DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

RIN 1018–AH07

Endangered and Threatened Wildlife and Plants; Final Designation of Critical Habitat for the San Bernardino Kangaroo Rat

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), designate critical habitat for the San Bernardino kangaroo rat (*Dipodomys merriami parvus*) pursuant to the Endangered Species Act of 1973, as amended (Act). A total of approximately 13,485 hectares (33,295 acres) in San Bernardino and Riverside Counties, California, are designated as critical habitat for the San Bernardino kangaroo rat.

Critical habitat identifies specific areas, both occupied and unoccupied, that are essential to the conservation of a listed species and that may require special management considerations or protection.

Section 7 of the Act prohibits destruction or adverse modification of critical habitat by any activity funded, authorized, or carried out by any Federal agency. Section 4 of the Act requires us to consider economic and other impacts of specifying any particular area as critical habitat.

DATES: This rule is effective May 23, 2002.

ADDRESSES: Comments and materials received, as well as supporting documentation used in the preparation of this final rule, are available for public inspection, by appointment, during normal business hours at the Carlsbad Fish and Wildlife Office, U.S. Fish and Wildlife Service, 2730 Loker Avenue West, Carlsbad, CA 92008.

FOR FURTHER INFORMATION CONTACT: Field Supervisor, Carlsbad Fish and Wildlife Office (see **ADDRESSES** section) (telephone: 760/431–9440; facsimile 760/431–9624).

SUPPLEMENTARY INFORMATION:

Background

The San Bernardino kangaroo rat (*Dipodomys merriami parvus*) is one of 19 recognized subspecies of Merriam's kangaroo rat (*D. merriami*), a widespread species distributed throughout arid regions of the western United States and northwestern Mexico (Hall and Kelson 1959, Williams *et al.* 1993). In coastal southern California, Merriam's kangaroo rat is the only species of kangaroo rat with four toes on each of its hind feet. The San Bernardino kangaroo rat has a body length of about 95 millimeters (mm) (3.7 inches (in)) and a total length of 230 to 235 mm (9.0 to 9.3 in). The hind foot measures less than 36 mm (1.4 in) in length. The body color is pale yellow with a heavy overwash of dusky brown. The tail stripes are medium to dark brown and the foot pads and tail hairs are dark brown. The flanks and cheeks of the subspecies are dusky (Lidicker 1960). The San Bernardino kangaroo rat is considerably darker and smaller than either of the other two subspecies of Merriam's kangaroo rat that occur in southern California, *D. merriami merriami* and *D. merriami collinus.* The San Bernardino kangaroo rat, endemic to southern California, is one of the most highly differentiated subspecies of Merriam's kangaroo rat and, according to Lidicker (1960), ''it seems likely that it has achieved nearly species rank.''

The San Bernardino kangaroo rat, a member of the family Heteromyidae, was first described by Rhoades (1894) under the name *Dipodomys parvus* from specimens collected by R.B. Herron in Reche Canyon, San Bernardino County, California. Elliot reduced *D. parvus* to a subspecies of *D. merriami* (*D. merriami parvus*) in 1901, a taxonomic treatment of the species which was confirmed by Hall and Kelson (1959) and Williams *et al.* (1993). The San Bernardino kangaroo rat appears to be separated from Merriam's kangaroo rat (*D. merriami merriami*) at the northernmost extent of its range near Cajon Pass by an 8 to 13 kilometer (km) (5 to 8 mile (mi)) gap of unsuitable habitat.

The historical range of this species extends from the San Bernardino Valley in San Bernardino County to the Menifee Valley in Riverside County (Hall and Kelson 1959, Lidicker 1960). Prior to 1960, the San Bernardino kangaroo rat was known from more than 25 localities within this range (McKernan 1993). From the early 1880s to the early 1930s, the San Bernardino kangaroo rat was a common resident of the San Bernardino and San Jacinto Valleys of southern California (Lidicker 1960). At the time of listing, based on the distribution of apparent suitable soils and museum collections of this species, we estimated that the historical range encompassed approximately 130,587 hectares (ha) (326,467 acres (ac)) (63 FR 51005). Recent studies indicate that the species occupies a wider range of soil and vegetation types than previously thought (Braden and McKernan 2000), which suggests that the species' historical range may have been larger than we estimated at the time of listing.

Although the entire area of the historical range would not have been occupied at any given time due to hydrological processes and resultant variation in habitat suitability, the San Bernardino kangaroo rat was widely distributed across the San Bernardino and San Jacinto valleys. By the 1930s, suitable habitat had been reduced to approximately 11,200 ha (28,000 ac) (McKernan 1997). Habitat destruction continued such that in 1997 the San Bernardino kangaroo rat was thought to occupy only 1,299 ha (3,247 ac) of suitable habitat divided unequally among seven locations (McKernan 1997). At the time of listing, we estimated that an additional 5,277 ha (13,193 ac) of habitat distributed within the Santa Ana River, Lytle and Cajon creeks, and San Jacinto River was also likely occupied by the San Bernardino kangaroo rat (63 FR 51005). Unlike the three largest habitat blocks, we did not provide an estimate for additional habitat that was likely occupied for the smaller remnant populations at City Creek, Etiwanda alluvial fan and wash, Reche Canyon, and South Bloomington (including Jurupa Hills). At the time of listing, we discounted approximately 1,358 ha (3,396 ac) of the 5,277 ha (13,193 ac) of additional habitat as being too mature or degraded to support San Bernardino kangaroo rats. Additional research following the listing of the species has indicated that San Bernardino kangaroo rats can occupy mature alluvial sage scrub, coastal sage scrub, and even chaparral vegetation types (McKernan 2000). Moreover, systematic and general biological surveys have resulted in the documentation of additional populations of the San Bernardino kangaroo rat, within and outside areas previously known to be occupied by the species. Consequently, based on information relative to habitat usage and species' distribution obtained since the listing, we significantly underestimated the amount of area occupied by the species at the time of listing. Thus, within the areas designated as critical habitat, a minimum of approximately 13,155 ha (32,480 ac) of habitat are believed to be occupied by the San Bernardino kangaroo rat.

On December 8, 2000, we proposed 22,423 ha (55,408 ac) of lands for designation as critical habitat in the Santa Ana River (including City and Plunge Creeks), Lytle and Cajon Creeks, San Jacinto River and Bautista Creek, and the Etiwanda alluvial fan (65 FR 77178). The areas proposed and refined

for this final rule are within the known historical range for this species. However, the majority of the remaining San Bernardino kangaroo rat populations are primarily found in three areas, the Santa Ana Wash, the San Jacinto Wash, and Lytle Creek and Cajon Wash. Other smaller populations of the San Bernardino kangaroo rat are documented in washes and hills in the areas surrounding the three main population centers. Several of the areas containing these smaller populations were proposed as critical habitat, but upon re-evaluation were not included in this final designation because they were determined not to be essential to the long-term conservation of the San Bernardino kangaroo rat. The basis for this determination and removing them from the final designation was information indicating that the small scattered populations or habitats occurred in areas that were highly fragmented by urban and agricultural development and/or no longer subject to hydrological and geomorphological processes that would naturally maintain alluvial sage scrub vegetation. However, even though we believe that these habitat areas are not essential to the long-term conservation of the San Bernardino kangaroo rat, they are still considered important and may assist in recovery efforts.

Habitat for the San Bernardino kangaroo rat has been severely reduced and fragmented by development and related activities in the San Bernardino and San Jacinto valleys, resulting in reduced habitat patch size and increased distances between patches of suitable habitat. As noted by Andren (1994) in a discussion of highly fragmented landscapes, reduced habitat patch size and isolation exacerbate the effects of habitat loss on a species' persistence (*i.e.,* the loss of species, or decline in population size, will be greater than expected from habitat loss alone) and may preclude recolonization of suitable habitat following local extirpation events.

The loss of native vertebrates, including rodents, due to habitat fragmentation is well documented (Soulé *et al.* 1992, Andren 1994, Bolger *et al.* 1997). Results of habitat fragmentation on rodents may include increased extirpation rates due to increased vulnerability to random demographic (population characteristics such as age and sex structure) and environmental events (Hanski 1994, Bolger *et al.* 1997). For example, isolated populations are more susceptible to local extirpation by manmade or natural events, such as disease or floods, than are larger, more connected populations. Furthermore, small populations are more likely to experience detrimental effects associated with reproduction (*e.g.,* genetic drift, inbreeding depression, and a loss of genetic variability) and increase the risk of extinction (Caughley 1994, Lacy 1997). Past and ongoing causes of fragmentation of San Bernardino kangaroo rat habitat include conversion of lands to urban, industrial, agricultural, and recreational uses; construction of roads and freeways; and development of flood control structures such as dams, levees, detention basins, and channels. The effect of these human-caused disturbances is three-fold—(1) they reduce the amount of suitable habitat for the San Bernardino kangaroo rat, breaking large areas into smaller patches, (2) they act as barriers to movement between the remaining suitable habitat patches, and (3) they disrupt, preclude, or alter natural processes necessary to maintain suitable habitat (*i.e.,* sediment scour and deposition).

San Bernardino kangaroo rats are typically found on alluvial fans (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), floodplains, along washes, in adjacent upland areas containing appropriate physical and vegetative characteristics (McKernan 1997), and in areas with historic braided channels (R. McKernan, Curator, San Bernardino County Museum, pers. comm., 2002). These areas consist of sand, loam, sandy loam, or gravelly soils (McKernan 1993, Braden and McKernan 2000) 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; debris flows). San Bernardino kangaroo rats also occupy areas where winds contribute to the deposition of sandy soils (*e.g.,* northwest of the Jurupa Hills) (McKernan 1997). The soils deposited by alluvial or wind driven processes typically support alluvial sage scrub and chaparral vegetation and allow kangaroo rats to dig simple, shallow burrow systems (McKernan 1997).

Alluvial sage scrub has been described as a variant of coastal sage scrub (Smith 1980) and is also referred to as Riversidean alluvial fan scrub, alluvial fan sage scrub, cismontane alluvial scrub, alluvial fan scrub, or by Holland (1986) as Riversidian Alluvial Fan Sage Scrub. This relatively open vegetation type is adapted to periodic flooding and erosion (Hanes *et al.* 1989) and is comprised of an assortment of drought-deciduous shrubs and larger evergreen woody shrubs characteristic of both coastal sage scrub and chaparral communities (Smith 1980).

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, Hanes *et al.* 1989). 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 is usually renewed by frequent floods (Smith 1980, Hanes *et al.* 1989). 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, and supports the highest densities of the San Bernardino kangaroo rat (McKernan 1997).

The oldest, or mature, phase of alluvial sage scrub is rarely affected by flooding and supports the highest plant density (Smith 1980). Although mature areas are generally used less frequently by the kangaroo rats or occupied at lower densities than those supporting earlier phases, these areas are essential for the conservation of the species. Shallow burrows, such as those inhabited by the San Bernardino kangaroo rats, are likely to become inundated or lost due to scour and sediment deposition during flooding events. Therefore, mature phase alluvial scrub areas can serve as refugia for San Bernardino kangaroo rats from lower portions of the floodplain during large scale flooding events, and they can support source populations for recolonization of the lower floodplain areas after the flooding has subsided. Due to the dynamic nature of the alluvial floodplain, all three elevations within the floodplain and the associated phases of alluvial scrub habitat are essential to the long-term survival of the San Bernardino kangaroo.

Alluvial sage scrub vegetation includes plant species that are often associated with coastal sage scrub, chaparral, or desert transition communities. Common plant species found within these plant communities may include: *Lepidospartum squamatum* (scalebroom), *Eriogonum fasciculatum* (California buckwheat), *Eriodictyon crassifolium* (wooly 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), and annual forbs (*e.g., Phacelia* spp. (phacelia), *Lupinus* spp. (lupine), and *Plagiobothrys* spp. (popcorn flower)), and native and nonnative grasses.

Similar to other subspecies of Merriam's kangaroo rat, the San Bernardino kangaroo rat prefers moderately open habitats characterized by low shrub canopy cover (McKernan 1997). However, the species uses areas of denser vegetation (Braden and McKernan 2000). McKernan (pers. comm., 2000) further stated that such areas are essential to San Bernardino kangaroo rat conservation. Research conducted by Braden and McKernan (2000) during 1998 and 1999 demonstrated that areas with late phases of the 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 species.

A study of San Bernardino kangaroo rats conducted by Braden and McKernan (2000) provided additional new, specific data about the habitat characteristics in which the species was found. While this study indicated the range of habitat characteristics in which the species can occur, it was not designed to describe habitat preferences for the species. Braden and McKernan determined that within habitat occupied by the San Bernardino kangaroo rat: (1) Perennial cover varies from 0 to 100 percent; (2) annual cover (primarily nonnative grasses) varies from 0 to 70 percent; (3) the proportion of surface fine sands varies from 0 to 100 percent; (4) surface cover of small rock fragments varies from 0 to 90 percent; and (5) surface cover of large rock fragments varies from 0 to 51 percent. The San Bernardino kangaroo rat has also been documented in areas of human disturbance not typically associated with the species, including nonnative grasslands, margins of orchards and out-of-use vineyards, alluvial sage scrub, and areas of wildland/urban interface within floodplains or terraces and adjacent to occupied habitat (McKernan, *in litt.* 2000).

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 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 species through natural processes (McKernan, pers. comm., 2000).

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 0.33 ha (0.8 ac) for males and 0.31 ha (0.8 ac) for females (Behrends *et al.* 1986). Furthermore, Blair (1943) reported much larger home ranges for Merriam's kangaroo rats in New Mexico, where home ranges averaged 1.7 ha (4.1 ac) for males and 1.6 ha (3.8 ac) 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). Home range overlap between males and between males and females is extensive, but female-female overlap is slight (Jones 1993). 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.

Similar to other kangaroo rats, the Merriam's kangaroo rat is generally granivorous (feeds on seeds and grains) and often stores large quantities of seeds in surface caches (Reichman and Price 1993). Green vegetation and insects are also 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).

Wilson *et al.* (1985) reported that compared to other rodents, Merriam's kangaroo rat, and heteromyids in general, have relatively low reproductive output. 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).

Little information exists on the specific types and local abundances of predators that feed on the San Bernardino kangaroo rat. Potential native 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*), and southern Pacific rattlesnake (*Crotalus viridus*). Domestic cats (*Felis cattus*) are known to be predators of native rodents (Hubbs 1951, George 1974) and have the ability to reduce population sizes of rodents (Crooks and Soulé 1999). Predation of San Bernardino kangaroo rats by domestic cats has been documented (McKernan, pers. comm., 2000). Continued fragmentation of habitat is likely to promote higher levels of predation by native animals (Bolger *et al.* 1997) 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).

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 species' 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 species' distribution and life history which should be considered when identifying areas essential for the conservation of the species—(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 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 species; (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 species' population dynamics in one or more areas. High-amplitude, high-frequency fluctuations in small, isolated populations make them extremely susceptible to local extirpation.

Previous Federal Action

The San Bernardino kangaroo rat was emergency listed as endangered on January 27, 1998; concurrently, a proposal to make provisions of the emergency listing permanent was also published in the **Federal Register** (63 FR 3835 and 63 FR 3877, respectively). On September 24, 1998, we published a final rule determining the San Bernardino kangaroo rat to be an endangered species under the Act (63 FR 51005). Critical habitat was determined not to be prudent at the time of listing because an increase in the degree of threat and the lack of benefit to the species (63 FR 51005).

On March 4, 1999, the Southwest Center for Biological Diversity and Christians Caring for Creation filed a lawsuit in the Federal District Court for the Northern District of California challenging our failure to designate critical habitat for the San Bernardino kangaroo rat and six other federally listed species. A settlement agreement was entered into on November 3, 1999, in which we were to re-evaluate the prudency of designating critical habitat. If designation of critical habitat for the San Bernardino kangaroo rat was determined to be prudent, we would publish a proposed rule critical habitat designation by December 1, 2000, and a final designation by December 1, 2001.

In accordance with the stipulated settlement agreement, we re-evaluated the not prudent finding as determined at the time of listing. Following our re-evaluation, we determined that critical habitat was, in fact, prudent and published a proposed rule to designate critical habitat on December 8, 2000 (65 FR 77178). A discussion of our re-evaluation of the prudency of designating critical habitat for the San Bernardino kangaroo rat is contained within the Previous Federal Action section of our rule proposing the designation (65 FR 77178).

Following delayed completion of the draft economic analysis for the proposed designation and time required to hold public hearings, we requested a 90-day extension from the plaintiffs to adequately address public comments and complete the final designation. On November 19, 2001, the plaintiffs agreed to the extension. The District Court subsequently approved the 90-day extension requiring us to complete the final designation by March 1, 2002. Through agreement of the parties, this deadline was subsequently extended to April 15, 2002.

Critical Habitat

Critical habitat is defined in section 3 of the Act as—(i) the specific areas within the geographic 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 geographic area occupied by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. ''Conservation'' means the use of all methods and procedures that are necessary to bring an endangered or a threatened species to the point at which listing under the Act is no longer necessary.

Critical habitat receives protection under section 7 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 also requires conferences on Federal actions that are likely to result in the destruction or adverse modification of proposed critical habitat. In regulations at 50 CFR 402.02, we define destruction or adverse modification as ''...the 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.'' Aside from the added protection that may be provided under section 7, the Act does not provide other forms of protection to lands designated as critical habitat. Because consultation under section 7 of the Act does not apply to activities on private or other non-Federal lands that do not involve a Federal nexus, critical habitat designation would not result in any regulatory requirements for these actions.

The designation of critical habitat does not, in itself, lead to the recovery of a listed species. The designation of critical habitat does not create a management plan, establish a preserve, reserve, or wilderness area where no actions are allowed, it does not establish numerical population goals, prescribe specific management actions (inside or outside of critical habitat), or directly affect areas not designated as critical habitat.

In order to be included in a critical habitat designation, the habitat must first be ''essential to the conservation of the species.'' Critical habitat designations identify, to the extent known, and using the best scientific and commercial 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)).

Section 4 of the Act requires that we designate critical habitat at the time of listing to the extent such habitat is determinable, at the time of listing. When we designate critical habitat at the time of listing or under short court-ordered deadlines, we often may not have sufficient information to identify all areas which are essential for the conservation of the species. Nevertheless, we are required to designate those areas we know to be critical habitat, using the best information available to us.

Within the geographic area occupied by the species, we are designating only areas currently known to be essential. Essential areas contain the features and habitat characteristics that are necessary to sustain the species, as defined at 50 CFR 424.12(b). We will not speculate about what areas might be found to be essential if better information became available, or what areas may become essential over time. Moreover, certain known populations of the San Bernardino kangaroo rat have not been designated as critical habitat. We did not designate critical habitat for small scattered populations or habitats which were in areas that were highly fragmented by urban and agricultural development or were no longer subject to hydrological and geomorphological processes that would naturally maintain alluvial sage scrub vegetation (the primary plant community containing its habitat) because we do not believe that these areas are essential to the conservation of the species based on current scientific and commercial information.

Based on the limited and fragmented range of the San Bernardino kangaroo rat, we are including 330 ha (815 ac) of habitat determined to be essential to the conservation of the San Bernardino kangaroo rat that is not currently known to be occupied. This area is located in Riverside County at the northern end of the San Jacinto Unit (Unit 3). A more detailed discussion of this area and the rationale as to why it is essential to the

conservation of the San Bernardino kangaroo rat is contained in the description for this critical habitat unit.

The Service's Policy on Information Standards Under the Endangered Species Act, published in the **Federal Register** on July 1, 1994 (59 FR 34271), provides criteria, establishes procedures, and provides guidance to ensure that decisions made by the Service represent the best scientific and commercial data available. This policy requires Service biologists, to the extent consistent with the Act and with the use of the best scientific and commercial 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 should be the listing package for the species. Additional information may be obtained from a recovery plan; articles in peer-reviewed journals; conservation plans developed, or under development, by States and counties; scientific status surveys and studies; and biological assessments or other unpublished materials (*e.g.,* gray literature).

