



Federal Register

**Tuesday,
October 24, 2000**

Part II

Department of the Interior

Fish and Wildlife Service

50 CFR Part 17

**Endangered and Threatened Wildlife and
Plants; Final Determination of Critical
Habitat for the Coastal California
Gnatcatcher; Final Rule**

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

RIN 1018-AF32

Endangered and Threatened Wildlife and Plants; Final Determination of Critical Habitat for the Coastal California Gnatcatcher

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), designate critical habitat for the coastal California gnatcatcher pursuant to the Endangered Species Act of 1973, as amended (Act). A total of approximately 207,890 hectares (513,650 acres) in Los Angeles, Orange, Riverside, San Bernardino, and San Diego Counties, California are designated as critical habitat for the coastal California gnatcatcher.

Critical habitat identifies specific areas that are essential to the conservation of a listed species and, with respect to areas within the geographic range occupied by the species, that may require special management considerations or protection. The primary constituent elements for the coastal California gnatcatcher are those habitat components that are essential for the primary biological needs of foraging, nesting, rearing of young, intra-specific communication, roosting, dispersal, genetic exchange, or sheltering. All areas designated as critical habitat for the coastal California gnatcatcher contain one or more of the primary constituent elements.

We have not designated critical habitat on lands covered by an existing, legally operative, incidental take permit for the coastal California gnatcatcher under section 10(a)(1)(B) of the Act. Subsection 4(b)(2) of the Act allows us to exclude from critical habitat designation 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 the benefits of excluding HCPs from the critical habitat designation for the coastal California gnatcatcher will outweigh the benefits of including them.

In areas where HCPs have not yet had permits issued, we have designated critical habitat for lands encompassing essential core populations of coastal California gnatcatchers and linkage areas that may require special

management considerations or protections.

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. We solicited data and comments from the public on all aspects of the proposed rule and economic analysis.

EFFECTIVE DATE: November 24, 2000.

FOR FURTHER INFORMATION CONTACT: Ken Berg, Field Supervisor, Carlsbad Fish and Wildlife Office, at the above address (telephone: 760/431-9440; facsimile 760/431-9624).

SUPPLEMENTARY INFORMATION:**Background**

The insectivorous (insect-eating) coastal California gnatcatcher (*Polioptila californica californica*) is a small (length 11 centimeters (4.5 inches), weight 6 grams (0.2 ounces)), long-tailed member of the old-world warbler and gnatcatcher family Sylviidae (American Ornithologist Union 1998). The bird's plumage is dark blue-gray above and grayish-white below. The tail is mostly black above and below. The male has a distinctive black cap which is absent during the winter. Both sexes have a distinctive white eye-ring.

We listed the coastal California gnatcatcher as one of three subspecies of the California gnatcatcher (*Polioptila californica*). A recent scientific paper by Robert Zink, George Barrowclough, Jonathan Atwood, and Rachelle Blackwell-Rago presents results of genetic research on the California gnatcatcher and calls into question the status of the coastal California gnatcatcher as a subspecies. The Service considers this a significant paper by noted scientists in the field, and it merits serious consideration. However, under the Endangered Species Act, the Service is required to designate critical habitat, where prudent and determinable, for listed species. Since the coastal California gnatcatcher is listed under the Act, the Service is obliged to designate critical habitat for the entity listed, and the new genetic study does not provide information that would remove that obligation.

This subspecies is restricted to coastal southern California and northwestern Baja California, Mexico, from Ventura and San Bernardino Counties, California, south to approximately El Rosario, Mexico, at about 30° north latitude (American Ornithologists' Union 1957, Atwood 1991, Banks and

Gardner 1992, Garrett and Dunn 1981). An evaluation of the historic range of the coastal California gnatcatcher indicates that about 41 percent of its latitudinal distribution is within the United States and 59 percent within Baja California, Mexico (Atwood 1990). A more detailed analysis, based on elevational limits associated with gnatcatcher locality records, reveals that a significant portion (65 to 70 percent) of the coastal California gnatcatcher's historic range may have been located in southern California rather than Baja California (Atwood 1992). The analysis further suggests that the species occurs below about 912 meters (m) (3,000 feet (ft)) in elevation. Of the approximately 8,700 historic or current locations used in the analysis for this rule, more than 99 percent occurred below 770 m (2,500 ft).

