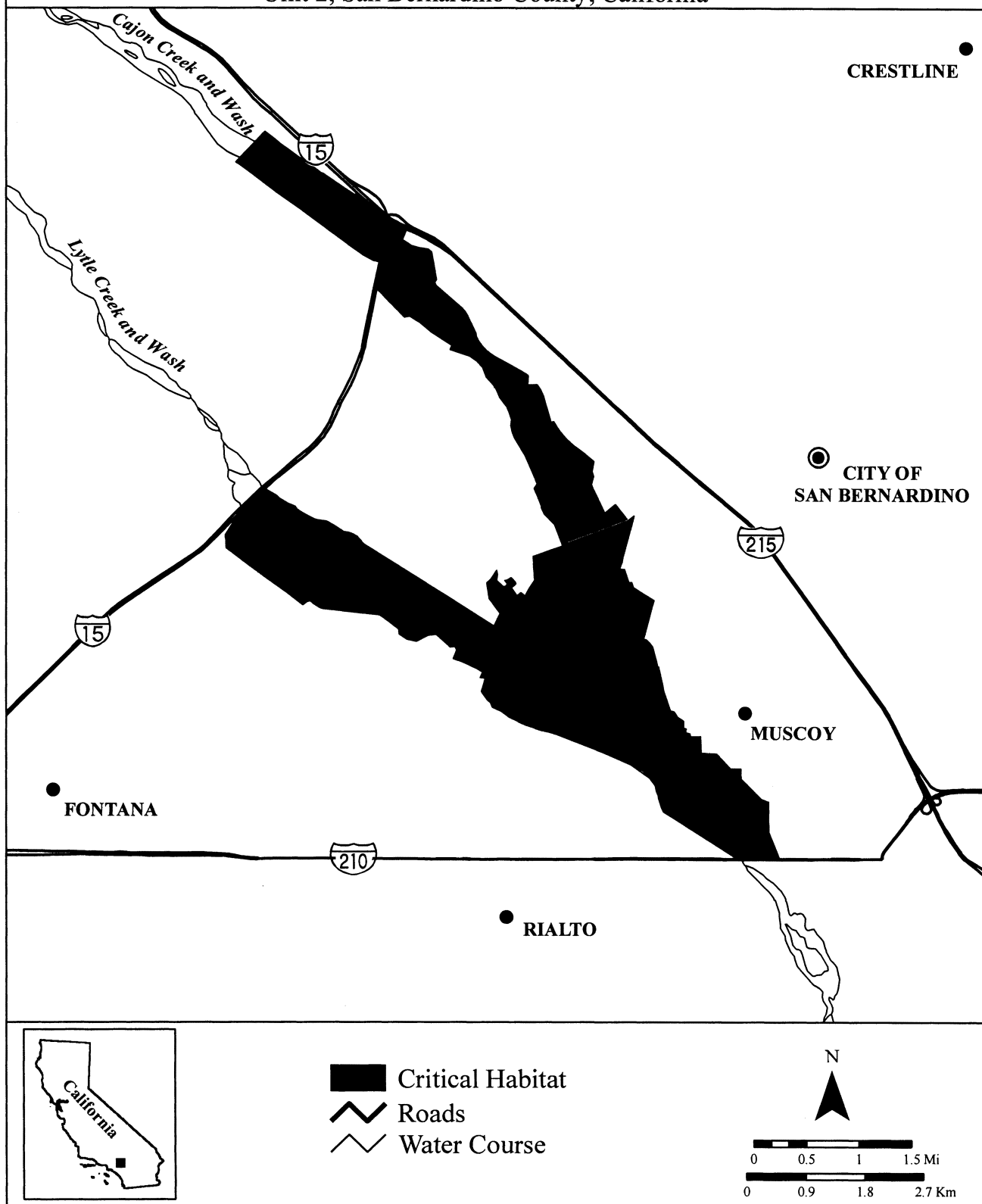
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 returning to 463087, 3785948.

(ii) Note: Map of Unit 2—Lytle/Cajon  
 Creek Wash (Map 3) follows:

BILLING CODE 4310-55-P

Map 3.  
Critical Habitat for San Bernardino kangaroo rat (*Dipodomys merriami parvus*)  
Unit 2, San Bernardino County, California



(8) Unit 3: San Jacinto River Wash, Riverside County, California. From USGS 1:24,000 quadrangles San Jacinto, Lake Fulmor, and Blackburn Canyon.