Habitat is often dynamic, and species may move from one area to another over time. Furthermore, we recognize that any designation of critical habitat may not include all of the habitat areas that may eventually be determined to be necessary for the recovery of the species. For these reasons, it is important to understand that critical habitat designations do not signal that habitat outside the designation is unimportant or may not be necessary for the conservation of the species. Areas outside the critical habitat designation will continue to be subject to conservation actions that may be implemented under section 7(a)(1) of the Act and to the regulatory protections afforded by the section 7(a)(2) of the Act jeopardy standard and the section 9 of the Act take prohibitions, as determined on the basis of the best available information at the time of the action. We specifically anticipate that federally funded or assisted projects affecting listed species outside their designated critical habitat units 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

In determining areas that are essential to conserve the San Bernardino kangaroo rat, we used the best scientific and commercial data available. These data included research and survey observations published in peer reviewed articles; regional Geographic Information System (GIS) coverages; San Bernardino County Multiple Species Habitat Conservation Program (MSHCP) database; the University of California, Riverside, species database; and data from reports submitted by biologists holding section 10(a)(1)(A) recovery permits, including results from on-going research on the San Bernardino kangaroo rat by the San Bernardino County Museum.

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, we are required to base critical habitat determinations on the best scientific and commercial data available and to consider those physical and biological features that are essential to the conservation of the species and that may require special management considerations or protection. These physical and biological features, as outlined in 50 CFR 424.12, include but are not limited to: space for individual and population growth, and for normal behavior; food, water, or other nutritional or physiological requirements; cover or shelter; sites for breeding, reproduction, or rearing of offspring; habitats that are protected from disturbance or are representative of the historical geographical and ecological distributions of a species. All areas designated as critical habitat for the San Bernardino kangaroo rat contain one or more of these physical or biological features, also called primary constituent elements.

The primary constituent elements for the San Bernardino kangaroo rat are those habitat components that are essential for the primary biological needs of foraging, reproducing, rearing of young, intra-specific communication, dispersal, genetic exchange, and/or sheltering. The primary constituent elements are found in areas influenced by historic and/or current geomorphological and hydrological processes and areas of wind-blown sand that support alluvial sage scrub vegetation or a mosaic of alluvial sage scrub and associated vegetation types (*e.g.,* coastal sage scrub, chaparral) in San Bernardino and Riverside counties. Primary constituent elements associated with the biological needs of dispersal are also found in areas that provide connectivity or linkage between or within larger core population areas, including open space and disturbed areas that may contain introduced plant species.

The long-term conservation of the San Bernardino kangaroo rat is dependent upon a number of factors including the protection and management of occupied habitat, the protection of linkages between core areas to maintain gene flow and minimize loss of genetic diversity (W. Spencer, conservation biologist, Conservation Biology Institute, pers. comm., 2002; Lande 1988), the protection of upland areas adjacent to suitable habitat that serve as refugia from lower portions of the floodplain during large scale flooding events and/or provide source populations for recolonization of the lower floodplain after the flooding has subsided (R. McKernan, pers. comm., 2002), and the protection of geomorphological, hydrological, and aeolian (wind-driven) processes essential to the continued existence and conservation of suitable habitat. The location and dynamic nature of the alluvial habitat occupied by this species makes it especially vulnerable to flood control activities throughout the drainages in which it occurs.

Based on our current knowledge of this species, the primary constituent elements include:

(1) Soil series consisting predominantly of sand, loamy sand, sandy loam, or loam;

(2) Alluvial sage scrub and associated vegetation, such as coastal sage scrub and chamise chaparral, with a moderately open canopy;

(3) River, creek, stream, and wash channels; alluvial fans; floodplains; floodplain benches and terraces; and historic braided channels that are subject to dynamic geomorphological and hydrological processes typical of fluvial systems within the historical range of the San Bernardino kangaroo rat. These areas may include a mosaic of suitable and unsuitable soils and vegetation that either (a) occur at a scale smaller than the home range of the animal, or (b) form a series of core areas and linkages between them; and

(4) Upland areas proximal to floodplains with suitable habitat (*e.g.,* floodplains that support the soils, vegetation, or geomorphological, hydrological and aeolian processes essential to this species). These areas are essential due to their geographic proximity to suitable habitat and the functions they serve during flooding events. These areas may include

marginal habitats such as agricultural lands that are disced annually, out-of-production vineyards, margins of orchards, areas of active or inactive industrial or resource extraction activities, and urban/wildland interfaces.

Criteria Used To Identify Critical Habitat

In identifying areas essential to the conservation of the San Bernardino kangaroo rat, we used data regarding the habitat elements essential to the species, including vegetation types, hydrology, elevation, topography, and soil type and texture. We identified suitable and necessary habitat components within the species' current and historic range, and examined the degree of existing urbanization and other forms of anthropogenic habitat disturbance, excluding from the designation, as feasible, those areas in which development has permanently precluded occupation by the species.

To identify those lands essential to the conservation of the San Bernardino kangaroo rat, we used data regarding (1) known San Bernardino kangaroo rat occurrences, (2) alluvial fan sage scrub and associated vegetation, (3) geomorphology, and (4) connectivity corridors between San Bernardino kangaroo rat populations. We delimited a study area by selecting geographic boundaries based on the four factors described above. We determined conservation value based on the presence of, or proximity to, extant San Bernardino kangaroo rat populations and/or alluvial fan sage scrub and associated vegetation, surrounding land-uses, and the potential to allow dispersal of the species between occupied areas. We then evaluated within this area those areas where ongoing habitat conservation planning efforts have resulted in the preparation of biological analyses that identify habitat important for the conservation of the San Bernardino kangaroo rat. These include the proposed Western Riverside County MSHCP and the proposed San Bernardino Valley-Wide MSHCP. Finally, we evaluated adjacent lands that may not have been included in the original data due to data limitations but have conservation value for the San Bernardino kangaroo rat based on the factors described above.

Once essential habitat was identified and delineated, we evaluated those lands to determine if they were covered by an approved Habitat Conservation Plan (HCP) or other special management plan that provided protection and management for the San Bernardino kangaroo rat and its habitat. We determined that none of the essential lands were covered by an approved HCP or other special management plan in which the San Bernardino kangaroo rat is a covered species.

Critical habitat for the San Bernardino kangaroo rat was delineated based on interpretation of the multiple sources available during the preparation of this final rule, including aerial photography at a scale of 1:24,000 (comparable to the scale of a 7.5 minute U.S. Geological Survey Quadrangle topographic map), current (2001) digital ortho-photography, and projects authorized for take through consultations under section 7 of the Act. These lands were divided into specific map units, *i.e.,* critical habitat units.

In defining critical habitat boundaries, we made an effort to avoid development, such as urbanized areas (*e.g.*, cities) and similar lands that do not contain the primary constituent elements that defined lands essential for the conservation of the San Bernardino kangaroo rat. However, our minimum mapping unit did not allow us to exclude all developed areas. Existing features and structures within the boundaries of the mapped units, such as buildings, roads, railroads, airports, other paved areas, lawns, and other urban landscaped areas will not contain one or more of the primary constituent elements. Federal actions limited to those areas, therefore, would not trigger a consultation under section 7 of the Act unless they affect the species and/or primary constituent elements in adjacent critical habitat.

Critical Habitat Designation

The approximate area of critical habitat by county and land ownership is shown in Table 1. Critical habitat includes San Bernardino kangaroo rat habitat throughout the species' remaining range in Riverside and San Bernardino Counties, California. Lands designated are under private, State, Tribal, and Federal ownership, with Federal lands including lands managed by the U.S. Forest Service (Forest Service) and Bureau of Land Management (BLM). Four critical habitat units have been delineated: Santa Ana River; Lytle and Cajon Creeks; San Jacinto River-Bautista Creek; and Etiwanda Alluvial Fan and Wash. These areas support important concentrations of San Bernardino kangaroo rats and are the major strongholds of this species within its geographical range. In summary, the critical habitat areas described below constitute our best assessment of areas needed for the survival and conservation of the San Bernardino kangaroo rat. A brief description of each unit, and reasons for designating it as critical habitat, are presented below.

TABLE 1.—APPROXIMATE CRITICAL HABITAT IN HECTARES (HA) (ACRES (AC)) BY COUNTY AND LAND OWNERSHIP

[Area estimates reflect critical habitat unit boundaries[1]]

County	Federal[2]	Tribal	Local/State[3]	Private	Total
Riverside	135 ha (330 ac)	290 ha (710 ac)	0 ha (0 ac)	1,835 ha (4,530 ac)	2,260 ha (5,565 ac)
San Bernardino	800 ac (1,970 ac)	0 ha (0 ac)	215 ha (535 ac)	10,210 ha (25,220 ac)	11,225 ha (27,725 ac)
Total	935 ha (2,300 ac)	290 ha (710 ac)	215 ha (535 ac)	12,045 ha (29,750 ac)	13,485 ha (33,295 ac)

[1] Approximate hectares have been converted to acres (1 ha = 2.47 ac). Based on the level of imprecision of mapping at this scale, approximate hectares and acres have been rounded to the nearest 5.

[2] Federal lands include BLM and Forest Service lands.

[3] Local/State lands defined for San Bernardino County are those lands formerly owned by the U.S. Air Force as part of Norton Air Force Base. These lands are in the process of being acquired by the San Bernardino County International Airport Authority and the Inland Valley Development Agency.

Critical Habitat Unit 1: Santa Ana River

The Santa Ana River critical habitat unit, located in San Bernardino County, encompasses approximately 3,615 ha (8,935 ac), and includes the Santa Ana River and portions of City, Plunge, and Mill creeks. Bounded by Seven Oaks Dam to the northeast, the area includes lands within the San Bernardino National Forest and portions of the cities of San Bernardino, Redlands, Highland, and Colton. Although Seven Oaks Dam impedes sediment transport and reduces the magnitude, frequency, and extent of flood events, the system still retains partial fluvial dynamics because contributions from Mill Creek are not impeded by a dam or debris basin.

A large tract of undeveloped land in San Bernardino National Forest is partially within and adjacent to the northern and eastern portions of this critical habitat unit. In addition, this unit contains upland refugia and tributaries (*e.g.,* City and Plunge creeks) that are occupied by the species, active hydrological channels, floodplain terraces, and areas of habitat immediately adjacent to floodplain terraces.

The Santa Ana River unit contains the approximately 310 ha (765 ac) Woolly-Star Preservation Area (WSPA), a section of the floodplain 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) in an attempt to minimize the effects of Seven Oaks Dam on the federally endangered *Eriastrum densifolium* ssp. *sanctorum* (Santa Ana River woolly-star) along the Santa Ana River. 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. Most of the area is likely to support San Bernardino kangaroo rats (MEC Analytical Systems, Inc 2000).

We are now 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 conservation area consisting of alluvial fan scrub occupied by three federally endangered species, the San Bernardino kangaroo rat, Santa Ana River woolly-star, and *Dodecahema leptoceras* (slender-horned spineflower); and one federally threatened species, the coastal California gnatcatcher (*Polioptila californica californica*). The area is envisioned to include an Area of Critical Environmental Concern or ACEC (see below) and the ACOE's preservation lands for Santa Ana River woolly-star. This cooperative agreement would reconfigure and consolidate sand and gravel mining operations in this unit to reduce adverse effects to these listed species and remaining alluvial fan scrub communities.

In 1994, the BLM designated three parcels in the Santa Ana River, a total of approximately 305 ha (760 ac), as an ACEC. The primary goal of this designation was to protect and enhance the habitat of federally listed plant species occurring in the area while providing for the administration of existing water conservation rights. Although the establishment of this ACEC was important in regard to conservation of sensitive species and communities in this area, the administration of these valid existing water conservation rights may conflict 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, No. 248). The entire ACEC is included in this withdrawn land and may be used for water conservation measures such as the construction of percolation basins. These lands are not managed specifically for the San Bernardino kangaroo rat.

Additionally, approximately 30 ha (54 ac) of occupied habitat in the Santa Ana River has been set aside in perpetuity by the U.S. Air Force as part of on-base site remediation efforts at the former Norton Air Force Base in San Bernardino, California. The area will be monitored and managed specifically for the San Bernardino kangaroo rat, as well as the woolly-star.

Critical Habitat Unit 2: Lytle and Cajon Creeks

The Lytle and Cajon Creeks Unit, which encompasses approximately 5,655 ha (13,970 ac) in San Bernardino County, includes the northern extent of this species' remaining distribution. This unit contains habitat along and between Lytle and Cajon creeks from the point that the creeks emanate from canyons within San Bernardino National Forest to flood control channels downstream. This unit includes alluvial fans, floodplain terraces, and historic braided river channels. Alluvial sage scrub and other vegetation types that provide habitat for San Bernardino kangaroo rat occur on terraces and adjacent areas with sandy soils. This unit includes Glen Helen Regional Park and portions of the City of Muscoy.

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. This unit is adjacent to large tracts of undeveloped land and contains upland areas occupied by the species. Therefore, these areas are essential because of the presence of substantial, existing populations of the species and habitat connectivity within and between Lytle and Cajon Creeks, as well as with the Etiwanda alluvial fan to the west.

The approximately 560 ha (1,380 ac) Cajon Creek Habitat Conservation Management Area, managed by Vulcan Materials Co., Western Division, was created in 1996 to offset approximately 920 ha (2,270 ac) of sand and gravel mining proposed within and adjacent to Cajon Creek. Of this, an estimated 245 ha (610 ac) is the Cajon Creek Conservation Bank established to help conserve populations of 24 species associated with alluvial fan scrub, including the Santa Ana River woolly-star, San Bernardino kangaroo rat, and coastal California gnatcatcher. We are working, through the section 7 consultation process, with project proponents to encourage the purchase of lands within this conservation bank by the year 2006, when interim protection under a 10-year conservation easement ends. The entire Cajon Creek Habitat Conservation Management Area and adjacent mitigation lands set aside for the development of the County of San Bernardino Sheriff's training facility would form the nucleus for a larger reserve to protect the San Bernardino kangaroo rat and other listed species in this area.

Critical Habitat Unit 3: San Jacinto River-Bautista Creek

The San Jacinto River-Bautista Creek Unit encompasses approximately 2,260 ha (5,565 ac) in Riverside County and includes portions of San Bernardino National Forest, Soboba Band of Luiseno Indians Reservation, Bautista Creek, and 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

species, is adjacent to San Bernardino National Forest and includes occupied habitat and approximately 330 ha (815 ac) of lands not currently known to be occupied.

Along the San Jacinto River the species occurs from the upper reach of habitat in the River downstream to State Route 79, within the confined portion of the floodplain, beyond the earthen flood control levee, along the river into the San Jacinto Valley and foothills of the Badlands. In Bautista Creek, the species occurs upstream of the Bautista flood control basin until the topography of the canyon becomes too steep. On Tribal lands two occupied tributaries to the San Jacinto River are included. All non-Tribal lands within Riverside County designated as critical habitat for the San Bernardino kangaroo rat are within the planning area of the Western Riverside MSHCP.

Since the time of listing, additional areas along the San Jacinto River and Bautista Creek have been identified as essential for the conservation of the San Bernardino kangaroo rat. New essential areas were identified based on additional occupation information, a better understanding of the species' habitat needs and vegetation providing habitat, the need for habitat connectivity, and the importance of maintenance of hydrological conditions. New information indicates that the habitat occupied within the floodplain by the San Bernardino kangaroo rat is larger than previously thought (McKernan, *in litt.* 1999, Braden and McKernan 2000), and includes areas of higher vegetation density. We have also received additional information on the distribution of the species within the watershed (*e.g.,* Bautista Creek), and are including areas essential for maintaining habitat connectivity along the floodplain. This additional information further supports the identification of this area as a major concentration of San Bernardino kangaroo rat in the final listing rule and the importance of this area for the long-term conservation for this species.

Approximately 290 ha (710 ac) of lands within the Soboba Band of Luiseno Indians Reservation within this critical habitat unit have been determined to be essential to the conservation of the San Bernardino kangaroo rat and designated as critical habitat. These lands include portions of the San Jacinto River and two tributary washes. This portion of the unit is least affected by flood control activities and supports the largest known density of animals in the unit. Inclusion of the Tribal portion of the unit is also necessary to maintain the hydrologic functions of the unit. Please refer to the Government-to Government Relationship with Tribes section of this final rule for a more detailed explanation of why these Tribal lands have been included in this final designation.

The San Jacinto River/Bautista Canyon population is the only known remaining population in Riverside County. Although this population is the smallest of the three large remaining populations, it is essential for the long-term survival and recovery of the species. The other two large populations (Santa Ana River and Lytle Creek/Cajon Wash) are in relatively close proximity to one another, leaving them simultaneously vulnerable to regional catastrophes. As a result, the San Jacinto population is essential for the recovery of the species, and any permanent reduction in its viability would affect the long-term survival of the San Bernardino kangaroo rat.

The portion of designated critical habitat located downstream (west) of State Route 79, an estimated 330 ha (815 ac), is currently not known to be occupied by the San Bernardino kangaroo rat. This area was historically occupied but we are not aware of any recent trapping efforts that could provide additional information as to current status of occupancy. This portion of the unit provides additional habitat essential for recovery to maintain a viable population and by reducing the risks from deleterious stochastic (random naturally occurring) events within the unit.

The population of San Bernardino kangaroo rats in this unit is at risk due to its small size and the limited area that it occupies. As discussed above, low abundance renders the population susceptible to stochastic events such as inbreeding, the loss of genetic variation, demographic problems like skewed variability in age and sex ratios, and catastrophes such as floods, droughts, or disease epidemics (Lande 1988, Frankham and Ralls 1998, Saccheri *et al.* 1998).

The risks of catastrophic stochastic events due to small population size and isolation is exacerbated by normal population fluctuation cycles. During a severe population decline due to a natural fluctuation or a stochastic event, populations contract into disjunct groups. As populations rebound these groups become the source for recolonization of previously occupied and new areas. Areas that include varying habitat conditions (*e.g.,* topography, position on the floodplain, vegetation characteristics, substrate, areas for population expansion) have an increased ability to support populations through stochastic events. Population expansion in good years results in reservoirs of individuals that survive in more difficult years. Therefore, essential habitat areas supporting relatively small populations should include varying habitat conditions.

The area of this unit that is not known to be occupied is on the broadest portion of the historic floodplain and is contiguous to known occupied habitat. It will provide area for population expansion during expansion years and provides important habitat variability for persistence in years of decline.

Critical Habitat Unit 4: Etiwanda Alluvial Fan and Wash

The Etiwanda Alluvial Fan and Wash, which encompasses approximately 1,950 ha (4,820 ac), is located in western San Bernardino County and represents the approximate westernmost extent of the known range of the San Bernardino kangaroo rat. Within the northern boundary of the unit are portions of San Bernardino National Forest. This unit includes lands within and between the active hydrological channels of Deer, Day, and Etiwanda creeks. A large alluvial fan, floodplains, and terraces occur throughout the unit. Soils are primarily sandy or sandy loam and support alluvial fan sage scrub. This unit also includes portions within the boundaries of the cities of Rancho Cucamonga and Fontana; and the approximately 310 ha (760 ac) North Etiwanda Preserve.

Lands designated as critical habitat within this unit contain a population of the species and upland refugia from catastrophic flooding. Neither dams nor debris basins exist at the mouths of East Etiwanda and San Sevaine creeks, enabling natural fluvial processes to maintain favorable habitat conditions on the upper alluvial fan and in other portions of the critical habitat unit. However, urban development and existing and proposed flood control structures will preclude the occurrence of future natural fluvial processes in the Etiwanda alluvial fan south of 24th Street/Wilson Avenue (Biological Opinion, FWS–SB–1743.5 Carlsbad Fish and Wildlife Office, February 7, 2002). Despite these conditions, the San Bernardino kangaroo rat persists within San Bernardino County Transportation and Flood Control District property and approximately 65 ha (155 ac) of this habitat within the critical habitat unit has been set aside and will be managed primarily for the San Bernardino kangaroo rat. Recognized local San Bernardino kangaroo rat authority, Robert McKernan, states that areas

within historic flood regimes (such as western Lytle Creek fan including the Etiwanda wash) should be given equal priority to the major population areas of the Santa Ana River and Cajon Wash in considering the survival and recovery of the San Bernardino kangaroo rat (R. McKernan 1999).