The coastal California gnatcatcher (hereafter referred to as the gnatcatcher) was considered locally common in the mid-1940s, although a decline in the extent of its habitat was noted (Grinnell and Miller 1944). By the 1960s, this species had apparently experienced a significant population decline in the United States that has been attributed to widespread destruction of its habitat. Pyle and Small (1961) reported that "the California subspecies is very rare, and lack of recent records of this race compared with older records may indicate a drastic reduction in population." Atwood (1980) estimated that no more than 1,000 to 1,500 pairs remained in the United States. He also noted that remnant portions of its habitat were highly fragmented with nearly all being bordered on at least one side by rapidly expanding urban centers. Subsequent reviews of gnatcatcher status by Garrett and Dunn (1981) and Unitt (1984) paralleled the findings of Atwood (1980). The species was listed as threatened under the Act in March 1993, due to habitat loss and fragmentation resulting from urban and agricultural development, and the synergistic (combined) effects of cowbird parasitism and predation (58 FR 16742).

The gnatcatcher typically occurs in or near sage scrub habitat, which is a broad category of vegetation that includes the following plant communities as classified by Holland (1986): Venturan coastal sage scrub, Diegan coastal sage scrub, maritime succulent scrub, Riversidean sage scrub, Riversidean alluvial fan (areas created when stream sediments are deposited) scrub, southern coastal bluff scrub, and coastal sage-chaparral scrub. Based upon dominant species, these communities have been further divided into series

such as black sage, brittlebush, California buckwheat, California buckwheat-white sage, California encelia, California sagebrush, California sagebrush-black sage, California sagebrush-California buckwheat, coast prickly-pear, mixed sage, purple sage, scalebroom, and white sage (Sawyer and Keeler-Wolf 1995).

The majority of plant species found in sage scrub habitat are low-growing, drought-tolerant shrubs and sub-shrubs. Generally speaking, most types of sage scrub are dominated by one or more of the following: California sagebrush (*Artemisia californica*), buckwheats (*Eriogonum fasciculatum* and *E. cinereum*), encelias (*Encelia californica* and *E. farinosa*), and various sages (commonly *Salvia mellifera*, *S. apiana*, and *S. leucophylla*). Sage scrub often occurs in a patchy, or mosaic, distribution pattern throughout the range of the gnatcatcher.

Gnatcatchers also use chaparral (shrubby plants adapted to dry summers and moist winters), grassland, and riparian (relating to a natural course of water such as a drainage or river) habitats where they occur in proximity to sage scrub. These non-sage scrub habitats are used for dispersal and foraging (Atwood *et al.* 1998; Campbell *et al.* 1998). Availability of these non-sage scrub areas may be essential during certain times of the year for dispersal, foraging, or nesting, particularly during drought conditions and following disturbance of habitat from fire.

A comprehensive overview of the life history and ecology of the gnatcatcher is provided by Atwood (1990) and is the basis for much of the discussion presented below. The gnatcatcher is non-migratory and defends breeding territories ranging in size from 1 to 6 hectares (ha) (2 to 14 acres (ac)). Reported home ranges vary in size from 5 to 15 ha (13 to 39 ac) for this species (Mock and Jones 1990). The breeding season of the gnatcatcher extends from late February through July with the peak of nest initiations (startups) occurring from mid-March through mid-May. Nests are composed of grasses, bark strips, small leaves, spider webs, down, and other materials and are often located in California sagebrush about 1 m (3 ft) above the ground. Nests are constructed over a 4- to 10-day period. Clutch size averages four eggs. The incubation and nestling periods encompass about 14 and 16 days, respectively. Both sexes participate in all phases of the nesting cycle. Although the gnatcatcher may occasionally produce two broods in one nesting season, the frequency of this behavior is not known. Juveniles are dependent

upon, or remain closely associated with, their parents for up to several months following departure from the nest and dispersal from their natal (place of birth) territory.