(i) Land bounded by the following Universal Transverse Mercator (UTM) North American Datum of 1927

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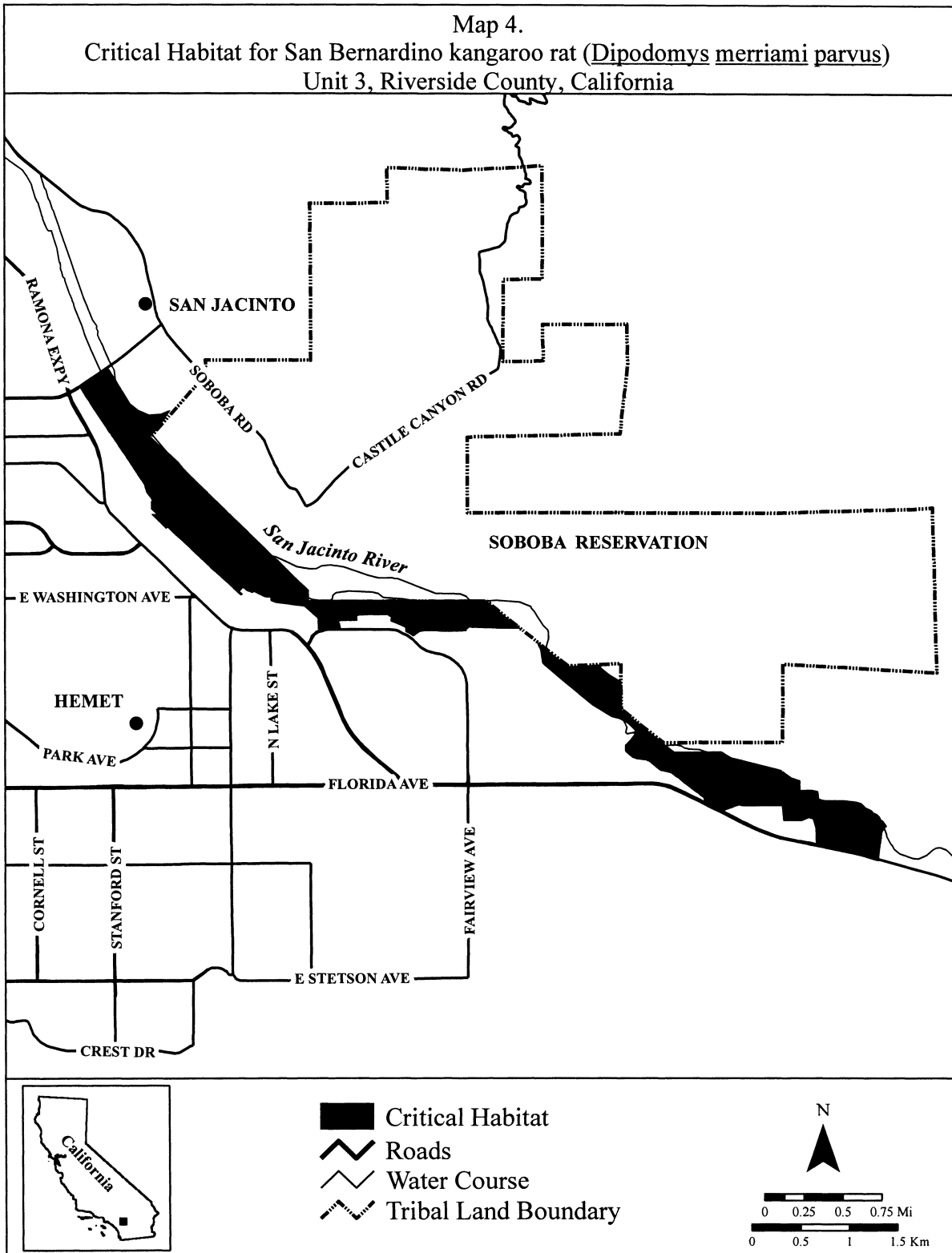
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returning to 510729, 3735445.

(ii) Note: Map of Unit 3—San Jacinto  
River Wash (Map 4) follows:

BILLING CODE 4310-55-P



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Dated: June 1, 2007.  
**David M. Verhey,**  
*Acting Assistant Secretary for Fish and  
 Wildlife and Parks.*  
 [FR Doc. 07-2823 Filed 6-18-07; 8:45 am]  
 BILLING CODE 4310-55-C