Effects of Critical Habitat Designation

Section 7 Consultation

Section 7(a) of the Act requires Federal agencies, including the Service, to ensure that actions they fund, authorize, or carry out do not destroy or adversely modify critical habitat to the extent that the action appreciably diminishes the value of the critical habitat for the conservation of the species. Individuals, organizations, States, local governments, and other non-Federal entities are affected by the designation of critical habitat only if their actions occur on Federal lands, require a Federal permit, license, or other authorization, or involve Federal funding.

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.

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 must enter into consultation with us. Through this consultation, we would ensure that the permitted actions do not adversely modify critical habitat.

When we issue a biological opinion concluding that a project is likely to result in 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 resulting in the 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.

Regulations at 50 CFR 402.16 require Federal agencies to reinitiate consultation on previously reviewed actions in instances where critical habitat is subsequently designated, 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 or conferencing with us on actions for which formal consultation has been completed, if those actions may affect designated critical habitat or adversely modify or destroy proposed critical habitat. Conference reports provide conservation recommendations to assist the agency in eliminating conflicts that may be caused by the proposed action. The conservation recommendations in a conference report are advisory.

We may issue a formal conference report if requested by a Federal action agency. Formal conference reports include a biological opinion that is prepared according to 50 CFR 402.14, as if the species was listed or critical habitat were designated. We may adopt the formal conference report as the biological opinion when the species is listed or 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)).

Activities on Federal lands that may affect the San Bernardino kangaroo rat or its critical habitat will require consultation under section 7 of the Act. Activities on private or State lands requiring a permit from a Federal agency, such as a permit from the U.S. Army Corps of Engineers (Corps) under section 404 of the Clean Water Act, or some other Federal action, including funding (e.g., Federal Highway Administration, Federal Aviation Administration, or Federal Emergency Management Agency) will also continue to be subject to the consultation process pursuant to section 7 of the Act. Federal actions not affecting listed species or critical habitat and actions on non-Federal lands that are not federally funded or permitted do not require consultation under section 7 of the Act.

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 adversely modify such habitat, or that may be affected by such designation. Activities that may destroy or adversely modify critical habitat include those that alter the primary constituent elements to an extent that the value of critical habitat for both the survival and recovery of the San Bernardino kangaroo rat is appreciably reduced. We note that such activities may also jeopardize the continued existence of the species. Activities that, when carried out, funded, or authorized by a Federal agency, may destroy or adversely modify critical habitat include, but are not limited to:

(1) Any activity that results in changes in the hydrology of the unit, including activities associated with flood control structures and operations; construction of levees, berms, and concrete channels; flooding; sediment, sand, or gravel removal, transfer, or deposition; grading; excavation; and construction or modification of bridges;

(2) Any activity that results in development or alteration of the landscape within or immediately adjacent to fluvial systems, including water diversion, reclamation, and recharge activities; agricultural activities; urban and industrial development; water conservation activities; off-road activity; and mechanized land clearing or discing;

(3) Any activity that results in changes to the water quality or quantity to an extent that habitat becomes unsuitable to support the San Bernardino kangaroo rat;

(4) Any activity that could lead to the introduction, expansion, or increased density of exotic plant or animal species, urban-associated domestic animals (*e.g.,* cats), or livestock into San Bernardino kangaroo rat habitat;

(5) Any activity that results in appreciable detrimental changes to the density or diversity of plant or animal populations in San Bernardino kangaroo rat habitat, such as grubbing, grading, overgrazing, mining, discing, off-road vehicle use, or the application of herbicides, rodenticides, or other pesticides; and

(6) Any activity that could result in an appreciably decreased habitat value or quality through indirect effects, such as noise, edge effects, night-time lighting, or fragmentation.

To properly portray the effects of critical habitat designation, we must first compare the requirements pursuant to section 7 of the Act for actions that

may affect critical habitat with the requirements for actions that may affect a listed species. Section 7 of the Act prohibits actions funded, authorized, or carried out by Federal agencies from jeopardizing the continued existence of a listed species or destroying or adversely modifying the listed species' critical habitat. Actions likely to ''jeopardize the continued existence'' of a species are those that would appreciably reduce the likelihood of the species' survival and recovery. Actions likely to ''destroy or adversely modify'' critical habitat are those that would appreciably reduce the value of critical habitat for the recovery of the listed species.

Common to both definitions is an appreciable detrimental effect on recovery of a listed species. Given the similarity of these definitions, actions likely to destroy or adversely modify critical habitat would almost always result in jeopardy to the species concerned, particularly when the area of the proposed action is occupied by the species concerned. Designation of critical habitat in areas occupied by the San Bernardino kangaroo rat is not likely to result in a significant regulatory burden above that already in place due to the presence of the listed species. In that portion of critical habitat that is not currently known to be occupied or if occupied habitat becomes unoccupied in the future, critical habitat may provide a benefit through the recognition of the importance of these areas to the conservation of the species. However, the Corps already currently requires review of most or all projects requiring permits in all fluvial systems, whether San Bernardino kangaroo rats are known to be present.

Designation of critical habitat could affect Federal agency activities. Federal agencies already consult pursuant to section 7 of the Act with the Service on activities in areas known to be occupied by the species to ensure that their actions do not jeopardize the continued existence of the species. These actions include, but are not limited to:

(1) Regulation of activities affecting waters of the U.S. by the Corps under section 404 of the Clean Water Act;

(2) Road construction and maintenance, right-of-way designation, and regulation of agricultural activities;

(3) Regulation of airport construction and improvement activities by the Federal Aviation Administration;

(4) Licensing of construction of communication sites by the Federal Communications Commission; and

(5) Funding of activities by the U.S. Environmental Protection Agency, Department of Energy, or any other Federal agency.

If you have questions regarding whether specific activities will likely constitute destruction or adverse modification of critical habitat, contact the Field Supervisor, Carlsbad Fish and Wildlife Office (see **ADDRESSES** section). Requests for copies of the regulations on listed wildlife, and inquiries about prohibitions and permits may be addressed to the Division of Endangered Species, U. S. Fish and Wildlife Service, 911 NE 11th Avenue, Portland, OR 97232–4181 (telephone 503–231–6158; facsimile 503–231–6243).

Relationship to Habitat Conservation Plans and Other Planning Efforts

Section 10(a)(1)(B) of the Act authorizes the Service to issue to non-Federal entities a permit for the incidental take of endangered and threatened species. This permit allows a non-Federal landowner to proceed with an activity that is legal in all other respects, but that results in the incidental taking of a listed species. The Act defines incidental take as take that is ''incidental to, and not the purpose of, the carrying out of an otherwise lawful activity.'' A habitat conservation plan, or HCP, must accompany an application for an incidental take permit. The purpose of the HCP is to describe and ensure that the effects of the permitted action on covered species are adequately minimized and mitigated and that the action does not appreciably reduce the survival and recovery of the species.

The State of California instituted a conservation planning program parallel to the Federal HCP program. Under the Natural Community Conservation Planning (NCCP) Act of 1991, a NCCP is a plan for the conservation of natural communities that takes an ecosystem approach and encourages cooperation between private and government interests. The Service and the California Department of Fish and Game (CDFG) work with applicants to develop plans that serve both as an HCP under the Federal Endangered Species Act as well as an NCCP under the State's NCCP Act. Much like a regional HCP, an NCCP identifies and provides for the regional or area-wide protection and perpetuation of plants, animals, and their habitats, while allowing compatible land use and economic activity. The initial focus of this program is coastal sage scrub. Within this program, the CDFG included the long-term conservation of alluvial sage scrub, which is in part occupied by the San Bernardino kangaroo rat. However, participation in NCCP is voluntary. San Bernardino and Riverside counties have signed planning agreements (memoranda of understanding (MOUs)) to develop multi-species plans that meet NCCP criteria, but have not enrolled in the NCCP program in the interim.

We are coordinating with the BLM, Corps, San Bernardino Valley Conservation District, Sun West 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 conservation area consisting of alluvial fan scrub communities occupied by four federally listed species, but as yet, we have not completed this process.

Because there are no approved HCPs/NCCPs in which the San Bernardino kangaroo rat is a covered species or other conservation plans that are currently completed that specifically address the San Bernardino kangaroo rat, we did not exclude any lands from this critical habitat designation pursuant to section 4(b)(2) of the Act on this basis.

In the event that future HCPs covering the San Bernardino kangaroo rat are developed within the boundaries of designated critical habitat, we will work with applicants to ensure that the HCPs provide for protection and management of habitat areas essential for the conservation of the San Bernardino kangaroo rat by either directing development and habitat modification to nonessential areas or appropriately modifying activities within essential habitat areas so that such activities will not adversely modify the primary constituent elements. The HCP development process provides an opportunity for more intensive data collection and analysis regarding the use of particular habitat areas by the San Bernardino kangaroo rat. The process also enables us to conduct detailed evaluations of the importance of such lands to the long-term survival of the species in the context of constructing a biologically configured system of interlinked habitat blocks.

We will provide technical assistance and work closely with applicants throughout the development of future HCPs to identify appropriate management for lands essential for the long-term conservation of the San Bernardino kangaroo rat. The take minimization and compensation measures provided under these HCPs are expected to protect the essential habitat lands designated as critical habitat in this rule. If an HCP that addresses the San Bernardino kangaroo rat as a covered species is ultimately approved, the Service may reassess the

critical habitat boundaries in light of the HCP.

Summary of Comments and Recommendations

In the December 8, 2000, proposed critical habitat designation (65 FR 77178), we requested all interested parties to submit comments on the specifics of the proposal including information related to biological justification, policy, economics, and proposed critical habitat boundaries. The first comment period closed on February 6, 2001. The comment period was reopened from September 4, 2001, to October 4, 2001 (66 FR 46251), to allow for additional comments on the proposed designation, and comments on the draft economic analysis of the proposed critical habitat. Comments received after the close of this last comment period were determined not to provide substantive comment that had not already been raised or addressed and entered into the supportive record for this rulemaking.

We contacted all appropriate State and Federal agencies, Tribes, county governments, elected officials, and other interested parties and invited them to comment. In addition, we invited public comment through the publication of legal notices in two newspapers in southern California: San Bernardino County Sun and Riverside Press Enterprise on December 11, 2000, and again in both papers on September 4, 2001. We provided notification of the draft economic analysis through telephone calls, letters, and news releases faxed and/or mailed to affected elected officials, media outlets, local jurisdictions, and interest groups. We also published the draft economic analysis and associated material on our Carlsbad Fish and Wildlife Office Internet site following its release on September 4, 2001. In addition to inviting public comment on the proposed designation and the draft economic analysis on the proposed designation, the latter notices announced the dates and times of public hearings on the proposed designation. These hearings were held on September 20, 2001, in San Bernardino, California from 1:00 p.m. to 3:00 p.m. and 6:00 p.m. to 8:00 p.m. Transcripts of these hearings are available for inspection (see **ADDRESSES** section).

We asked nine biologists, who have knowledge of the San Bernardino kangaroo rat, to provide peer review of the proposed designation of critical habitat for the San Bernardino kangaroo rat; six responded. Five of the six supported the designation, although several expressed concerns with the ability of the amount of habitat proposed to provide for the persistence and recovery of the species; one was non-committal. Several of the reviewers felt that the Braden and McKernan (2000) study could be misleading, as their methods for quantifying the percent cover of habitat could give the impression that marginal upland mature shrub habitat had the same value as high quality alluvial scrub. Their comments have been either addressed in the text or responded to below.

We received a total of 66 comment letters/testimonies, from 54 separate parties, during the two public comment periods. Comments were received from a number of Federal and local agencies, and separate private organizations or individuals. Of these 66 comments, 10 were in favor of the designation, 52 against it, and 4 were neutral. We reviewed all comments received for substantive issues and comments, and new information regarding the San Bernardino kangaroo rat. Similar comments were grouped into three general issues relating specifically to the proposed critical habitat determination and draft economic analysis on the proposed determination. Comments have been incorporated directly into the final rule or final addendum to the economic analysis or addressed in the following summary.

Issue 1: Biological Justification and Methodology

1. *Comment:* The scale of the proposed critical habitat for the San Bernardino kangaroo rat is overly broad, resulting in vague unit boundaries. Several commenters questioned the biological justification for proposing critical habitat for the San Bernardino kangaroo rat using such a landscape-scale approach. Several commenters were concerned that the mapping lacked precision for use by the public. Several commenters voiced concern that areas that should not be designated as critical habitat were included because of the mapping scale.

Our Response: We recognize that not all parcels of land designated as critical habitat will contain the habitat components essential to the conservation of the San Bernardino kangaroo rat. Due to time constraints, and the absence of more detailed map information during the preparation of the proposed designation, we used a 100-m UTM grid to delineate the critical habitat boundaries. This resulted in the inclusion of some lands that did not provide the primary constituent elements for the San Bernardino kangaroo rat, such as homes and urban landscapes.

In developing the final designation, we made an effort to minimize the inclusion of nonessential areas that do not contain the primary constituent elements for the kangaroo rat. However, due to our mapping scale, some areas not essential to the conservation of the San Bernardino kangaroo rat were included within the boundaries of proposed and final critical habitat. We were able to refine our boundaries considerably with recent (2001) aerial imagery which allowed for the exclusion of many areas that do not contain the primary constituent elements. These areas, such as towns, housing developments, mines, or other developed lands are unlikely to provide essential habitat for the kangaroo rat. Because they do not contain one or more of the primary constituent elements for the species, Federal actions limited to those areas will not trigger a section 7 consultation, unless they affect the species or the primary constituent elements of adjacent critical habitat.

2. *Comment:* Several peer reviewers, in addition to other commenters, had concerns that the amount of land proposed as critical habitat was not sufficient for the survival and long-term conservation of the species. Additionally, some commenters thought that the critical habitat proposal was overly broad, containing too much land, and one commenter supported the delineation of the proposed designation.

Our Response: In proposing critical habitat for the San Bernardino kangaroo rat, we identified those areas that we believed to be essential to the conservation of this species. However, the mapping scale that we used resulted in a more inclusive proposal. We did not include all areas currently occupied by the kangaroo rat, but designated those areas that possess larger populations, have unique ecological characteristics, and/or represent the historic geographic areas where the species can be re-established. Please refer to the Background and Criteria Used To Identify Critical Habitat sections of this final rule for further discussion on this topic.

After refining our proposal and weighing the best available information, we conclude that the areas designated by this final rule, including currently occupied areas that were not known to be occupied at the time the species was listed, are essential for the conservation of the species.

3. *Comment:* Several peer reviewers and other commenters indicated that certain areas within the proposed critical habitat were either known to be occupied (*e.g.,* Etiwanda Creek Channel, Day Creek Channel, San Antonio Wash

near Baseline Road, Etiwanda Fan) or were not occupied (*e.g.,* Riverside County Flood Control and Water Conservation District facilities, Rancho Cucamonga, Fontana).

Our Response: Data used in the preparation of our proposed and final designations indicate that the Etiwanda Creek Channel, Day Creek Channel, San Antonio Wash near Baseline Road, Etiwanda Fan, and areas in Fontana are occupied by the San Bernardino kangaroo rat. The majority of the Riverside Flood Control and Water Conservation District facilities mentioned by the commenters (*e.g.,* small properties, buildings, wells) are located in areas of the San Jacinto Wash in which we have current documentation of occupancy by the San Bernardino kangaroo rat.

4. *Comment:* Some commenters were concerned with the definition of ''occupied'' in the proposed rule claiming that it was problematic, unsupportable, and inconsistent.

Our Response: In the proposed rule and for this final designation, we defined occupancy based on documented occurrence data for the San Bernardino kangaroo rat for the last fifteen years. We evaluated the location of observations relative to other documented occurrences to obtain an understanding of the mosaic of occupied habitat within appropriate suitable plant communities and wash habitat. We then evaluated the estimated territory size, potential use area and dispersal distances documented for other kangaroo rat species and applied those trends for the San Bernardino kangaroo rat.

We understand that this definition of occupancy may differ from public perception of detectable presence of a kangaroo rat during each survey event over all of designated critical habitat. We believe that based on the behavior and ecology of the San Bernardino kangaroo rat as extrapolated from the best available scientific data, the animal may not be detectable at all times across all areas designated as critical habitat. Based on our analysis we believe we have properly defined occupancy as it relates to the behavior and ecology of the San Bernardino kangaroo rat.

5. *Comment:* Several peer reviewers pointed out that small, isolated populations of the San Bernardino kangaroo rat may contain important genetic material for the species. They also suggested that the Service conduct a population genetics study to determine whether or not to include them in critical habitat.

Our Response: Small isolated populations of the San Bernardino kangaroo rat may provide important genetic material for the species and its long-term conservation. However, we currently do not have any information concerning the genetic diversity of these populations. Further, due to the time constraints for completing this designation, we were unable to develop and or conduct a biologically and statistically rigorous study to evaluate the genetics of the remaining San Bernardino kangaroo rat populations. Therefore, we did not have substantive information to determine and support that these small isolated populations are essential to the long-term conservation of the San Bernardino kangaroo rat. Thus, the areas containing them were not designated as critical habitat.

6. *Comment:* The descriptions of the primary constituent elements of critical habitat for the San Bernardino kangaroo rat are not specific, or are vague, incorrect, and/or confusing.

Our Response: The description of the primary constituent elements for the San Bernardino kangaroo rat is based on the best available scientific and commercial data regarding the species, including a compilation of data from peer-reviewed, published literature; unpublished or non-peer-reviewed survey and research reports; and opinions of biologists knowledgeable about the San Bernardino kangaroo rat and its habitat. Additionally, we updated the biological information, including the primary constituent elements, in this final rule based on information that we received from survey reports during 2002, public comments, and scientific and commercial data. Consequently, the primary constituent elements, as described in this final rule, represent our best estimate of what habitat components are essential for the conservation of the species. Please refer to the Primary Constituent Elements section of this final rule for a further discussion on this topic.

7. *Comment:* One commenter questioned the methodology that we used to determine the critical habitat boundaries and indicated that the proposed designation must be substantially revised and resubmitted for public comments before it is finalized

Our Response: As described in the Criteria Used To Identify Critical Habitat section of this final rule we describe the methods used to define critical habitat for the San Bernardino kangaroo rat. In general, to delineate critical habitat boundaries we used data regarding (1) known San Bernardino kangaroo rat occurrences, (2) alluvial fan sage scrub and associated vegetation, (3) geomorphology, and (4) connectivity corridors between San Bernardino kangaroo rat population. Once these areas were defined, we then evaluated them for conservation value and removed any lands determined not to be essential to the long-term conservation of the San Bernardino kangaroo rat (*e.g.,* urban, active mining, and agriculture).

During the development of this final designation, the lands proposed for designation were further re-evaluated and refined based on more recent aerial photography, public comment, and information received since the publication of the proposed designation. The critical habitat boundaries defined in this final rule have been reduced from those identified in the proposal.

8. *Comment:* Several peer reviewers and one commenter expressed concern with the use of the data from Braden and McKernan (2000) to include upland areas such as vineyards (current/historical), agricultural lands, and mature alluvial fan sage scrub in the proposed critical habitat.

Our Response: The Braden and McKernan (2000) study provided additional new, specific data about the habitat characteristics where the species has been documented; we realize that this study indicates the range of habitat characteristics in which the species can occur. We recognize that the study was not designed to indicate/describe habitat affinities or habitat preferences by the San Bernardino kangaroo rat. We used this information, realizing its limitations, when developing our best estimate of areas that are important for the conservation of the San Bernardino kangaroo rat. Please refer to the background section in this final rule for an expanded discussion on this topic.

9. *Comment:* Several peer reviewers were concerned that the survey protocol was insufficient to determine presence/absence; therefore, data used to determine the proposed critical habitat was flawed. Additionally, one commenter was concerned that the Service assumed that many areas were occupied without protocol surveys.