Dispersal of juveniles generally requires a corridor of native vegetation providing certain foraging and shelter requisites to link larger patches of appropriate sage scrub vegetation (Soule 1991). These dispersal corridors facilitate the exchange of genetic material and provide a path for recolonization of areas from which the species has been extirpated (Soule 1991 and Galvin 1998). It has been suggested that "natal dispersal [through corridors] is therefore an important aspect of the biology of [a] * * * nonmigratory, territorial bird . . . [such as] the California gnatcatcher * * *" Galvin (1998). Although it has also been suggested that juvenile gnatcatchers are capable of dispersing long distances (up to 22 kilometers (14 miles)) across fragmented and highly disturbed sage scrub habitat, such as found along highway and utility corridors or remnant mosaics of habitat adjacent to developed lands, generally the species disperses short distances through contiguous, undisturbed habitat (Bailey and Mock 1998, Famolaro and Newman 1998, and Galvin 1998). Moreover, it is likely that populations will experience increased juvenile mortality in fragmented habitats where dispersal distances are greater than average (Atwood *et al.* 1998). This would be particularly true if dispersal was across non- or sub-optimal habitats that function as population sinks (areas where mortality is greater than reproduction rates) (Soule 1991).

Previous Federal Action

On March 30, 1993, we published a final rule determining the gnatcatcher to be a threatened species (58 FR 16742). In making this determination, we relied, in part, on taxonomic studies conducted by Dr. Jonathan Atwood of the Manomet Bird Observatory. As is standard practice in the scientific community, we cited the conclusions by Dr. Atwood in a peer reviewed, published scientific article pertaining to the subspecific taxonomy of the gnatcatcher (Atwood 1991).

On December 10, 1993, we published a final special rule concerning the take of the gnatcatcher pursuant to section 4(d) of the Act (58 FR 63088). This rule defines the conditions for which incidental take of the gnatcatcher resulting from certain land-use practices regulated by State and local governments through the Natural Community Conservation Planning Act

of 1991 (NCCP) would not be a violation of section 9 of the Act. We found that implementation of the 4(d) special rule and the NCCP program provides for conservation and management of the gnatcatcher and its habitat in a manner consistent with the purposes of the Act.

The Endangered Species Committee of the Building Industry Association of Southern California and other plaintiffs filed a suit challenging the listing on several grounds, but primarily based on our conclusions regarding gnatcatcher taxonomy. In a Memorandum Opinion and Order filed in the U. S. District Court for the District of Columbia (District Court) on May 2, 1994, the District Court vacated the listing determination, holding that the Secretary of the Interior (Secretary) should have made available the underlying data that formed the basis of Dr. Atwood's conclusions on the taxonomy of the gnatcatcher.

Following the District Court's decision, Dr. Atwood released his data to us. We made these data available to the public for review and comment on June 2, 1994 (59 FR 28508). By Order dated June 16, 1994, the District Court reinstated the threatened status of the gnatcatcher pending a determination by the Secretary whether the listing should be revised or revoked in light of the public review and comment of Dr. Atwood's data. On March 27, 1995, we published a determination to retain the threatened status for the gnatcatcher (60 FR 15693).

At the time of the listing, we concluded that designation of critical habitat for the gnatcatcher was not prudent because such designation would not benefit the species and would make the species more vulnerable to activities prohibited under section 9 of the Act. We were aware of several instances of apparently intentional habitat destruction that occurred during the listing process. In addition, most land occupied by the gnatcatcher was in private ownership, and we did not believe designation of critical habitat to be of benefit because of a lack of a Federal nexus (critical habitat has regulatory applicability only for activities carried out, funded, or authorized by a Federal agency).

On May 21, 1997, the U. S. Court of Appeals for the Ninth Circuit issued an opinion (*Natural Resources Defense Council v. U.S. Department of the Interior*, 113 F. 3d 1121) requiring us to issue a new decision regarding the prudence of determining critical habitat for the gnatcatcher. In this opinion, the Court held that the "increased threat" criterion in the regulations may justify a not prudent finding only when we

have weighed the benefits of designation against the risks of designation. Secondly, with respect to the "not beneficial" criterion explicit in the regulations, the Court ruled that our conclusion that designation of critical habitat was not prudent because it would fail to control the majority of land-use activities within critical habitat was inconsistent with Congressional intent that the not prudent exception to designation should apply "only in rare circumstances." The Court noted that a substantial portion of gnatcatcher habitat would be subject to a future Federal nexus sufficient to trigger section 7 consultation requirements regarding critical habitat. Finally, the Circuit Court determined that our conclusion that designation of critical habitat would be less beneficial to the species than another type of protection (e.g., State of California Natural Community Conservation Planning (NCCP) efforts) did not absolve us from the requirement to designate critical habitat. The Court also criticized the lack of specificity in our analysis.