Our Response: We currently do not have an approved survey protocol for the San Bernardino kangaroo rat. However, based on repeated field sampling, we have developed a standard minimum methodology for conducting presence/absence surveys. We are currently reviewing proposed changes to increase the accuracy of this survey methodology and decrease the chances of error in detecting the San Bernardino kangaroo rat if present.

For determining critical habitat, we evaluated the current distribution of the

San Bernardino kangaroo rat based on documented sightings or captures and incorporated those areas that we believed to be essential to the conservation of the species based on this occurrence information in the critical habitat designation.

10. *Comment:* The proposed rule inappropriately uses a ''recovery standard'' to determine critical habitat for the San Bernardino kangaroo rat.

Our Response: The definition of critical habitat in section 3(5)(A) of the Act includes ''(i) specific areas within the geographic 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 geographic area occupied by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.'' The term ''conservation'', as defined in section 3(3) of the Act, means ''to use and the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to the Act are no longer necessary.''

In designating critical habitat for the San Bernardino kangaroo rat, pursuant to the Act, we identified those areas that currently contain one or more of the physical or biological features, primary constituent elements, essential to the conservation of the species. We did not include all areas currently occupied by the San Bernardino kangaroo rat or containing the primary constituent elements, but designated only those areas determined to be essential to the species conservation and characterized by large populations, unique ecological characteristics, and historic geographic areas where the species can be re-established.

11. *Comment:* The lands that are being proposed as critical habitat for the San Bernardino kangaroo rat represent a huge, unsubstantiated increase from the amount of habitat that was described in the final listing rule, and even now, as being occupied by this species. There is a lack of data to support this increase in occupied area for the species.

Our Response: In our final rule to list the San Bernardino kangaroo rat as endangered (63 FR 51005), we estimated that approximately 5,279 ha (13,044 ac) were likely occupied. In this final critical habitat designation we are designating approximately 13,485 ha (33,295 ac) as essential, of which approximately 330 ha (815 ac) are currently not known to be occupied. The approximate two-fold increase over the approximate amount of land occupied by the San Bernardino kangaroo rat at the time it was federally listed is based on additional data and research that has expanded our knowledge on the distribution and habitat needs of the species. Please refer to the background section of this final rule for a more detailed discussion of this issue.

12. *Comment:* The broad scale of the proposed critical habitat maps is not specific enough to allow for reasonable public comment, therefore violating the Act and 50 CFR 424.12(c).

Our Response: We identified specific areas in the proposed determination that are referenced by public land surveys and UTM coordinates, which are found on standard topographic maps. We also made available a public viewing room where maps with the proposed critical habitat superimposed on 7.5 minute topographic maps and spot imagery could be inspected. Further, we distributed GIS coverages and maps of the proposed critical habitat to everyone who requested them. We believe the information made available to the public was sufficiently detailed to allow for informed public comment. This final rule contains the legal descriptions of areas designated as critical habitat required under 50 CFR 424.12(c). The accompanying maps are for illustration purposes only. If additional clarification is necessary, please contact the Carlsbad Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT** section).

13. *Comment:* According to one peer reviewer, geomorphological and hydrological processes, and presently unoccupied habitat are critical to the survival and conservation of the San Bernardino kangaroo rat. The commenter recommended including side channels in the critical habitat designation.

Our Response: As we discuss in the Background section of this rule, we concur with the commenter on the importance of these geomorphological and hydrological processes for creating and maintaining habitat essential to the survival and conservation of the San Bernardino kangaroo rat. We considered the importance of these processes and side channels when delineating the boundaries of critical habitat for this final designation and included the areas providing for those geomorphological and hydrological processes that are essential for the conservation of the San Bernardino kangaroo rat.

14. *Comment:* Several commenters felt that we proposed critical habitat before we obtained all of ''the best scientific evidence'; that we should conduct additional surveys or research (such as estimate the minimum viable population size); and that there is evidence to designate critical habitat areas outside of occupied habitat.

Our Response: We are required to use the best available information in designating critical habitat. During the development of the proposed designation and following its publication during the two open comment periods, we solicited biological data and public participation in the rule making process. These comments have been taken into consideration in the development of this final designation. As stated in several sections of this final designation, we used data collected during 2001 and 2002 to determine the final configuration of critical habitat. Data from 2002 corroborated occupancy and assisted in further defining critical habitat boundaries. We are currently unable to conduct a population viability analysis for or more detailed research on the San Bernardino kangaroo rat due to time and funding constraints. We are currently required under a court-approved settlement agreement to finalize this designation by April 15, 2002. However, we will continue to monitor the species and collect new information and may revise the critical habitat designation in the future, funding permitting, if new information supports a change.

Issue 2: Policy and Regulations

15. *Comment:* The Service violated the Administrative Procedure Act by not providing adequate public notice to all affected landowners, not providing sufficient opportunity for public comment, or extending the comment period to allow for adequate time for comment.

Our Response: We published the proposed rule to designate critical habitat for the San Bernardino kangaroo rat on December 8, 2000 (65 FR 77178), and accepted comments from the public for 60 days, until February 6, 2001. The comment period was reopened from September 4, 2001, to October 4, 2001 (66 FR 46251), to allow for additional comments on the proposed designation, and comments on the draft economic analysis on the proposed critical habitat. Comments received after the close of the last comment period were determined not to provide substantive comments that had not already been raised or addressed and entered into the supportive record for this rulemaking.

We contacted all appropriate State and Federal agencies, Tribes, county governments, elected officials, and other

interested parties and invited them to comment. In addition, we invited public comment through the publication of notices in the following newspapers in southern California: San Bernardino Sun and Riverside Press Enterprise on December 11, 2000, and again in both papers on September 4, 2001. We provided notification of the draft economic analysis through telephone calls, letters, and news releases faxed and/or mailed to affected elected officials, media local jurisdictions, and interest groups. We also published the draft economic analysis and associated material on our Carlsbad Fish and Wildlife Office Internet site following the draft's release on September 4, 2001. In addition to inviting public comment on the proposed designation and the draft economic analysis for the proposed designation, the latter notices announced the dates and times of public hearings on the proposed designation. These hearings were held on September 20, 2001, in San Bernardino, California from 1:00 p.m. to 3:00 p.m. and 6:00 p.m. to 8:00 p.m. Transcripts of these hearings are available for inspection (see **ADDRESSES** section).

16. *Comment:* A commenter indicated that our re-evaluation of the prudency of designating critical habitat for the San Bernardino kangaroo rat was insufficient.

Our Response: In our final rule listing the San Bernardino kangaroo rat as endangered under the Act (63 FR 51005), we found that designation of critical habitat was not prudent because we believed that designation could result in an increase in the degree of threat to the species. As we discuss in the Previous Federal Action section of this final rule, we were challenged on our original ''not prudent'' finding. On November 3, 1999, we agreed to a stipulated settlement that required us to publish a proposal to withdraw the existing ''not prudent'' critical habitat determination and re-evaluate the prudency of designating critical habitat. If designation of critical habitat for the San Bernardino kangaroo rat was determined to be prudent, we agreed to publish a proposed designation by December 1, 2000, and a final designation by December 1, 2001. The publication of our December 8, 2000, proposal and this final rule are in compliance with the stipulated settlement agreement and subsequent court orders. A detailed discussion of our re-evaluation of the prudency of designating critical habitat for the San Bernardino kangaroo rat is located in the Previous Federal Action section of the proposed designation. In short, our re-evaluation of the prudency of designating critical habitat resulted in our concluding that the benefits of designating critical habitat outweighed the benefits of not designating (*i.e.,* threats to the species due to the release of specific habitat or occurrence information). Pursuant to section 3 of the Act, and the implementing regulations, in the absence of finding that critical habitat would increase threats to a species, if there are any benefits to critical habitat being designated, then a prudent finding is warranted.

17. *Comment:* The Service violated the National Environmental Policy Act of 1969 (NEPA) by failing to prepare an Environmental Impact Statement for the designation of critical habitat.

Our Response: As discussed in the National Environmental Policy Act section of the proposed rule and this final, we have determined that it is not necessary to prepare an Environmental Assessment or an Environmental Impact Statement as defined by the National Environmental Policy Act of 1969 in connection with regulations adopted pursuant to section 4(a) of the Endangered Species Act as amended. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244).

18. *Comment:* Tribal lands should be excluded from critical habitat based on either section 4(b)(2) of the Act, Secretarial Order 3206, or because Tribal lands are managed better voluntarily.

Our Response: In our proposed critical habitat rule, we indicated that approximately 465 ha (1,150 ac) of lands within the Soboba Band of Luisẽno Indians Reservation in western Riverside County were essential for the conservation of the San Bernardino kangaroo rat. In the development of the final critical habitat designation for the San Bernardino kangaroo rat, we re-evaluated these Tribal lands to determine if they were essential to the conservation of the kangaroo rat and whether they should be designated as critical habitat. Based on distribution information for the San Bernardino kangaroo rat in the San Jacinto Wash, the continuity of kangaroo rat habitat extending up the tributaries adjacent to occupied habitat, and slope, vegetation, and disturbance information; we have re-defined the area designated as critical habitat on the Soboba Band of Luisẽno Indians Reservation. Additionally, we refined the 100 meter grid line used in the proposal to the essential critical habitat line along the edges of the two washes and the main portion of the river on Tribal land and removed from the designation a non-essential disturbed area on the western edge of Tribal lands on the north side of the river that is proposed for economic development. The result of this analysis and refinement was the reduction of critical habitat on Tribal land to 290 ha (710 ac).

Currently the Soboba Band of Luisẽno Indians does not have a resource management plan which provides protection or conservation for the San Bernardino kangaroo rat and its habitat. We are committed to maintaining a positive working relationship with the Tribe and will continue to work with them on developing a resource management plan for the Reservation including conservation measures for the kangaroo rat. However, due to the time constraints for completing this final rule and the lack of an existing resource management plan covering the San Bernardino kangaroo rat, we were required to finalize the designation based on our analysis of the relative importance of the lands within the Soboba Band of Luisẽno Indians Reservation for the conservation of the San Bernardino kangaroo rat.

For a further discussion of this issue please refer to the Government-To-Government Relationship With Tribes section of this final rule.

19. *Comment:* Many commenters, including all of the peer reviewers, suggested that additional lands be designated as critical habitat for the San Bernardino kangaroo rat. The areas suggested include additional lands upwind and upstream from lands contained within proposed critical habitat that are important to maintain San Bernardino kangaroo rat habitat, upland refugia areas up to 600 meters (1,950 feet) from channels, other known occupied sites, and other lands to connect the proposed critical habitat units together. The commenters indicated that these areas are needed for the long-term conservation of the San Bernardino kangaroo rat.

Our Response: We did not include all of the lands, both general and specific, suggested by the commenters in proposed critical habitat because, at the time of proposal, we concluded that these lands were not essential for the conservation of the San Bernardino kangaroo rat based on available information concerning status of the species in the specific areas and level of habitat disturbance and fragmentation. Only those lands that we believed to be essential to the conservation of the San Bernardino kangaroo rat based on the best scientific and commercial data available at the time the proposal was being developed were included in the proposed critical habitat designation.

20. *Comment:* Several commenters expressed concern over the inclusion of the former Norton Air Force Base in final critical habitat.

Our Response: Portions of the lands within the former Norton Air Force Base (NAFB) were included in the proposed designation of critical habitat for the San Bernardino kangaroo rat. Currently, NAFB is in the process of being turned over to the San Bernardino County Airport Authority and the Inland Valley Development Agency for use as a regional airport. During the development of the final designation, we re-evaluated those lands proposed as critical habitat that fell within the NAFB. Based on this re-evaluation and refinement, most of the land within the former NAFB was not included in this final critical habitat because it was determined not to be essential to the conservation of the San Bernardino kangaroo rat. All areas north of (and including) the runway have been removed from the final critical habitat designation because additional evaluation showed the area to be too highly degraded and fragmented to provide for conservation of the San Bernardino kangaroo rat. Areas south of the runway, adjacent to or in the Santa Ana River channel, are still considered essential to the conservation of the San Bernardino kangaroo rat because these support suitable habitat and existing populations.

Further, we completed an informal consultation with the Federal Aviation Authority regarding two grants, a $7 million grant to construct a Joint Powers Authority training facility and another grant between $5 and $20 million to rehabilitate the main runway. In our consultations on these two grants, following the proposal of critical habitat for the San Bernardino kangaroo rat, we determined that the construction of the JPA facility and the rehabilitation of the main runway will not adversely affect proposed critical habitat. The primary areas affected by these projects have been removed from designated critical habitat because they were determined to not be essential to the long-term conservation of the San Bernardino kangaroo rat due to the degraded condition of the area.

Commenters were additionally concerned that the designation of critical habitat for the San Bernardino kangaroo rat would affect a $1.3 million grant that the San Bernardino International Airport Authority was applying for to construct a hanger. A consultation with us pursuant to section 7 of the Act was not necessary because the proposed action did not affect any San Bernardino kangaroo rats or their habitat and was not within proposed critical habitat. The grant has since been awarded to the airport authority.

21. *Comment:* Emergency maintenance activities for the County of San Bernardino and the San Bernardino County Flood Control District should be exempted from designation within critical habitat.

Our Response: Emergency maintenance activities are not exempt from consultation under section 7 of the Act. The regulations at 50 CFR 402.05 allow for informal consultation where emergency circumstances mandate the need to consult in an expedited manner. Formal consultation should be initiated as soon as possible after the emergency is under control. We have conducted programmatic consultations with FEMA and other Federal agencies for future anticipated emergency actions. These consultations can be conducted prior to the emergency and address anticipated response activities. In addition, there is a Memorandum of Understanding (MOU) between the Service and FEMA which involves expedited consultation time frames.

22. *Comment:* Several commenters expressed concern regarding the inclusion of water and flood control district properties and facilities (e.g., Riverside County Flood Control and Water Conservation District, Metropolitan Water District of Southern California, City of Redlands) in the proposed critical habitat areas.

Our Response: Lands proposed and designated in this final rule have been determined to be essential to the conservation of the San Bernardino kangaroo rat by providing biological and physical requisites for the animals survival and long-term conservation. In developing our designation we attempted to exclude those areas that do not currently contain the primary constituent elements essential to the San Bernardino kangaroo rat, such as urban areas and land altered by active agriculture or mining. However, due to our minimum mapping scale and based on the photographic accuracy of our GIS data, some areas not containing the primary constituent elements essential to the San Bernardino kangaroo rat were included in designated critical habitat. Activities in which there is a Federal nexus that occur in these areas would not trigger a consultation pursuant to section 7 of the Act unless those activities may affect a listed species or may directly or indirectly affect primary constituent elements in adjacent critical habitat.

23. *Comment:* A number of commenters identified specific areas that they thought should not be designated as critical habitat (*e.g.,* Etiwanda and San Sevine Channel south of State Route 30; all of Units 4, 5, and 6; various project development areas).

Our Response: Where site-specific documentation was submitted to us providing a rationale and supporting documentation as to why an area should not be designated critical habitat, we evaluated that information in accordance with the definition of critical habitat pursuant to section 3 of the Act and made a determination as to whether modifications to the proposal were appropriate. As discussed in the background sections of the proposed rule and this final rule, areas containing smaller populations of the San Bernardino kangaroo rat were removed from critical habitat in this final designation because they were determined not to be essential to the long-term conservation of the San Bernardino kangaroo rat. The basis for this determination and removing them from the final designation was based on the information indicating that the small scattered populations or habitats occurred in areas that were highly fragmented by urban and agricultural development or no longer subject to hydrological and geomorphological processes that would naturally maintain alluvial sage scrub vegetation. Lands proposed as critical habitat that were excluded from this final designation based on this re-evaluation included portions of Etiwanda and San Sevine channels within Unit 4, and Units 5 and 6 in their entirety.

24. *Comment:* Critical habitat should be retained within the boundaries of approved HCPs. HCPs cannot be viewed as a functional substitute for critical habitat designation, and they provide inadequate protection and special management considerations for the species and their habitat. Other commenters supported the exclusion of approved HCPs from critical habitat designation, and several commenters wanted pending HCPs to be excluded, as well. They supported their recommendations by asserting that landowners will be reluctant to participate in HCPs unless they have incentives, including the removal of critical habitat from HCP boundaries.

Our Response: The designation of critical habitat should not deter participation in the Natural Community Conservation Program (NCCP) or HCP processes. Approvals issued under these processes include assurances of no additional mitigation through the HCP No Surprises regulation (63 FR 8859). We recognize that critical habitat is only one of many conservation tools for federally listed species. HCPs are one of

the most important tools for reconciling land use with the conservation of listed species on non-Federal lands. Section 4(b)(2) of the Act allows us to exclude from critical habitat areas where the benefits of exclusion outweigh the benefits of designation, provided the exclusion will not result in the extinction of the species. We believe that in most instances the benefits of excluding HCPs from critical habitat designations will outweigh the benefits of including them. Currently, there are no approved and legally operative HCPs in which the San Bernardino kangaroo rat is a covered species and management is provided for the species' long-term conservation.

25. *Comment:* The Service violated the Administrative Procedure Act and Endangered Species Act by not making the scientific data relied on in formulating the proposed rule available for public review and comment despite requests from interested parties and that we should also inform the public of areas that are occupied that we did not propose as critical habitat.

Our Response: In the proposed rule, we stated that all supporting documentation, including the references and unpublished data used in the preparation of the proposed rule, would be available for public inspection at the Carlsbad Fish and Wildlife Office. A public viewing room was made available at the Carlsbad Fish and Wildlife Office where the proposed critical habitat units, superimposed on 7.5 minute topographic maps, could be inspected. In addition, we responded to each request for GIS maps and data supporting the rulemaking in a timely manner by providing copies of the maps and data. Additionally, data concerning the occurrences of the San Bernardino kangaroo rat used in the analysis for the proposed designation were also made available to the public, if requested. These data have also been provided to several of the local jurisdictions in western Riverside and San Bernardino counties for use in the development of the regional HCPs. The occurrence data and supporting documentation used in the rulemaking are available for inspection at the Carlsbad Fish and Wildlife Office by appointment (Please see **ADDRESSES** Section of this rule).

26. *Comment:* The designation of critical habitat would place an additional burden on landowners above and beyond what the listing of the species would require. The number of section 7 consultations will increase; areas where no San Bernardino kangaroo rat are known to occur will now be subject to consultations under section 7 of the Act since many Federal agencies previously have been making ''no effect'' determinations within unoccupied suitable habitat. Now, with the designation of critical habitat the Federal agencies may be required to consult and there could be an increase in ''may effect'' determinations, if any primary constituent elements are effected by the proposed action.

Our Response: As discussed in this rule and our economic analysis, consultations pursuant to section 7 of the Act would only occur for activities that may affect a federally listed species or critical habitat in which there is a Federal nexus. We acknowledge that there may be some additional consultations pursuant to section 7 of the Act because of the designation critical habitat for the San Bernardino kangaroo rat. However, we believe that in the areas occupied by the species (*i.e.,* approximately 97.5 percent of designated critical habitat), Federal agencies should have already been consulting with us on activities affecting the San Bernardino kangaroo rat and its habitat due to it being listed as a federally endangered species. Further, because the portion of critical habitat that is not currently known to be occupied is located downstream of occupied habitat, activities occurring in this area with a Federal nexus may have also been subjected to consultation under section 7 of the Act. Therefore, we believe that additional consultations, or efforts such as technical assistance, would be minimal as the result of the designation of critical habitat for the San Bernardino kangaroo rat.

27. *Comment:* Critical habitat for the San Bernardino kangaroo rat is needed because the current legal protections are insufficient to protect the species and its habitat (both occupied and unoccupied) from direct and indirect impacts.

Our Response: The San Bernardino kangaroo rat and lands occupied by the species currently receive protection under sections 7, 9, and 10 of the Act. Much of the remaining habitat for the San Bernardino kangaroo rat occurs in areas that are under the ACOE jurisdiction. The ACOE, as well as other Federal agencies, are required to consult with us when an action they permit, fund or authorize ''may affect'' a listed species. Additionally, habitats used by the San Bernardino kangaroo rat (*e.g.,* Riversidian alluvial fan sage scrub, coastal sage scrub, alluvial fan scrub) are considered sensitive under California Environmental Quality Act and must be addressed during that process. We will continue to work with local landowners to protect and enhance kangaroo rat habitat.

28. *Comment:* Consultations under section 7 of the Act are required for projects (*e.g.,* building, development) on private property in critical habitat because an HCP is needed for these projects regardless of occupancy because there is a ''may effect'' to critical habitat.

Our Response: We disagree with the commenter that any development project occurring in designated critical habitat for the San Bernardino kangaroo rat would require a Federal permit. A consultation pursuant to section 7 of the Act would only be triggered if there was a Federal action that may affect a listed species or critical habitat. A Federal action is any action funded, permitted or otherwise authorized by a Federal action agency. Where there is no Federal nexus, a consultation pursuant to section 7 of the Act would not be triggered. If a Federal nexus does not exist, we would work with the project proponent on the development of a HCP and issuance of an incidental take permit for actions that may affect a federally listed species. As part of this process, we are required, pursuant to section 7 of the Act, to evaluate the issuance of the incidental take permit for the proposed action to ensure that the action as proposed would not jeopardize the continued existence of the species covered under the HCP, nor result in the destruction or adverse modification of critical habitat designated within the planning area of the HCP such that it would appreciably reduce the likelihood of survival and recovery of the species.

29. *Comment:* The proposed critical habitat rule violates section 4(b)(8) of the Act by not including (1) a summary of data used in the development of the proposal, (2) relationship of the data to proposed critical habitat, and (3) a description of activities that may adversely modify critical habitat.

Our Response: We disagree with the commenter that we violated section 4(b)(8) of the Act by not including a summary of data used in the development of the proposal, did not provide a discussion of the relationship of the data to proposed critical habitat, and did not provide a description of activities that may adversely modify critical habitat. In the Background section of this final rule, and the proposal, we discuss at length the biology and ecology of the San Bernardino kangaroo rat and the relationship of this information to proposed and final critical habitat. The relationship of this data to designated critical habitat is also discussed in the Primary Constituent Elements section and in the description of each of the

critical habitat units. Within these discussions, we cite references or data sources that our conclusions are based on. A list and copy of each data source used in the development of this rulemaking are within the supporting documentation and available for inspection at the Carlsbad Fish and Wildlife Office (please refer to **ADDRESSES** section). Further, the GIS data layers used in the development of critical habitat boundaries are discussed in the Methods and Criteria Used To Identify Critical Habitat sections of the proposed rule and this final rule. Copies of these data layers are also available for inspection at the Carlsbad Fish and Wildlife Office. The description of activities that may adversely modify critical habitat is discussed in the Section 7 section of this rule. Here we list those activities that would result in the destruction or adverse modification of critical habitat for the San Bernardino kangaroo rat.

30. *Comment:* Several commenters asserted that too much critical habitat for the San Bernardino kangaroo rat was being proposed on private land and that critical habitat should only be designated on Federal lands.

Our Response: The definition of critical habitat in section 3(5)(A) of the Act includes ''(i) specific areas within the geographic 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 geographic area occupied by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species''. The term ''conservation'', as defined in section 3(3) of the Act, means ''to use and the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to the Act are no longer necessary.''

In designating critical habitat for the San Bernardino kangaroo rat, we identified those areas that we know are essential to the conservation of this species, regardless of land ownership. The Act does not direct us to limit the designation to Federal lands, or take into consideration land ownership when developing the designation. Therefore, we analyzed the area within the current range of this San Bernardino kangaroo rat to determine which areas are biologically essential to its conservation. The areas designated as critical habitat for the San Bernardino kangaroo rat provide those habitat components essential for the survival and conservation of this species.

31. *Comment:* Critical habitat represents the Service's efforts to control local government land use and to usurp local governments' rights to regulate land uses.

Our Response: The designation of critical habitat does not create a management plan, establish a preserve, reserve, or wilderness area where no actions are allowed, it does not establish numerical population goals, prescribe specific management actions (inside or outside of critical habitat), or directly affect areas not designated as critical habitat (as discussed in the Critical Habitat section of this rule). Critical habitat does not ''usurp'' local governments' rights to regulate land uses. However, the designation may result in some additional effort by the State and local jurisdictions to review proposed actions in designated critical habitat pursuant to the California Environmental Quality Act and other State or local land use regulations.

32. *Comment:* One commenter asserted that we should account for the loss of critical habitat, and that this loss should be counted against the permissible ''take'' as per the California Department of Fish and Game's Natural Community Conservation Program guidelines.

Our Response: The referenced NCCP guidelines directs habitat loss to areas with low long-term conservation potential that will not preclude development of adequate preserves and ensures that connectivity between areas of high habitat value will be maintained. Under the NCCP guidelines, jurisdictions that are participating in the program can authorize the loss of or ''take'' of up to five percent of coastal sage scrub vegetation within their planning area through a habitat loss permit that requires the concurrence of the U.S. Fish and Wildlife Service and the California Department of Fish and Game while they are developing their regional habitat conservation plan. In these enrolled subregions, habitat loss is regulated by the local jurisdiction and Service oversight is not dependent upon a Federal nexus. Therefore, the participating jurisdictions are responsible for tracking the habitat loss authorized under their habitat loss permit. Currently, the local jurisdictions in which critical habitat for the San Bernardino kangaroo rat is being designated are not participating in the NCCP program.

Additionally, even though habitat loss under the NCCP is not applicable to consultations under section 7 of the Act, the loss of the habitat is analyzed in each section 7 consultation for effects to the baseline of listed species.

Issue 3: Economic Issues

33. *Comment:* One commenter expressed concern over the use of Service files, in particular those of the Carlsbad Fish and Wildlife Office, to extrapolate future consultations, project modifications, and re-initiation of consultations based on consultation histories for the purpose of evaluating potential economic effects of the designation. The commenter cited the findings of a recent Government Accounting Office report that indicated that the files at the Carlsbad Fish and Wildlife Office were unorganized, incomplete, and poorly managed.

Our Response: As a result of the Government Accounting Office's review of the Carlsbad Fish and Wildlife Office's files and the subsequent report indicating some weaknesses in file management, we have instituted an electronic file management system which has corrected many of the apparent weaknesses. Because the San Bernardino kangaroo rat has only been listed since 1998, and it has been a highly scrutinized listed species, files and information relevant to the San Bernardino kangaroo rat have been, and are, well organized, complete, and properly managed. Therefore, we have a high level of confidence in information extrapolated from those files. Additionally, as discussed in the draft economic analysis, values associated with future costs attributable to future consultations, project modifications, etc. are averaged from data collected at Fish and Wildlife Offices across the country.

34. *Comment:* The public comment period for the Economic Analysis must be at least 60 days long.

Our Response: According to Code of Federal Regulations (CFR) 424.16 (c)(2), we are required to have a public comment period of ''at least 60 days * * * following publication in the **Federal Register** of a rule proposing the listing, delisting, or reclassification of a species, or the designation or revision of critical habitat.'' We published the proposed rule to designate critical habitat for the San Bernardino kangaroo rat on December 8, 2000 (65 FR 77178), and accepted comments from the public for 60 days, until February 6, 2001. The comment period was reopened from September 4, 2001, to October 4, 2001 (66 FR 46251), to allow for additional comments on the proposed designation, and comments on the draft economic analysis on the proposed critical habitat. We have fulfilled our requirements under the Act and the CFR regarding the

public comment period for the proposed designation of critical habitat for the San Bernardino kangaroo rat.

35. *Comment:* We violated the Regulatory Flexibility Act by not preparing and providing for public comment a detailed initial regulatory flexibility analysis at the same time as the proposed rule.

Our Response: The Regulatory Flexibility Act, as amended by the Small Business Regulatory Enforcement Fairness Act, generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act, or any other statute, unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. We are certifying that this rule will not have a significant economic impact on a substantial number of small entities and as a result, neither an initial or final regulatory flexibility analysis is required. Please refer to the sections, Economic Analysis and Regulatory Flexibility Act for further discussions concerning the potential economic effects for this designation.

36. *Comment:* Demographic and economic information regarding the Soboba Band of Luiseño Indians was included in the Draft Economic Analysis of Critical Habitat Designation for the San Bernardino kangaroo rat, yet they were not personally contacted regarding this information.

Our Response: Although we try to contact as many stakeholders as possible, we are not able to contact every potential stakeholder in order for us to develop a draft economic analysis due to time and budget constraints. Especially in light of the limited resources and time available to us, we believe that we were adequately able to understand the issues of concern to local communities based on public comments submitted on the proposed rule, on transcripts from public hearings, and from detailed discussions among our staff and with representatives from other Federal, State, Tribal, and local government agencies, as well as some landowners. Information that was used in the draft Economic Analysis regarding the Soboba Band of Luiseño Indians was obtained from existing documents available to the Service. Based on comments during the public comment period, we attempted to update the information in the Addendum to the Economic Analysis on the Soboba Band of Luiseño Indians. We obtained publicly available information regarding the Tribe from a U.S. Bureau of Indian Affairs web site and included it in our Addendum. In addition, we met with the Tribe during the development of the critical habitat designation (September 19, 2001) to discuss the potential impacts on Tribal lands. After discussions with the Tribe and analysis of our biological and physical data, we have revised the boundaries relative to Tribal lands.

37. *Comment:* Several commenters expressed concern that the proposed rule was not accompanied by an economic analysis as required by law.

Our Response: Section 4(b)(2) of the Act and 50 CFR 424.19 requires us to consider the economic impact, and any other relevant impact, of specifying any particular area as critical habitat. We published our proposed designation of critical habitat for the San Bernardino kangaroo rat in the **Federal Register** on December 8, 2000 (65 FR 77178). At that time, our Division of Economics and their consultants Industrial Economics, Inc. initiated the draft economic analysis. The draft Economic Analysis of the proposed critical habitat designation was made available for public comment and review beginning on September 4, 2001 (66 FR 46251). Following a 30-day public comment period on the proposal and draft Economic Analysis, a final Addendum to the Economic Analysis was written based on public comments. Both the draft Economic Analysis and final Addendum were used in the development of this final designation of critical habitat for the San Bernardino kangaroo rat. Please refer to the Economic Analysis section of this final rule for a more detailed discussion of these documents.

38. *Comment:* The draft Economic Analysis does not provide enough information to conduct an analysis pursuant to section 4(b)(2) of the Act.

Our Response: We disagree that the Economic Analysis does not provide sufficient information to make an informed decision under section 4(b)(2) of the Act. We believe that the Economic Analysis very specifically discusses likely impacts to entities based on probable land use activities. Furthermore, the Addendum very specifically addresses weaknesses in the draft Economic Analysis that were identified during the public comment period. Taken together, we believe both documents adequately identify where the potential economic impacts of the proposed rule may lie and the assumptions that were necessary to generate these estimates. Therefore, they are sufficient to identify any areas where the economic costs may outweigh the biological benefits of the designation.

39. *Comment:* Specific lands should be excluded from proposed critical habitat pursuant to section 4(b)(2) of the Act because the economic effects of excluding particular areas outweigh the benefits.

Our Response: Section 4(b)(2) of the Act and 50 CFR 424.19 requires us to consider the economic impact, and any other relevant impact, of specifying any particular area as critical habitat. We may exclude an area from critical habitat if we determine that the benefits of exclusion outweigh the benefits of designating the area as critical habitat, unless that exclusion will lead to extinction of the species. As discussed in this final rule and our economic analyses for this rulemaking, we have determined that no significant adverse economic effects will result from this critical habitat designation. Further, based on our re-evaluation of lands proposed as critical habitat, we believe that the designation of the lands in this final rule as critical habitat outweigh the benefits of their exclusion from being designated as critical habitat. Consequently, none of the proposed lands have been excluded from the designation based on economic impacts or other relevant factors pursuant to section 4 (b)(2) of the Act.

40. *Comment:* The Service is obligated to consider ''other relevant impacts'' in our analysis pursuant to section 4(b)(2) of the Act for potential exclusions from critical habitat such as the ''projected'' housing crisis in southern California.

Our Response: As previously discussed in this final rule, section 4(b)(2) of the Act and 50 CFR 424.19 require us to consider the economic impact, and any other relevant impact, of specifying any particular area as critical habitat. We may exclude an area from critical habitat if we determine that the benefits of exclusion outweigh the benefits of designating the area as critical habitat, unless that exclusion will lead to extinction of the species.

We are aware that some of the land that we have designated as critical habitat for the San Bernardino kangaroo rat faces significant development pressure. Development activities can have a significant effect on the land and the species dependent on the habitat being developed. We also recognize that many large-scale development projects are subject to a Federal nexus. As a result, we expect that future consultations will, in part, include planned and future real estate development.

However, we believe that these resulting consultations will not take

place solely with respect to critical habitat issues. While it is true that development activities can adversely affect designated critical habitat, we believe that our future consultations regarding new housing development will take place because such actions have the potential to adversely affect a federally listed species. We believe that such planned projects would require a section 7 consultation regardless of the critical habitat designation. Again, as we have previously mentioned, section 7 of the Act requires Federal agencies to consult with us whenever actions they fund, authorize, or carry out may affect a listed species or its critical habitat.

41. *Comment:* Several commenters were concerned that the critical habitat designation would have significant adverse economic impacts to particular projects, agencies, and/or the economic recovery of entire region.

Our Response: During the development of critical habitat for the San Bernardino kangaroo rat, we conducted an analysis of the economic impacts that were likely to occur as a result of the designation. The results of our analysis are contained in our draft Economic Analysis and the final Addendum to the Economic Analysis. Because the areas being designated are primarily occupied, our Economic Analysis concluded that the designation would not result in significant economic impacts to the lands being designated as critical habitat or the economic recovery of the region as a whole.

42. *Comment:* The Draft Economic Analysis of Critical Habitat Designation for the San Bernardino Kangaroo Rat is flawed, inaccurate, contains numerous errors, and makes improper assumptions.

Our Response: As previously discussed, section 4(b)(2) of the Act and 50 CFR 424.19 requires us to consider the economic impact, and any other relevant impact, of specifying any particular area as critical habitat. We published our proposed designation of critical habitat for the San Bernardino kangaroo rat in the **Federal Register** on December 8, 2000 (65 FR 77178). At that time, our Division of Economics and their consultants Industrial Economics, Inc., initiated the draft Economic Analysis. The draft Economic Analysis of the proposed critical habitat designation was made available for review and public comment during a 30-day public comment period beginning on September 4, 2001 (66 FR 46251). Based on the public comments received during the open comment period, a final Addendum to the Economic Analysis of critical habitat for the San Bernardino kangaroo rat was drafted. This final Addendum addressed the concerns raised through the comment period and took into consideration new data and a revised methodology. Please refer to the Economic Analysis section of this final rule for a more detailed discussion of these documents. Copies of both the draft Economic Analysis and the final Addendum are in the supporting record for this rulemaking and can be inspected by contacting the Carlsbad Fish and Wildlife Office (refer to the **ADDRESSES** section of this rule).

43. *Comment:* The Economic Analysis failed to adequately estimate various potential economic impacts.

Our Response: In the Addendum to the Economic Analysis of Critical Habitat Designation for the San Bernardino Kangaroo Rat we conducted a revised analysis to address all concerns that were brought up during the public comment process. In some instances we obtained additional data and increased our estimates, in other instances we presented arguments/rebuttals to concerns mentioned by particular commenters which explained why our estimate might be more accurate/appropriate. Please refer to the Addendum to the Economic Analysis for a more thorough discussion regarding potential economic impacts.

44. *Comment:* The draft Economic Analysis had errors in the land ownership data.

Our Response: In accordance with section 3(5)(A)(i) of the Act and regulations at 50 CFR 424.12, we are directed to use the best scientific and commercial data available in determining which areas to propose as critical habitat. We recognize that data used in our analysis may not be the most accurate relative to land ownership. The data concerning land ownership is obtained from a variety of sources including Federal and State agencies, data clearing-houses, and local and county jurisdictions. Once data is obtained by the lead agency or data source, time is required to process and verify the data, which may take up to one to two years. Consequently, the data that we obtain for our analysis may be one to two years older than what is reflective of current land ownership. As best as possible, we attempt to correct discrepancies or errors that are detected in the data. However, there will most likely be some factor of error in the data.

45. *Comment:* No monetary benefits for the survival of the species were included in the draft Economic Analysis.

Our Response: While we have acknowledged the potential for society to experience such benefits in our economic analyses for critical habitat rulemakings, our ability to actually measure these benefits in any meaningful way is difficult and imprecise at best. While we are aware of many studies that attempt to identify the value (in monetary units) of listed species, open space, the use of public lands for recreational purposes, the cost of sprawl, etc.; few of these studies provide any meaningful information that can be used to develop estimates associated with a critical habitat designation. The designation of critical habitat does not necessarily inhibit development of private property, which makes it difficult to draw upon the literature of the economic values of open space to identify potential benefits of critical habitat designation. Also, while some economic studies attempt to measure the social value of protecting endangered species, the species that are often valued are well known and easy to identify (*e.g.* bighorn sheep) in contrast to other species such as the San Bernardino kangaroo rat. Furthermore, the values identified in these studies would be most closely associated with the listing of a species as endangered or threatened because the listing serves to provide the majority of protection and conservation benefits under the Act.

While we will continue to explore ways that will allow us to provide more meaningful descriptions of the potential benefits associated with a critical habitat designation, we believe that due to the current lack of available data specific to these rulemakings, along with the time and resource constraints imposed upon the Service, the benefits of a critical habitat designation are best expressed in biological terms that can then be weighed against the expected social costs of the rulemaking.

46. *Comment:* The draft Economic Analysis violates the Endangered Species Act and the Administrative Procedure Act by limiting its scope to a ten year time frame.

Our Response: Neither the Endangered Species Act nor the Administrative Procedure Act address limitations on a time frame for the scope of economic analyses for critical habitat rules. In developing the Economic Analysis we attempted to estimate the impacts of critical habitat designation on activities that are ''reasonably foreseeable.'' Small changes in current trends, plans, and projections (in land use and economic estimates) may have large effects on long-range predictions. Independent of these uncertainties, the endangered status of the kangaroo rat may change in the future (*e.g.* from endangered to recovered). A change in status may reduce the need for the

critical habitat designation. Thus, in order to reduce uncertainty, the analysis bases estimates on activities that are likely to occur within a ten-year time horizon. Cost estimates beyond this ten-year time horizon are likely to be highly inaccurate because socioeconomic and other conditions may shift dramatically.

47. *Comment:* The draft Economic Analysis is not a full analysis. It is still an incremental analysis, and it is not in compliance with the recent Tenth Circuit Court ruling on the southwestern willow flycatcher critical habitat.

Our Response: On May 11, 2001, the U.S. Court of Appeals in the Tenth Circuit issued a ruling that addressed the analytical approach used by the Service to estimate the economic impacts associated with the critical habitat designation for the southwestern willow flycatcher. Specifically, the court rejected the approach used by the Service to define and characterize baseline conditions. Defining the baseline is a critical step within an economic analysis, as the baseline in turn identifies the type and magnitude of incremental impacts that are attributed to the policy or change under scrutiny. In the flycatcher analysis, the Service defined baseline conditions to include the effects associated with the listing of the flycatcher and, as is typical of many regulatory analyses, proceeded to present only the incremental effects of the rule.

The court's decision, in part, reflects the uniqueness of many of the more recent critical habitat rulemakings. Specifically, the flycatcher was initially listed by the Service as an endangered species in 1995, several years prior to designating critical habitat. Once a species has been officially listed as endangered under the Act, it is afforded special protection under Federal law. In particular, it is illegal to ''take'' a protected species without authorization once it is listed. Take is defined to mean harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or to attempt to engage in any such conduct. Implementing regulations promulgated by the Service further define ''harm'' to mean ''. . . an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering.''