On February 8, 1999, we published a notice of determination in the **Federal Register** (64 FR 5957) regarding the prudency of designating critical habitat for the gnatcatcher. We found that the designation of critical habitat was prudent on Federal lands within the range of the gnatcatcher and non-Federal lands where a current or likely future Federal nexus exists. We determined that designating critical habitat on private lands lacking a current or likely future Federal nexus or any lands subject to the provision of an approved HCP under section 10(a)(1)(B) of the Act and/or an approved NCCP under which the gnatcatcher is a covered species would provide no additional benefit to the species. Further, we determined that the threats (e.g., activities prohibited under section 9 of the Act) from designating critical habitat on private lands would outweigh the benefits in certain areas.

On August 4, 1999, in response to a motion filed by the Natural Resources Defense Council, the U.S. District Court for the Central District of California ordered the Service to propose critical habitat by October 4, 1999. In response to this order and in preparation of a proposal using our prudency determination (64 FR 5957), we had difficulty delineating critical habitat because of uncertainty identifying likely future Federal nexuses. Since publication of the determination, we discovered that the Federal nexuses relied on in our prudency determination for several development projects no longer existed. Conversely, other

projects were found to have current Federal nexuses, which were lacking when we developed the prudency determination. Given the unpredictability of determining whether a Federal nexus is likely to exist on any given parcel of private land, we have reevaluated our previous conclusion and now conclude that there may be a regulatory benefit from designating critical habitat for the gnatcatcher on private lands now lacking an identifiable Federal nexus because such lands may have a nexus to a Federal agency action in the future.

In our initial prudency determination (64 FR 5957), we described the threat posed by vandalism towards the gnatcatcher and its habitat, largely coastal sage scrub. We cited several cases under investigation by our Law Enforcement Division and various newspaper articles regarding this threat. We determined that the designation of critical habitat would increase the instances of habitat destruction and exacerbate threats to the gnatcatcher. Therefore, we concluded that the threat posed by vandalism that would result from designating private lands lacking a Federal nexus as critical habitat would outweigh the benefit provided by such a designation. We acknowledged that critical habitat may provide some benefit by highlighting areas where the species may occur or areas that are important to recovery. However, we stated that such locational data are well known, and designation of critical habitat on private lands may incite some members of the public and increase incidences of habitat vandalism above current levels.

We have reconsidered our evaluation in the prudency determination of the threats posed by vandalism. We have determined that the threats to the gnatcatcher and its habitat from the specific instances of habitat destruction we identified do not outweigh the broader educational, and any potential regulatory and other possible benefits, that a designation of critical habitat would provide for this species. The instances of likely vandalism, though real, were relatively isolated given the wide-ranging habitat of the gnatcatcher. Additionally, having determined that the existence of current or likely future Federal nexuses is an unreliable basis upon which to include or exclude private lands as critical habitat, we are not compelled to identify specific scattered parcels of private land with presumptive Federal nexuses. Instead, we are able to use a landscape approach in identifying areas for critical habitat designation that does not appear to highlight individual parcels of private

land. Consequently, we conclude that designating critical habitat on private lands will not increase incidences of habitat vandalism above current levels for this species. Furthermore, a designation of critical habitat will provide some educational benefit by formally identifying on a range-wide basis those areas essential to the conservation of the species and, thus, the areas likely to be the focus of our recovery efforts for the gnatcatcher. Therefore, we conclude that the benefits of designating critical habitat on non-Federal lands essential for the conservation of the gnatcatcher outweigh the risks of increased vandalism resulting from such designation.

In light of our decision to reconsider the prudency determination, we needed additional time to revise the determination (64 FR 5957) and develop a proposed critical habitat rule based on the revised determination. We, therefore, requested an extension of 120 days in which to reevaluate prudency and propose critical habitat, which the District Court granted. The Court also ordered us to publish a final critical habitat rule by September 30, 2000.

On February 7, 2000, we published a proposed determination for the designation of critical habitat for the gnatcatcher (65 FR 5946). A total of approximately 323,726 hectares (799,916 acres) was proposed as critical habitat for the gnatcatcher in Los Angeles, Orange, Riverside, San Bernardino, and San Diego Counties, California. The comment period was open until April 8, 2000. During this 60-day comment period we held three public hearings (Anaheim on February 15, San Diego on February 17, and Riverside on February 23, 2000). On June 29, 2000, we published a notice (65 FR 40073) announcing the reopening of the comment period on the proposal to designate critical habitat for the gnatcatcher and a notice of availability of the draft economic analysis on the proposed determination. The comment period was open until July 31, 2000, an additional 30 days. On July 11, 2000, we published a notice (65 FR 42662) correcting the electronic mail address for public comment during this second comment period.