Because the southwestern willow flycatcher was initially listed as endangered by the Service in 1995, several years before the designation of critical habitat, the flycatcher, along with its habitat, already received considerable protection before the designation of critical habitat in 1997. As a result, the economic analysis concluded that the resulting impacts of the designation would be insignificant. This conclusion was based on the facts that: (1) The designation of critical habitat only requires the Federal government to consider whether their actions could adversely modify critical habitat; and (2) the Federal government already was required to consult on actions that may adversely affect the flycatcher and to ensure that its actions did not jeopardize the flycatcher.

For a Federal action to adversely modify critical habitat the action would have to adversely affect the critical habitat's constituent elements or their management in a manner likely to appreciably diminish or preclude the role of that habitat in the recovery of the species. The Service defines jeopardy, which was a pre-existing condition prior to the designation of critical habitat, as to ''engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species.'' The recovery standard is used in the definition of both terms and as a result, the additional protection afforded the flycatcher due to the designation of critical habitat was determined to be negligible.

The court, however, considered why Congress would want an economic analysis performed by the Service when making a decision about designating critical habitat if in fact the designation of critical habitat adds no significant additional protection to a listed species. In the court's mind, ''(b)ecause (the) economic analysis done using the Service's baseline model is rendered essentially without meaning by 50 CFR 402.02, we conclude Congress intended that the Service conduct a full analysis of all of the economic impacts of a critical habitat designation, regardless of whether those impacts are attributable co-extensively to other causes.''

Even though the court's ruling applies only to the designation of critical habitat for the southwestern willow flycatcher, this analysis attempts to comply with the court's instructions by revising the approach to defining baseline conditions within the areas of proposed critical habitat. Specifically, this analysis presents a detailed discussion of existing Federal, State, and local requirements and both current and planned activities within proposed critical habitat that are reasonably expected to occur regardless of whether the area is designated as critical habitat. Only after considering how these activities most likely will be affected given existing conditions, does the analysis estimate how the designation of critical habitat could impact forecasted activities.

This approach to baseline definition employed in the analysis of the designation of critical habitat for the San Bernardino kangaroo rat is similar to that employed in previous approaches, in that the goal is to understand the incremental effects of a designation. However, it does provide more extensive discussion of pre-existing baseline conditions than previous critical habitat economic analyses. Typical economic analyses concentrate mostly on identifying and measuring, to the extent feasible, economic effects most likely to occur because of the action being considered. Baseline conditions, while identified and discussed, are rarely characterized or measured in any detailed manner because by definition, these conditions remain unaffected by the outcome of the decision being contemplated. While the goal of this analysis remains the same as previous critical habitat economic analyses, that is to identify and measure the estimated incremental effects of the proposed rulemaking, the information provided in this analysis concerning baseline conditions is more detailed than that presented in previous studies. The final addendum to this analysis provided further information concerning the baseline and potential incremental effects of the designation of critical habitat for the San Bernardino kangaroo rat.

Summary of Changes From the Proposed Rule

In the development of our final designation of critical habitat for the San Bernardino kangaroo rat we made several significant changes to our proposed designation based on a review of public comments received on the proposed designation and the draft Economic Analysis and a re-evaluation of lands proposed as critical habitat. As discussed in the Methods and Criteria Used To Identify Critical Habitat sections of this final rule, we re-evaluated the lands proposed as critical habitat for the San Bernardino kangaroo rat based on public comment, more recent aerial photography, and additional occurrence information obtained following the publication of the proposal. The refinements to the amount of land determined to be essential for the San Bernardino kangaroo rat and incorporated into this final designation resulted in a net

reduction of approximately 8,938 ha (22,113 ac) lands. The primary changes for this final designation include the following: (1) The removal of the Jurupa Hills and Reche Canyon proposed critical habitat units (units 5 and 6, respectively), and the removal of the San Timoteo Canyon portion of proposed critical habitat unit 1; (2) the removal of the majority of lands within the former Norton Air Force Base from designated critical habitat; (3) a reduction in the lands being designated as critical habitat on the Soboba Tribal Reservation; and (4) a refinement in our mapping methodology.

Based on available data and evaluation of more recent aerial photography, we determined that we did not have sufficient information to indicate that the lands within Jurupa Hills and Reche Canyon proposed as critical habitat units 5 and 6, respectively, and those lands within the San Timoteo Canyon portion of proposed critical habitat unit 1 are essential to the long-term conservation of the San Bernardino kangaroo rat. Each of these areas contains small isolated populations of the San Bernardino kangaroo rat. We believe these areas are not essential due to habitat disturbance and encroachment and the degree of isolation due to urban development. Consequently, these lands were removed from the final designation of critical habitat for the San Bernardino kangaroo rat.

Based on our re-evaluation and refinement during the development of this final rule, we determined that most of the land within the former NAFB was too highly degraded to provide for the conservation of the species and, therefore, was removed from this final designation. Those lands south of the runway and adjacent to the Santa Ana River channel have been determined to be essential to the long-term conservation of the San Bernardino kangaroo rat due to the existing suitable habitat and current populations that occupy this area.

In our proposed critical habitat rule, we indicated that approximately 465 ha (1,150 ac) of lands within the Soboba Band of Luiseño Indians Reservation in western Riverside County were essential for the conservation of the San Bernardino kangaroo rat. In the development of the final critical habitat designation for the San Bernardino kangaroo rat, we re-evaluated these Tribal lands to determine if they were essential to the conservation of the kangaroo rat and whether they should be designated as critical habitat. The result of this analysis and refinement was the reduction of critical habitat on Tribal land to 290 ha (710 ac). Please refer to our response to Comment 18 and the section Government-to-Government Relationship With Tribes for further information pertaining to the inclusion of lands within the Soboba Band of Luiseño Indians Reservation in critical habitat.

Lastly, for the proposed rule, we identified a line around those lands we believed to be essential to the conservation of the San Bernardino kangaroo rat. We then described these essential habitat lines using a 100-meter UTM grid. By using this grid, lands not essential to the conservation of the species were included in critical habitat as a relic of the square grid cell. To better describe these lands we determined to be essential for this final designation, we defined our essential line using UTM coordinates instead of the 100-meter UTM grid. We were able to use the UTM coordinates for the critical habitat designation due to the existence of readily identifiable urban features that defined the edge of the critical habitat. This resulted in a better refinement of the boundaries of critical habitat along the urban interface and a reduction and removal of approximately 2,024 ha (5,000 ac) of lands from the final designation that we determined not to be essential to the conservation of San Bernardino kangaroo rat.

Economic Analysis

Section 4(b)(2) of the Act requires us to designate critical habitat on the basis of the best scientific and commercial information available, and to consider the economic and other relevant impacts of designating a particular area as critical habitat. We may exclude areas from critical habitat upon a determination that the benefits of such exclusions outweigh the benefits of specifying such areas as critical habitat. We cannot exclude such areas from critical habitat when such exclusion will result in the extinction of the species.

Following the publication of the proposed critical habitat designation, a draft Economic Analysis was conducted to estimate the potential economic effect of the proposed designation. The draft analysis was made available for public review on September 4, 2001 (66 FR 46251). We accepted comments on the draft analysis until October 4, 2001. Additionally we held two public hearings on the proposed designation and the draft Economic Analysis on September 20, 2001, in San Bernardino, California.

Our draft Economic Analysis evaluated potential future effects associated with the listing of the San Bernardino kangaroo rat as an endangered species under the Act, as well as any potential effect of the critical habitat designation above and beyond those regulatory and economic impacts associated with listing. To quantify the proportion of total potential economic impacts attributable to the critical habitat designation, the analysis evaluated a ''without critical habitat'' baseline and compared it to a ''with critical habitat'' scenario. The ''without critical habitat'' baseline represented the current and expected economic activity under all modifications prior to the critical habitat designation, including protections afforded the species under Federal and State laws. The difference between the two scenarios measured the net change in economic activity attributable to the designation of critical habitat. The categories of potential costs considered in the analysis included the costs associated with (1) conducting section 7 consultations associated with the listing or with the critical habitat, including technical assistance; (2) modifications to projects, activities, or land uses resulting from the section 7 consultations; (3) uncertainty and public perceptions resulting from the designation of critical habitat; and (4) potential offsetting beneficial costs associated with critical habitat including educational benefits.

The majority of consultations resulting from the critical habitat designation for the San Bernardino kangaroo rat are likely to address land development, road construction or road expansion activities, sand and gravel mining activities, and water management activities. The draft analysis estimated that the critical habitat designation would not result in a significant economic impact, and estimated the potential economic effects due to the designation over a 10-year period ranging between $4.4 to $28.2 million.

Following the close of the comment period on the draft economic analysis, a final addendum was completed which incorporated public comments on the draft analysis and a re-evaluation of the analysis of potential economic effects of the designation. Based on this new analysis, it was determined that there would be the potential for additional consultations and assistance over and above the estimate projected in the draft analysis. Subsequently, the addendum concluded that the designation may result in potential economic effects ranging from between $15.7 to $130.7 million over a 10-year period. The addendum concluded that economic impacts anticipated from the designation of critical habitat for the

San Bernardino kangaroo rat were not significant. Additionally, these values may be an overestimate of the potential economic effects of the designation because the analysis was based on the proposal, and the final critical habitat was reduced by approximately 8,900 ha (22,000 ac), including several units proposed for designation.

A more detailed discussion of our analyses are contained in the Draft Economic Analysis of Proposed Critical Habitat Designation for the San Bernardino kangaroo rat (September 2001) and the Addendum to Economic Analysis of Critical Habitat Designation for the San Bernardino kangaroo rat (March 2002). Both documents are included in the supporting documentation for this rule making and available for inspection at the Carlsbad Fish and Wildlife Office (refer to **ADDRESSES** Section).

Required Determinations

Regulatory Planning and Review

This document is a significant rule and has been reviewed by the Office of Management and Budget (OMB) in accordance with Executive Order 12866.

a. This rule, as designated, will not have an annual economic effect of $100 million or more or adversely affect an economic sector, productivity, jobs, the environment, or other units of government. A cost-benefit and economic analysis therefore is not required. The San Bernardino kangaroo rat was listed as an endangered species in 1998. Since that time, we have conducted ten formal section 7 consultations with other Federal agencies to ensure that their actions would not jeopardize the continued existence of the species.

The areas designated as critical habitat are within the geographic range occupied by the San Bernardino kangaroo rat and are considered predominately occupied, with less than 2.5 percent of the lands designated not known to be currently occupied. Under the Act, critical habitat may not be adversely modified by a Federal agency action; it does not impose any restrictions on non-Federal persons unless they are conducting activities funded or otherwise sponsored or permitted by a Federal agency. Section 7 requires Federal agencies to ensure that they do not jeopardize the continued existence of the species. Based upon our experience with this species and its needs, we conclude that any Federal action or authorized action that could potentially cause adverse modification of designated critical habitat would currently be considered as ''jeopardy'' under the Act. Accordingly, the designation of areas within the geographic range occupied by the San Bernardino kangaroo rat has little, if any, incremental impacts on what actions may or may not be conducted by Federal agencies or non-Federal persons that receive Federal authorization or funding. Non-Federal persons who do not have a Federal ''sponsorship'' of their actions are not restricted by the designation of critical habitat although they continue to be bound by the provisions of the Act concerning ''take'' of the species. The designation of areas as critical habitat where section 7 consultations would not have occurred but for the critical habitat designation may have impacts on what actions may or may not be conducted by Federal agencies or non-Federal persons who receive Federal authorization or funding that are not attributable to the species listing. These impacts were evaluated in our economic analysis (under section 4 of the Act; see Economic Analysis section of this rule).

b. This rule, as designated, will not create inconsistencies with other agencies' actions. As discussed above, Federal agencies have been required to ensure that their actions do not jeopardize the continued existence of the San Bernardino kangaroo rat since the listing in 1998. The prohibition against adverse modification of critical habitat is not expected to impose any significant restrictions in addition to those that now exist in those areas currently known to be occupied by the San Bernardino kangaroo rat, an estimated 97.5 percent of designated critical habitat. Because of the potential for impacts on other Federal agency activities, we will continue to review this action for any inconsistencies with other Federal agency actions.

c. This rule, as designated, will not materially affect entitlements, grants, user fees, loan programs, or the rights and obligations of their recipients. Federal agencies are required to ensure that their activities do not jeopardize the continued existence of the species, and, as discussed above, we do not anticipate that the adverse modification prohibition (resulting from critical habitat designation) will have any incremental effects in areas of occupied habitat.

d. OMB has determined that this rule may raise novel legal or policy issues and, as a result, this rule has undergone OMB review. 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 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 (*i.e.,* 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 to require Federal agencies to provide a statement of the factual basis for certifying that a rule will not have a significant economic effect on a substantial number of small entities. In this rule, we are certifying that the critical habitat designation for the San Bernardino kangaroo rat will not have a significant effect on a substantial number of small entities. The following discussion explains our rationale.

Small entities include small organizations, such as independent non-profit organizations, small governmental jurisdictions, including school boards and city and town governments that serve fewer than 50,000 residents, as well as small businesses. Small businesses include manufacturing and mining concerns with fewer than 500 employees, wholesale trade entities with fewer than 100 employees, retail and service businesses with less than $5 million in annual sales, general and heavy construction businesses with less than $27.5 million in annual business, special trade contractors doing less than $11.5 million in annual business, and agricultural businesses with annual sales less than $750,000. To determine if potential economic impacts to these small entities are significant, we consider the types of activities that might trigger regulatory impacts under this rule as well as the types of project modifications that may result. In general, the term ''significant economic impact'' is meant to apply to a typical small business firm's business operations.

Current activities with Federal involvement that may require consultation include: regulation of activities affecting waters of the United States by the ACOE under section 404 of the Clean Water Act; regulation of water flows, damming, diversion, and channelization by any Federal agencies; regulation of grazing, mining, and recreation by the BLM, Forest Service, or the Service; road construction, maintenance, and right of way designation; regulation of agricultural activities; regulation of airport

improvement activities by the Federal Aviation Administration; hazard mitigation and post-disaster repairs funded by the Federal Emergency Management Agency; construction of communication sites licensed by the Federal Communications Commission; and activities funded by the U.S. Environmental Protection Agency, Department of Energy, or any other Federal agency. In the Economic Analysis for the proposed rule, we found that the proposed designation could potentially impose total economic costs for consultations and modifications to projects to range between $15.7 to $130.7 million dollars over a ten year period.

In determining whether this rule could ''significantly affect a substantial number of small entities,'' the Economic Analysis first determined whether critical habitat could potentially affect a ''substantial number'' of small entities in counties supporting critical habitat areas. While SBREFA does not explicitly define ''substantial number,'' the Small Business Administration, as well as other Federal agencies, have interpreted this to represent an impact on 20 percent or greater of the number of small entities in any industry. Based on the past consultation history of the kangaroo rat, the economic analysis anticipated that the designation of critical habitat could affect small businesses associated with six different industries, including residential, commercial, and industrial development; mining for sand and gravel, airport activities, and water conservation and supply activities.

To be conservative (*i.e.,* more likely overstate impacts than understate them), the economic analysis assumed that a unique company will undertake each of the consultations forecasted in a given year, and so the number of businesses affected is equal to the total annual number of consultations projected in the economic analysis. The number of small business estimated to be impacted from the proposed rule range from less than one percent of commercial/retail development firms to almost eight percent of water conservation and supply firms. Because these estimates are far less than the 20 percent threshold that would be considered ''substantial,'' the analysis concludes that this designation will not affect a substantial number of small entities as a result of the designation of critical habitat for the San Bernardino kangaroo rat. The draft Economic Analysis and final Addendum contain the factual bases for this certification and contain a complete analysis of the potential economic affects of this designation. Copies of these documents are in the supporting record for the rulemaking and are available at the Carlsbad Fish and Wildlife Office (refer to **ADDRESSES** section).

In general, two different mechanisms in section 7 of the Act consultations could lead to additional regulatory requirements. First, if we conclude in a biological opinion, that a proposed action is likely to jeopardize the continued existence of a species or adversely modify its critical habitat, we will make every effort to offer ''reasonable and prudent alternatives.'' Reasonable and prudent alternatives are alternative actions that can be implemented in a manner consistent with the scope of the Federal agency's legal authority and jurisdiction, that are economically and technologically feasible, and that would avoid jeopardizing the continued existence of listed species or destroying or adversely modifying critical habitat. A Federal agency and an applicant may elect to implement a reasonable and prudent alternative associated with a biological opinion that has found jeopardy or adverse modification of critical habitat. An agency or applicant could alternatively choose to seek an exemption from the requirements of the Act or proceed without implementing the reasonable and prudent alternative. However, unless an exemption was obtained, the Federal agency or applicant would be at risk of violating section 7(a)(2) of the Act if it chose to proceed without implementing the reasonable and prudent alternatives. Second, if we find that a proposed action is not likely to jeopardize the continued existence of a listed animal species, we may identify reasonable and prudent measures designed to minimize the amount or extent of take and require the Federal agency or applicant to implement such measures through non-discretionary terms and conditions. We may also identify discretionary conservation recommendations designed to minimize or avoid the adverse effects of a proposed action on listed species or critical habitat, help implement recovery plans, or to develop information that could contribute to the recovery of the species.

Based on our experience with consultations pursuant to section 7 of the Act for all listed species, virtually all projects—including those that, in their initial proposed form, would result in jeopardy or adverse modification determinations—can be implemented successfully with, at most, the adoption of reasonable and prudent alternatives. These measures, by definition, must be economically feasible and within the scope of authority of the Federal agency involved in the consultation. Nonetheless, the economic analysis provided an estimate of the number of small businesses that could experience significant economic impact. The analysis conservatively assumed the unit cost to a private party for participating in a section 7 consultation and any associated project modification was the upper-bound estimate identified in the analysis. Under such an assumption, the analysis concluded that less than two percent of small business could be significantly impacted by the proposed designation.

In summary, we have considered whether this rule could result in significant economic effects on a substantial number of small entities. We have determined, for the above reasons, that it will not affect a substantial number of small entities. Furthermore, we believe that the potential compliance costs for the number of small entities that may be affected by this rule will not be significant. Therefore, we are certifying that the designation of critical habitat for the San Bernardino kangaroo rat will not have a significant economic impact on a substantial number of small entities. A regulatory flexibility analysis is not required.

Small Business Regulatory Enforcement Fairness Act (5 U.S.C. 804(2))

As discussed above, this rule is not a major rule under 5 U.S.C. 804(2), the Small Business Regulatory Enforcement Fairness Act. This final designation of critical habitat: (a) does not have an annual effect on the economy of $100 million; (b) will not cause a major increase in costs or prices for consumers, individual industries, Federal, State, or local government agencies, or geographic regions; and (c) does not have significant adverse effects on competition, employment, investment, productivity, innovation, or the ability of U.S.-based enterprises to compete with foreign-based enterprises. As discussed in the economic analysis, the designation is anticipated to have a total estimated economic effect ranging between $15.7 to $130.7 million over a 10-year period. Assuming that these costs are spread evenly over the period of analysis, annual effects to the economy could range between $1.6 and $13 million. Additionally, these values are very likely to be an overestimate of the potential economic effects of the designation because the economic analysis evaluated potential impacts associated with the area proposed as critical habitat and this area has been significantly reduced in this final rule.

Proposed and final rules designating critical habitat for listed species are issued under the authority of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*). Competition, employment, investment, productivity, innovation, or the ability of U.S.-based enterprises to compete with foreign-based enterprises are not affected by this action and will not be affected by the final rule designating critical habitat for this species. Therefore, we anticipate that this final rule will not place significant additional burdens on any entity.

Executive Order 13211

On May 18, 2001, the President issued an Executive Order (E.O. 13211) which applies to regulations that significantly affect energy supply, distribution, and use. Executive Order 13211 requires agencies to prepare Statements of Energy Effects when undertaking certain actions. The primary land uses within designated critical habitat include urban and agricultural development, water management and conservation facilities, and sand and gravel mining operations. Significant energy production, supply, and distribution facilities are not included within designated critical habitat. Therefore, this action does not represent a significant action effecting energy production, supply, and distribution facilities; and no Statement of Energy Effects is required. Additionally, the area designated as critical habitat is predominately considered to be occupied by the listed species, with only an estimated 2.5 percent of the designation not known to be currently occupied. Therefore, any consultation required pursuant to section 7 of the Act by a Federal agency undertaking an action in this area would likely be triggered by the presence of the listed species and not solely by this designation of critical habitat.

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

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501 *et seq.*):

a. This rule, as designated, will not ''significantly or uniquely'' affect small governments. A Small Government Agency Plan is not required. Small governments will be affected only to the extent that any programs having Federal funds, permits, or other authorized activities must ensure that their actions will not adversely affect the critical habitat. However, as discussed above, these actions are currently subject to equivalent restrictions through the listing protections of the species, and no further restrictions are anticipated in areas of occupied designated critical habitat.

b. This rule, will not produce a Federal mandate of $100 million or greater in any year, that is, it is not a ''significant regulatory action'' under the Unfunded Mandates Reform Act. The designation of critical habitat imposes no obligations on State or local governments.

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 13,485 ha (33,295 ac) of lands in Riverside and San Bernardino counties, California as critical habitat for the San Bernardino kangaroo rat. The takings implications assessment concludes that this final designation of critical habitat does not pose significant takings implications for lands within or affected by the designation of critical habitat for the San Bernardino kangaroo rat.

Federalism

In accordance with Executive Order 13132, this rule does not have significant Federalism effects. A Federalism assessment is not required. We will coordinate the designation of critical habitat for the San Bernardino kangaroo rat with the appropriate State agencies. The designation of critical habitat in areas currently occupied by the San Bernardino kangaroo rat imposes no additional restrictions to those currently in place and, therefore, has little significant incremental impact on State and local governments and their activities. The designation may have some benefit to these governments in that the areas essential to the conservation of the species are more clearly defined, and the primary constituent elements of the habitat necessary to the survival and conservation of the species 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 consultations under section 7 of the Act to occur).

Civil Justice Reform

In accordance with Executive Order 12988, the Office of the Solicitor has determined that the rule does not unduly burden the judicial system and meets the requirements of sections 3(a) and 3(b)(2) of the Order. We designate critical habitat in accordance with the provisions of the Act. The rule uses standard property descriptions and identifies the primary constituent elements within the designated units to assist the public in understanding the habitat and conservation 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 the Office of Management and Budget under the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*). This rule will not impose new record-keeping 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

We have determined that we do not need to prepare an Environmental Assessment and/or an Environmental Impact Statement as defined by the National Environmental Policy Act of 1969 in connection with regulations adopted pursuant to section 4(a) of the Endangered Species Act as amended We published a notice outlining our reasons for this determination on October 25, 1983 (48 FR 49244). This final designation does not constitute a major Federal action significantly affecting the quality of the human environment.

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 512 DM 2, we are coordinating with federally recognized Tribes on a Government-to-Government basis. Further, Secretarial Order 3206, ''American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act'' (1997) provides that critical habitat should not be designated in an area that may impact Tribal trust resources unless it is determined to be essential to the conservation of a listed species. The Secretarial Order further states that in designating critical habitat, ''the Service shall evaluate and document the extent to which the conservation needs of a listed species can be achieved by limiting the designation to other lands''.

In our proposed critical habitat rule, we indicated that approximately 465 ha (1,150 ac) of lands within the Soboba

Band of Luisẽno Indians Reservation in western Riverside County were essential for the conservation of the San Bernardino kangaroo rat. In the development of the final critical habitat designation for the San Bernardino kangaroo rat, we re-evaluated these Tribal lands to determine if they were essential to the conservation of the kangaroo rat and whether they should be designated as critical habitat. Based on distribution information for the San Bernardino kangaroo rat in the San Jacinto Wash, the continuity of kangaroo rat habitat extending up the tributaries adjacent to occupied habitat, and slope, vegetation, and disturbance information; we have re-defined the area designated as critical habitat on the Soboba Band of Luisẽno Indians Reservation. Additionally, we refined the 100 meter grid line used in the proposal to the essential critical habitat line along the edges of the two washes and the main portion of the river on Tribal land and removed from the designation a non-essential disturbed area on the western edge of Tribal lands on the north side of the river that is proposed for economic development. The result of this analysis and refinement was the reduction of critical habitat on Tribal land to 290 ha (710 ac). The remaining area on Tribal lands is essential to the conservation of the San Bernardino kangaroo rat because it supports several populations and provides continuity between two adjacent areas of essential habitat.

Currently the Soboba Band of LuisẽNo Indians does not have a resource management plan which provides protection or conservation for the San Bernardino kangaroo rat and its' habitat. We are committed to maintaining a positive working relationship with the Tribe and will continue our attempts to work with them on developing a resource management plan for the Reservation including conservation measures for the kangaroo rat. However, due to time constraints for completing this final rule, the lack of an existing resource management plan covering the San Bernardino kangaroo rat, we were required to finalize the designation based on our own analysis of the relative importance of the lands within the Soboba Band of Luisẽno Indians Reservation for the conservation of the San Bernardino kangaroo rat.

References Cited

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

Authors

The primary authors of this designation are Douglas Krofta and Mark A. Elvin , Carlsbad Fish and Wildlife Office (see **ADDRESSES** section).

List of Subjects in 50 CFR Part 17

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

Regulation Promulgation

Accordingly, we 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 § 17.11(h) revise the entry for ''Kangaroo rat, San Bernardino Merriam's'' under ''MAMMALS'' to read as follows:

§ 17.11 Endangered and threatened wildlife.

* * * * *

(h) * * *

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific Name						
MAMMALS							
*	*	*	*	*	*		*
Kangaroo rat, San Bernardino Merriam's..	*Dipodomys merriami parvus*.	U.S.A., CA	Entire	E	632E, 645	17.95(a)	NA
*	*	*	*	*	*		*

3. Amend § 17.95(a) by adding critical habitat for the San Bernardino kangaroo rat (*Dipodomys merriami parvus*) in the same alphabetical order as this species occurs in § 17.11 (h) 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) Within these areas, the primary constituent elements for the San Bernardino kangaroo rat are those habitat components that are essential for the primary biological needs of the species. Based on our current knowledge of this species, the primary constituent elements include:

(i) Soil series consisting predominantly of sand, loamy sand, sandy loam, or loam;

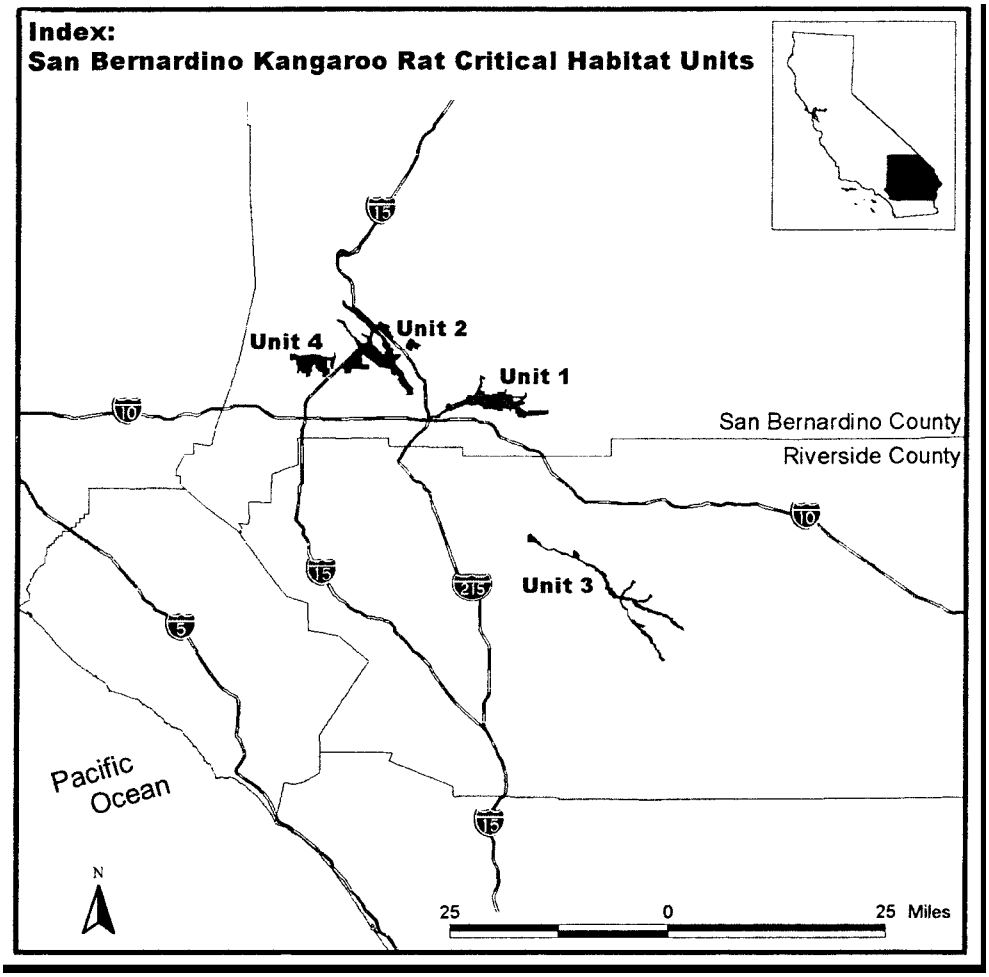
(ii) Alluvial sage scrub and associated vegetation, such as coastal sage scrub and chamise chaparral, with a moderately open canopy.

(iii) River, creek, stream, and wash channels; alluvial fans; floodplains; floodplain benches and terraces; and historic braided channels that are subject to dynamic geomorphological and hydrological processes typical of fluvial systems within the historical range of the San Bernardino kangaroo rat. These areas may include a mosaic of suitable and unsuitable soils and vegetation that either (A) occur at a scale smaller than the home range of the animal, or (B) form a series of core areas and linkages between them.

(iv) Upland areas proximal to floodplains with suitable habitat (e.g., floodplains that support the soils, vegetation, or geomorphological, hydrological and aeolian processes essential to this species). These areas are essential due to their geographic proximity to suitable habitat and the functions they serve during flooding events. These areas may include marginal habitats such as agricultural lands that are disced annually, out-of-production vineyards, margins of orchards, areas of active or inactive industrial or resource extraction activities, and urban/wildland interfaces.

(3) Existing features and structures, such as buildings, roads, railroads, airports, other paved areas, lawns, and other urban landscaped areas, do not contain one or more of the primary constituent elements. Federal actions limited to those areas, therefore, would not trigger a consultation under section 7 of the Act unless they affect the species and/or primary constituent elements in adjacent critical habitat.

(4) Critical Habitat Map Units-Index Map Follows.



(5) Unit 1: Santa Ana River and Wash, San Bernardino County, California

(i) From USGS 1:24,000 quadrangle maps Harrison Mountain (1980), Yucaipa (1988), Redlands (1980), and San Bernardino South (1980), California, lands in the Santa Ana Wash bounded by the following Universal Transverse Mercator (UTM) North American Datum 1927 (NAD27) coordinates (E, N): 482376, 3776863; 482520, 3777020; 482425, 3777267; 482403, 3777426; 482590, 3777477; 482714, 3777417; 482755, 3777375; 482793, 3777315; 482847, 3777277; 482942, 3777261; 482977, 3777201; 483050, 3777175; 483142, 3777191; 483238, 3777159; 483282, 3777128; 483285, 3777023; 483257, 3777023; 483250, 3776778; 483168, 3776763; 483088, 3776797; 483003, 3776807; 482965, 3776855; 482885, 3777007; 482841, 3777032; 482603, 3777036; 482552, 3776943; 482558, 3776715; 482692, 3776286; 482708, 3776201; 482717, 3775426; 482568, 3775426; 482435, 3775170; 482428, 3774953; 482444, 3774750; 482574, 3774556; 483247, 3774550; 483244, 3773978; 484038, 3773981; 484038, 3773734; 484746, 3773730; 484752, 3774140; 485628, 3774128; 485628, 3774419; 485787, 3774423; 485787, 3774391; 486009, 3774391; 486006, 3774492; 486073, 3774489; 486298, 3774362; 486270, 3774286; 486222, 3774267; 486149, 3774267; 486108, 3774238; 486079, 3774194; 486076, 3774149; 486197, 3774162; 486463, 3774356; 486717, 3774438; 486873, 3774496; 486994, 3774578; 487038, 3774715; 487044, 3774848; 487022, 3774953; 486994, 3774988; 487159, 3774981; 487194, 3774889; 487244, 3774788; 487191, 3774543; 487111, 3774435; 486879, 3774229; 486848, 3774127; 488140, 3773892; 488251, 3773835; 488324, 3773775; 488394, 3773680; 488467, 3773622; 488546, 3773578; 488649, 3773548; 488651, 3773549; 490156, 3773511; 490219, 3773476; 490121, 3773435; 490019, 3773387; 489994, 3773356; 489896, 3773311; 489778, 3773356; 489730, 3773403; 488597, 3773435; 488378, 3773286; 488384, 3773257; 488356, 3773124; 488499, 3772708; 488645, 3772622; 489184, 3772616; 489762, 3772965; 489816, 3773035; 490029, 3773124; 490134, 3773086; 490327, 3773191; 490324, 3773372; 490296, 3773432; 490264, 3773480; 490248, 3773495; 490334, 3773572; 490429, 3773562; 490585, 3773657; 490769, 3773784; 490804, 3773934; 490826, 3774080; 490832, 3774172; 490804, 3774229; 490762, 3774267; 490734, 3774330; 490937, 3774334; 490978, 3774105; 490940, 3774038; 490943, 3773915;

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473395, 3769889; 473706, 3769885; 474348, 3769962; 474392, 3770019; 474938, 3770327; 475043, 3770498; 475132, 3770590; 475367, 3770765; 475497, 3770873; 475789, 3771032; 475980, 3771136; 476123, 3771187; 476147, 3771188; 476151, 3771273; 476132, 3771397; 476151, 3772200; 476373, 3772200; 476373, 3771873; 476608, 3771752; 476621, 3771686; 476615, 3771622; 476631, 3771502; 476866, 3771508; 476869, 3771692; 477113, 3771692; 477062, 3771508; 477602, 3771505; 477609, 3771667; 477742, 3771759; 477777, 3771797; 478307, 3772086; 478291, 3772156; 478320, 3772203; 477942, 3772197; 477732, 3772137; 477310, 3771968; 477224, 3771902; 476910, 3771787; 476786, 3771768; 476697, 3771787; 476561, 3772054; 476520, 3772130; 476475, 3772162; 476415, 3772197; 476427, 3772210; 476805, 3772219; 476805, 3772140; 476831, 3772105; 476958, 3772079; 476983, 3772019; 478345, 3772489; 478421, 3772356; 478466, 3772375; 478399, 3772508; 479386, 3772864; 479386, 3772865; 479860, 3773022; 479841, 3773105; 479901, 3773184; 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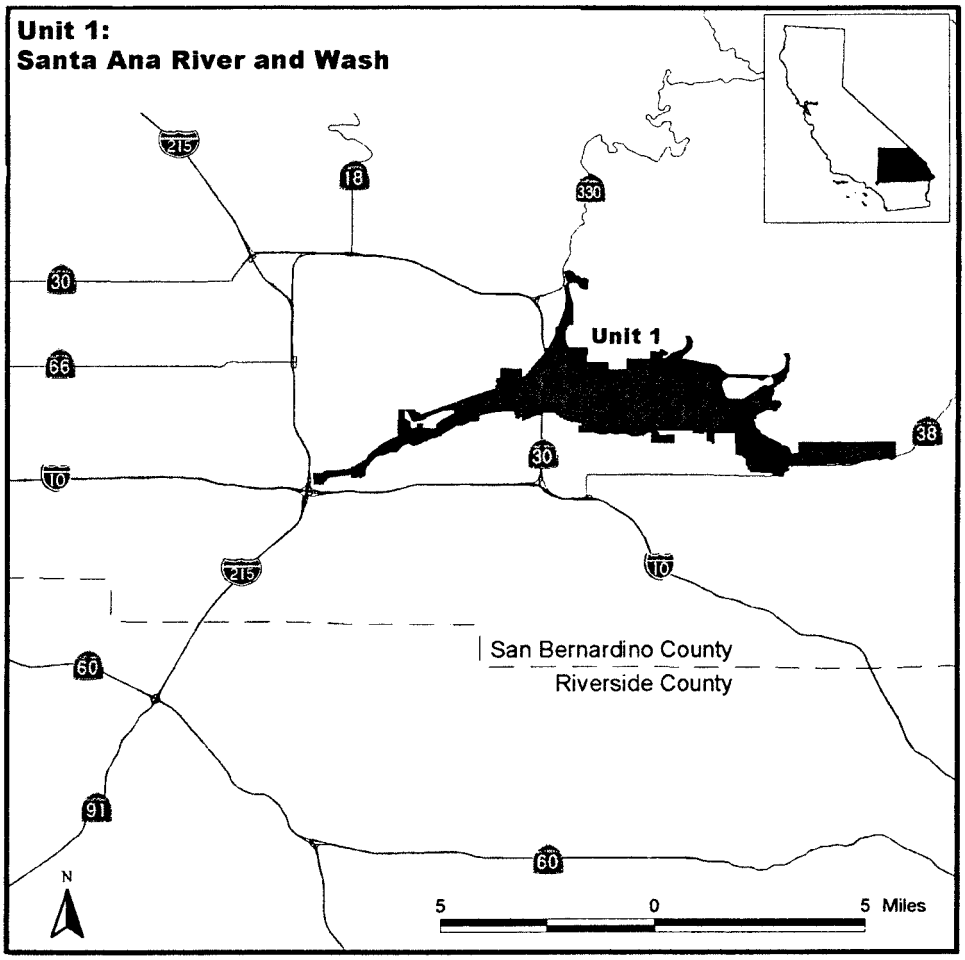
(ii) Map Unit 1 follows.