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 critical habitat. In our 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 afford any additional protections under the Act against such activities.

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 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 requires that we designate critical habitat at the time of listing and based on what we know at the time of the designation. When we designate critical habitat at the time of listing or under short court-ordered deadlines, we will often not have sufficient information to identify all areas of critical habitat. We are required, nevertheless, to make a decision and thus must base our designations on what, at the time of designation, we know to be critical habitat.

Within the geographic area occupied by the species, we will designate only areas currently known to be essential. Essential areas should already have the features and habitat characteristics that are necessary to sustain the species. 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. If the information available at the time of designation does not show that an area provides essential life cycle needs of the species, then the area should not be included in the critical habitat designation. Within the geographic area occupied by the species, we will not designate areas that do not now have the primary constituent elements, as defined at 50 CFR 424.12(b), that provide essential life cycle needs of the species.

Our regulations state that, "The Secretary shall designate as critical habitat areas outside the geographic area presently occupied by the species only when a designation limited to its present range would be inadequate to ensure the conservation of the species." (50 CFR 424.12(e)). Accordingly, when the best available scientific and commercial data do not demonstrate that the conservation needs of the species require designation of critical habitat outside of occupied areas, we will not designate critical habitat in areas outside the geographic area occupied by the species.

The Service's Policy on Information Standards Under the Endangered Species Act, published in the **Federal Register** on July 1, 1994 (Vol.59, p. 34271), provides criteria, establishes procedures, and provides guidance to ensure that decisions made by the Service represent the best scientific and commercial data available. It 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 by states and counties, scientific status surveys and studies, and biological assessments or other unpublished materials (*i.e.* gray literature).

Habitat is often dynamic, and species may move from one area to another over time. Furthermore, we recognize that designation of critical habitat may not

include all of the habitat areas that may eventually be determined to be necessary for the recovery of the species. For these reasons, all should understand that critical habitat designations do *not* signal that habitat outside the designation is unimportant or may not be required for recovery. Areas outside the critical habitat designation will continue to be subject to conservation actions that may be implemented under Section 7(a)(1) and to the regulatory protections afforded by the section 7(a)(2) jeopardy standard and the Section 9 take prohibition, 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 areas may still result in jeopardy findings in some cases. Similarly, critical habitat designations made on the basis of the best available information at the time of designation will not control the direction and substance of future recovery plans, habitat conservation plans, or other species conservation planning efforts if new information available to these planning efforts calls for a different outcome.

Methods

In determining areas that are essential to conserve the gnatcatcher, we used the best scientific and commercial data available. This included data from research and survey observations published in peer reviewed articles; regional Geographic Information System (GIS) coverages; habitat evaluation models for the San Diego County Multiple Species Conservation Program (MSCP), the North San Diego County Multiple Habitat Conservation Program (MHCP), and the North County Subarea of the MSCP for Unincorporated San Diego County; approved HCPs; and data collected from reports submitted by biologists holding section 10(a)(1)(A) recovery permits. Following the listing of the species, concerted efforts were undertaken to survey significant portions of the species' range in San Diego and Orange Counties for the purpose of developing and implementing HCPs, and more recently, surveys of varying intensity have been conducted in Los Angeles, Riverside, San Bernardino, and Ventura Counties. Further, information provided in comments on the proposed designation and draft economic analysis were evaluated and taken into consideration in the development of this final designation.

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 and protection. Such requirements include but are not limited to: space for individual and population growth, and for normal behavior; food, water, air, light, minerals, or other nutritional or physiological requirements; cover or shelter; sites for breeding, reproduction, rearing of offspring; and habitats that are protected from disturbance or are representative of the historic geographical and ecological distributions of a species.

All areas designated as critical habitat for the gnatcatcher contain one or more of these physical or biological features, also called primary constituent elements.

The primary constituent elements for the gnatcatcher are those habitat components that are essential for the primary biological needs of foraging, nesting, rearing of young, intra-specific communication, roosting, dispersal, genetic exchange, or sheltering (Atwood 1990). Primary constituent elements can be provided in undeveloped areas that support various types of sage scrub or chaparral, grassland, and riparian habitats where they occur in an essential core population or linkage area proximal to sage scrub and where they may be utilized for biological needs such as breeding and foraging (Atwood *et al.* 1998, Campbell *et al.* 1998). Primary constituent elements associated with the biological needs of dispersal are also found in undeveloped areas that provide connectivity or linkage between or within larger core areas, including open space and disturbed areas containing introduced plant species that may receive only periodic use.

Primary constituent elements include, but are not limited to, the following plant communities in their natural state or those that have been recently disturbed (*e.g.*, by fire or grubbing): Venturan coastal sage scrub, Diegan coastal sage scrub, maritime succulent scrub, Riversidean sage scrub, Riversidean alluvial fan scrub, southern coastal bluff scrub, and coastal sage-chaparral scrub (Holland 1986). Based upon dominant species, these communities have been further divided into series such as black sage,

brittlebush, California buckwheat, California buckwheat-white sage, California encelia, California sagebrush, California sagebrush-black sage, California sagebrush-California buckwheat, coast prickly-pear, mixed sage, purple sage, scalebroom, and white sage (Sawyer and Keeler-Wolf 1995). Dominant plants within these communities include California sagebrush, buckwheats, encelias, and various sages (commonly *Salvia mellifera*, *S. apiana*, and *S. leucophylla*). Other commonly occurring plants include coast goldenbush (*Isocoma menziesii*), bush monkeyflower (*Mimulus aurantiacus*), Mexican elderberry (*Sambucus mexicana*), bladderpod (*Isomeris arborea*), deerweed (*Lotus scoparius*), chaparral mallow (*Malacothamnus fasciculatum*), laurel sumac (*Malosma laurina*), and several species of *Rhus* (*R. integrifolia*, *R. ovata*, and *R. trilobata*). Succulent species, such as boxthorn (*Lycium* spp.), cliff spurge (*Euphorbia misera*), jojoba (*Simmondsia chinensis*), and various species of cacti (*Opuntia littoralis*, *O. prolifera*, and *Ferocactus viridescens*), and live-forever (*Dudleya* spp.) are represented in maritime succulent scrub, coast prickly-pear scrub, and southern coastal bluff scrubs.

Criteria Used To Identify Critical Habitat

We considered several qualitative criteria in the selection and proposal of specific areas or units for gnatcatcher critical habitat. Such criteria focused on designating units: (1) throughout the geographical and elevational range of the species; (2) within various occupied plant communities, such as Venturan coastal sage scrub, Diegan coastal sage scrub, maritime succulent scrub, Riversidean sage scrub, Riversidean alluvial fan scrub, southern coastal bluff scrub, and coastal sage-chaparral scrub; (3) in documented areas of large, contiguous blocks of occupied habitat (*i.e.*, core population areas); and (4) in areas that link core populations areas (*i.e.*, linkage areas). These criteria are similar to criteria used to identify reserve/preserve lands in approved HCPs covering the gnatcatcher.

To identify critical habitat units, we first examined those lands identified for conservation under approved HCPs covering the gnatcatcher. These planning efforts utilized site specific surveys, habitat evaluation models, gnatcatcher occurrence data, and/or reserve design criteria to identify reserve systems of core gnatcatcher populations and linkage areas that are essential for the conservation of the species. These included MSCP, San

Diego City and County Subarea Plans, and Central/Coastal NCCP Subregions of Orange County.

We then evaluated those areas where on-going habitat conservation planning efforts have resulted in the preparation of biological analyses that identify habitat important for the conservation of the gnatcatcher. These include: the Western Riverside County Multiple Species Habitat Conservation Program (MSHCP), the Rancho Palos Verdes MSHCP, the North San Diego County MHCP, the North County Subarea of the MSCP for Unincorporated San Diego County, and the Southern Subregion of Orange County's NCCP. We used those biological analyses in concert with data regarding (1) current gnatcatcher occurrences, (2) sage scrub vegetation, (3) elevation, and (4) connectivity between core gnatcatcher populations to identify those lands that are essential for the conservation of the gnatcatcher within the respective planning area boundaries.

Finally, we evaluated other lands for their conservation value for the gnatcatcher. We delimited a study area by selecting geographic boundaries based on the following: (1) gnatcatcher occurrences, (2) sage scrub vegetation, (3) elevation, and (4) connectivity to other core gnatcatcher populations. We determined conservation value based on the presence of, or proximity to, significant gnatcatcher core populations and/or sage scrub, sage scrub habitat quality, parcel or habitat patch size, surrounding land-uses, and potential to support resident gnatcatchers and/or facilitate movement of birds between known habitat areas.