(6) Unit 2: Lytle and Cajon Creeks, San Bernardino County, California

(i) From USGS 1:24,000 quadrangle maps San Bernardino South (1980), San Bernardino North (1988), Devore (1988), and Cajon (1988), California. Subunit 2a: Land bounded by the following UTM NAD27 coordinates (E,N): 459113, 3789417; 459304, 3789431; 459431, 3789507; 459586, 3789387; 459850, 3789253; 459989, 3788993; 460389, 3788590; 460586, 3788491; 460786, 3788294; 460888, 3788218; 461088, 3788082; 461196, 3787990; 461826, 3787406; 461831, 3787409; 461999, 3787259; 462221, 3787075; 462412, 3786923; 462533, 3786856; 462701, 3786742; 463028, 3786459; 463101, 3786027; 463079, 3785989; 463291, 3785821; 463555, 3785580; 463799, 3785084; 463907, 3784954; 464007, 3784892; 464444, 3784653; 464577, 3784557; 464717, 3784399; 464780, 3784281; 464898, 3783910; 464974, 3783770; 465104, 3783608; 465231, 3783510; 465565, 3783252; 465473, 3782871; 465504, 3782792; 465806, 3782557; 465850, 3782579; 466040, 3782336; 466174, 3782446; 465946, 3781582; 466523, 3781300; 466555, 3781373; 467520, 3781351; 467581, 3781265; 466800, 3780408; 466500, 3780067; 466581, 3779690; 466679, 3779392; 466733, 3779382; 466790, 3779293; 466882, 3779236; 466882, 3779125; 466917, 3779115; 466914, 3779058; 466978, 3779039; 466987, 3778992; 467139, 3778992; 467149, 3778738; 467387, 3778725; 467597, 3778496; 467752, 3778493; 467759, 3778339; 468060, 3778026; 468174, 3777982; 468181, 3777512; 468387, 3776995; 468476, 3776804; 469061, 3775917; 469184, 3775791; 469235, 3775769; 469775, 3775232; 469756, 3775201; 469660, 3775245; 469705, 3775074; 469752, 3775026; 469752, 3774632; 469781, 3774505; 469787, 3774296; 469822, 3774175; 469857, 3774172; 469857, 3774035; 469787, 3774020; 469711, 3773972; 469619, 3773883; 469492, 3773835; 469371, 3773845; 469206, 3773858; 469051, 3773861; 468676, 3773864; 468721, 3773959; 468778, 3774035; 468876, 3774175; 468924, 3774286; 468806, 3774512; 468736, 3774620; 468711, 3774712; 468609, 3774909; 468524, 3775067; 468524, 3775107; 468432, 3775140; 468244, 3775290; 468111, 3775410; 468086, 3775483; 467927, 3775480; 467822, 3775620; 467822, 3775759; 467511, 3776109; 467409, 3776210; 467298, 3776293; 467279, 3776468; 467219, 3776566; 467139, 3776652; 467130, 3776922; 467060, 3777055; 467076, 3777088; 467720, 3777090; 466571, 3777823; 466444, 3777664; 466492, 3777566; 466324, 3777539; 466333, 3777480; 466165, 3777626; 466019, 3777741; 465958, 3777861; 465860, 3777918; 465774, 3777982; 465730, 3778071; 465777, 3778103; 465920, 3777985; 465955, 3777979; 465971, 3777963; 466012, 3777938; 466035, 3777950; 466038, 3777985; 466006, 3778058; 465755, 3778449; 465727, 3778442; 465688, 3778465; 465669, 3778519; 465685, 3778550; 465787, 3778512; 465930, 3778449; 466041, 3778382; 466139, 3778315; 466254, 3778246; 466311, 3778223; 466349, 3778312; 466416, 3778239; 466447, 3778220; 466374, 3778315; 466295, 3778407; 466190, 3778487; 465888, 3778630; 465644, 3778734; 465406, 3778830; 465269, 3778858; 465158, 3778852; 464914, 3778785; 464831, 3778938; 464723,

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457519, 3786046; 457459, 3786085; 457440, 3786227; 457392, 3786227; 457319, 3786313; 457297, 3786367; 457173, 3786424; 457110, 3786510; 456999, 3786574; 456995, 3786669; 456980, 3786786; 456891, 3786888; 456865, 3787028; 456786, 3787082; 456675, 3787170; 456633, 3787256; 456525, 3787339; 456478, 3787399; 456392, 3787370; 456208, 3787466; 455938, 3787488; 455865, 3787456; 455738, 3787612; 455671, 3787634; 455525, 3787713; 455640, 3787815; 455754, 3787847; 456059, 3787764; 456157, 3787704; 456332, 3787653; 456472, 3787567; 456570, 3787590; 456754, 3787586; 456935, 3787523; 457014, 3787466; 457065, 3787351; 457129, 3787158; 457167, 3787018; 457164, 3786910; 457136, 3786794; 457237, 3786701; 457192, 3786647; 457205, 3786564; 457411, 3786459; 457576, 3786269; 457586, 3786132; 457640, 3786034; 457767, 3785929; 457926, 3785843; 458059, 3785678; 458091, 3785596; 458043, 3785485; 458097, 3785377; 458100, 3785243; 458208, 3785065; 458294, 3784980; 458361, 3784916; 458450, 3784888; 458523, 3784846; 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(ii) Subunit 2b: Land bounded by the following UTM NAD27 coordinates (E, N): 465795, 3784148; 464554, 3785327; 463276, 3786555; 463400, 3786918; 463325, 3786939; 463416, 3787252; 463416, 3787310; 463445, 3787388; 463849, 3787384; 463804, 3787314; 463869, 3787268; 463948, 3787260; 464187, 3787194; 464389, 3786988; 464385, 3786901; 464389, 3786815; 464286, 3786695; 464298, 3786638; 464381, 3786605; 464488, 3786695; 464541, 3786811; 464438, 3786856; 464541, 3786984; 464673, 3786984; 464682, 3786889; 465081, 3786885; 465090, 3786786; 465288, 3786691; 465490, 3786592; 465461, 3786559; 465283, 3786242; 465292, 3786102; 465263, 3785962; 465366, 3785891; 465292, 3785702; 465527, 3785558; 465572, 3785652; 465704, 3785586; 465626, 3785166; 465799, 3784939; 465997, 3784778; 466128, 3784700; 465906, 3784280; 465881, 3784300; returning to 465795, 3784148.

(iii) Subunit 2c: Land bounded by the following UTM NAD27 coordinates (E, N): 469615, 3782014; 469536, 3782017; 469485, 3782090; 469415, 3782141; 469345, 3782214; 469298, 3782239; 469263, 3782293; 469193, 3782309; 469117, 3782335; 469025, 3782325; 468942, 3782370; 468844, 3782401; 468812, 3782417; 468777, 3782376; 468625, 3782490; 468564, 3782643; 468548, 3783024; 468558, 3783141; 468609, 3783195; 468609, 3783281; 468723, 3783446; 468859, 3783671; 468910, 3783700; 468913, 3783789; 468936, 3783881; 469012, 3783894; 469021, 3784090; 469107, 3784087; 469209, 3784198; 469231, 3784284; 469599, 3784284; 469625, 3784173; 469901, 3783989; 469980, 3783881; 469898, 3783811; 469968, 3783735; 470009, 3783773; 470187, 3783732; 470209, 3783662; 470295, 3783646;

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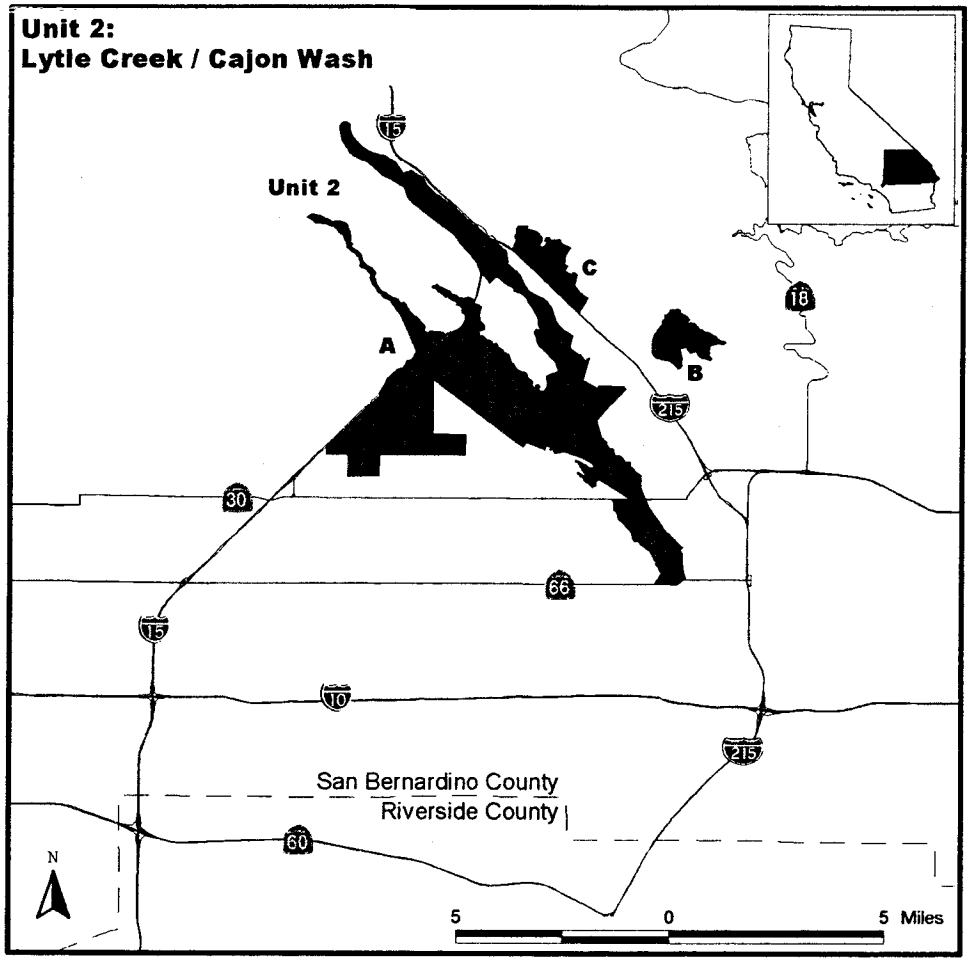
(iv) Map Unit 2 follows.



(7) Unit 3: San Jacinto River and Bautista Creek, Riverside County, California.

(i) From USGS quadrangle maps Blackburn Canyon (1988), Hemet (1979), Lake Fulmor (1988), San Jacinto (1979), and Lakeview (1979), California, land bounded by the following UTM NAD27 coordinates (E, N): 493757, 3745718; 494287, 3745394; 494490, 3745290; 494890, 3745061; 495084, 3744988; 495258, 3744978; 495389, 3744997; 495671, 3745096; 495938, 3745159; 496074, 3745175; 496284, 3745159; 496494, 3745077; 496601, 3744994; 496605, 3744994; 496884, 3744791; 497078, 3744689; 497287, 3744588; 497468, 3744524; 498024, 3744420; 498386, 3744293; 498541, 3744264; 499291, 3743826; 499484, 3743673; 499767, 3743564; 499780, 3744556; 499840, 3744728; 499846, 3744832; 499980, 3744820; 500081, 3744769; 500189, 3744693; 500278, 3744610; 500389, 3744572; 500564, 3744359; 500722, 3744178; 500872, 3743931; 500811, 3743943; 500745, 3743924; 500716, 3743762; 500751, 3743600; 500840, 3743489; 500789, 3743419; 500735, 3743213; 501688, 3742689; 502148, 3742442; 502262, 3742356; 502402, 3742293; 502415, 3742359; 502551, 3742273; 502650, 3742257; 502824, 3742232; 502932, 3742194; 503088, 3742086; 503164, 3742197; 503285, 3742095; 503358, 3742061; 503443, 3742073; 503548, 3741994; 503650, 3741956; 503758, 3741788; 503875, 3741689; 503964, 3741651; 503967, 3741594; 504028, 3741553; 504155, 3741530; 504171, 3741489; 504218, 3741467; 504275, 3741407; 504282, 3741302; 504666, 3741140; 504742, 3741076; 504872, 3740959; 505126, 3740886; 505282, 3740778; 505475, 3740676; 505522, 3740595; 505529, 3740594; 505612, 3740521; 505701, 3740400; 505853, 3740261; 505888, 3740191; 505920, 3740064; 505710, 3739854; 505787, 3739594; 505891, 3739286; 505971, 3739076; 506107, 3739054; 506145, 3738987; 506250, 3738876; 506247, 3738686;

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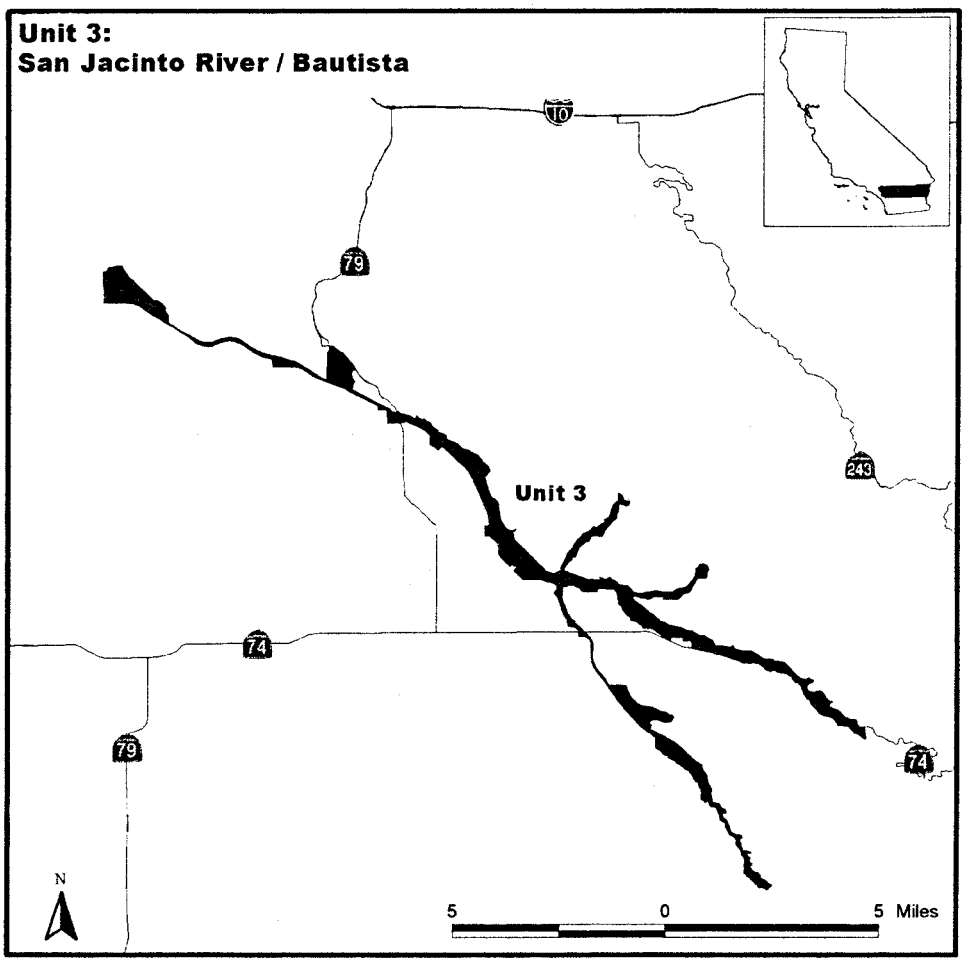
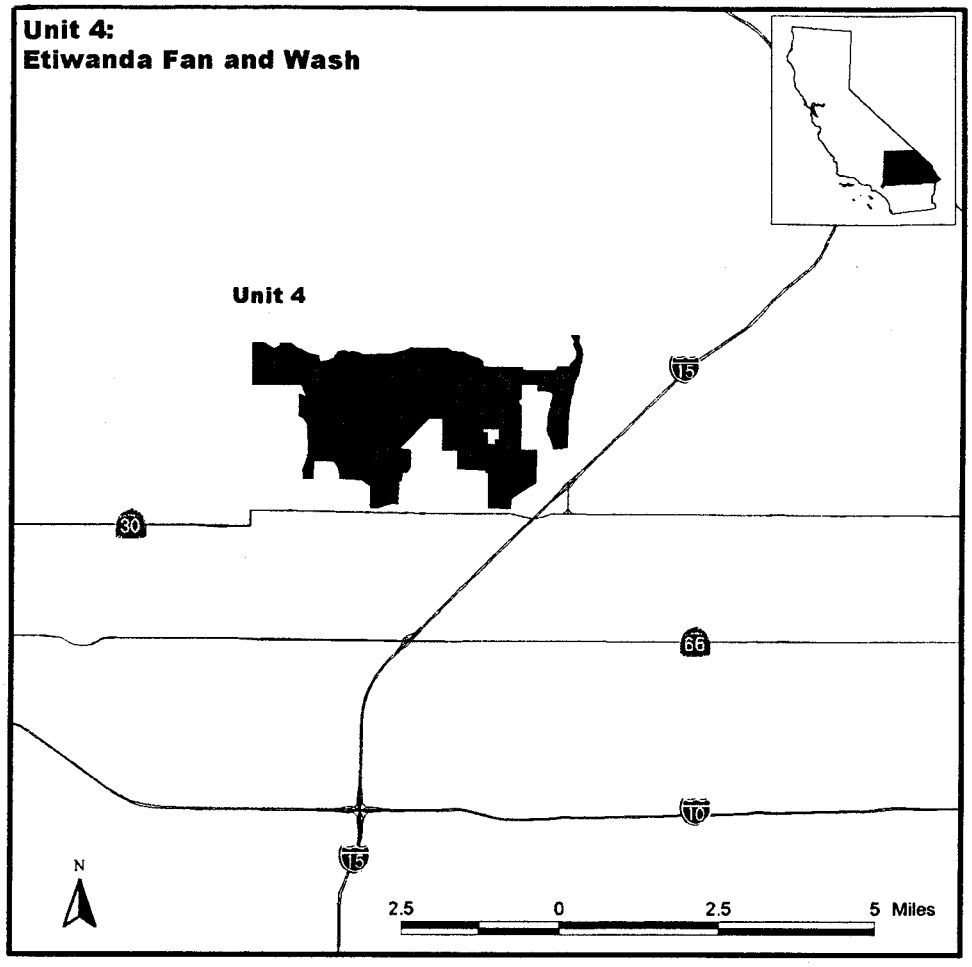
(ii) Map Unit 3 follows.



(8) Unit 4: Etiwanda Alluvial Fan and Wash, San Bernardino County, California

(i) From USGS 1:24,000 quadrangle maps Devore (1988) and Cucamonga Peak (1988), California, land bounded by the following UTM NAD27 coordinates (E, N): 449195, 3781261; 449359, 3781273; 449455, 3781238; 449550, 3781270; 449715, 3781238; 449785, 3781184; 450509, 3781194; 450909, 3781295; 451007, 3781362; 451963, 3781353; 452099, 3781270; 452376, 3781251; 452490, 3781191; 452788, 3781092; 452884, 3781003; 452896, 3780864; 453004, 3780860; 453881, 3780857; 453877, 3780816; 453988, 3780791; 454706, 3780785; 454757, 3780876; 455017, 3780886; 455217, 3781099; 455224, 3781251; 455150, 3781432; 455166, 3781559; 455081, 3781657; 455090, 3781683; 455281, 3781676; 455281, 3781483; 455344, 3781368; 455360, 3781273; 455376, 3781222; 455366, 3781022; 455347, 3781003; 455312, 3780905; 455290, 3780800; 455281, 3780689; 455189, 3780502; 455116, 3780140; 455087, 3780101; 455081, 3779987; 455052, 3779813; 455024, 3779419; 455008, 3778819; 454931, 3778809; 454865, 3778781; 454801, 3778797; 454757, 3778778; 454719, 3778797; 454671, 3778787; 454608, 3779009; 454516, 3779203; 454487, 3779282; 454509, 3779403; 454516, 3779600; 454652, 3780171; 454614, 3780232; 454446, 3780263; 454271, 3780270; 454271, 3780432; 453852, 3780435; 453861, 3780060; 453782, 3780003; 453855, 3779898; 453858, 3778752; 454255, 3778743; 454243, 3777913; 453611, 3777517; 453601, 3777263; 453046, 3777273; 453033, 3778181; 452957, 3778181; 452953, 3778244; 452242, 3778266; 452242, 3778746; 451860, 3778746; 451852, 3779565; 451509, 3779568; 450763, 3778822; 450763, 3778781; 451033, 3778755; 451029, 3778295; 450934, 3778171; 450807, 3778168; 450791, 3777962; 450734, 3777958; 450718, 3777362; 450629, 3777396; 450553, 3777396; 450229, 3777273; 450010, 3777273; 450017, 3777819; 449804, 3777987; 449244, 3778007; 449242, 3778120; 449194, 3778305; 449089, 3778466; 448581, 3778463; 448578, 3778016; 448334, 3778009; 448331, 3778174; 448299, 3778197; 448432, 3778555; 448445, 3778701; 448435, 3779371; 448385, 3779476; 448327, 3779549; 448210, 3779613; 448207, 3780168; 448397, 3780102; 448356, 3780232; 448283, 3780368; 448242, 3780419; 447032, 3780410; 447035, 3781480; 447305, 3781483; 447477, 3781394; 447562, 3781340; 447613, 3781340; 447737, 3781422; 447743, 3781467; 448007, 3781473; 448096, 3781384; 448489, 3781181; 448705, 3781156; 448731, 3780994; 448893, 3781003; 449074, 3781102; returning to 449195, 3781261; excluding land bounded by 452900, 3779300; 453300, 3779300; 453300, 3779000; 453200, 3779000; 453200, 3778900; 453000, 3778900; 453000, 3779200; 452900, 3779200; 452900, 3779300.

(ii) Map Unit 4 follows.



Dated: April 12, 2002.

Craig Manson,

Assistant Secretary for Fish and Wildlife and Parks.

[FR Doc. 02–9596 Filed 4–22–02; 8:45 am]

BILLING CODE 4310–55–P