Critical habitat for the gnatcatcher 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 aerial photography prints, boundaries of approved HCPs, and projects authorized for take through section 7 consultations. These lands define specific map units, *i.e.*, Critical Habitat Units. For the purpose of this final determination these Critical Habitat Units have been described using primarily Universal Transverse Mercator (UTM) North American Datum of 1927 (NAD 27) derived from a 100-m grid that approximated the boundaries delineated from the digital aerial photography. Further, within Fallbrook Naval Weapons Station and along the boundaries of several major amendment areas for the San Diego County MSCP, public land survey (PLS) sections were

used to facilitate the delineation of essential lands. However, there were some exceptions to this mapping convention. Within the Orange County NCCP Central/Coastal Subregions we used boundaries of select Existing Land Use and North Ranch Policy Plan areas, and the designated reserve within Marine Corps Air Station El Toro. In San Diego County, we used the boundaries of the major amendment areas within the San Diego County MSCP (excepting those areas defined using PLS or UTM coordinates), San Diego National Wildlife Refuge Complex, Fallbrook Naval Weapons Station (excepting those areas defined using PLS or UTM coordinates), and San Onofre State Park, in addition to UTM coordinates derived from the 100-m grid.

In defining critical habitat boundaries, we made an effort to avoid developed areas, such as towns and other similar lands, that are not critical habitat. However, the minimum mapping unit

that we used to approximate our delineation of critical habitat for the gnatcatcher did not allow us to exclude all developed areas, such as towns, or housing developments, or other lands unlikely to contain the primary constituent elements essential for conservation of the gnatcatcher. Existing features and structures within the boundaries of the mapped units, such as buildings, roads, aqueducts, railroads, airports, other paved areas, lawns, and other urban landscaped areas will not contain one or more of the primary constituent elements and are therefore not critical habitat. Federal actions limited to those areas, therefore, would not trigger a section 7 consultation, unless they affect the species and/or primary constituent elements in adjacent critical habitat.

In summary, the critical habitat areas described below constitute our best assessment of areas needed for the species' conservation and recovery.

Critical Habitat Designation

The approximate area of critical habitat by county and land ownership is shown in Table 1. Critical habitat includes gnatcatcher habitat throughout the species' range in the United States (i.e., Los Angeles, Orange, Riverside, San Bernardino, and San Diego Counties, California). Lands designated are under private, State, and Federal ownership, with Federal lands including lands managed by us, the Bureau of Land Management (BLM), Department of Defense (DOD), and Forest Service. Lands designated as critical habitat have been divided into 13 Critical Habitat Units. A brief description of each unit and reasons for designating it as critical habitat are presented below.

Table 1. Approximate proposed critical habitat area (hectares (acres)) by county and land ownership.¹

County	Federal ²	Local/State	Private	Total
Los Angeles	4,275 ha (10,560 ac)	925 ha (2,280 ac)	18,180 ha (44,920 ac)	23,380 ha (57,760 ac)
Orange	845 ha (2,090 ac)	3,660 ha (9,050 ac)	25,250 (62,390 ac)	29,755 ha (73,530 ac)
Riverside	7,110 ha (17,560 ac)	3,995 ha (9,870 ac)	69,005 ha (170,510 ac)	80,110 ha (197,940 ac)
San Bernardino	2,685 ha (6,630 ac)	345 ha (850 ac)	23,030 (56,900 ac)	26,060 ha (64,380 ac)
San Diego	10,915 ha (26,970 ac)	1,390 ha (3,430 ac)	36,280 ha (89,640 ac)	48,585 ha (120,040 ac)
Total	25,830 ha (63,810 ac)	10,315 ha (25,480 ac)	171,745 ha (424,360 ac)	207,890 ha (513,650 ac)

Unit 1: San Diego Multiple Species Conservation Program (MSCP)

Unit 1 encompasses approximately 10,120 ha (25,000 ac) within the MSCP planning area. Lands designated contain core gnatcatcher populations, sage scrub, and areas providing connectivity between core populations and sage scrub. Critical habitat includes lands within the MSCP planning areas that have not received incidental take permits for the gnatcatcher under section 10(a)(1)(B) of the Act. This includes lands essential to the conservation of the gnatcatcher within the cities of Chula Vista, El Cajon, and Santee; major amendment areas within the San Diego County Subarea Plan; the Otay-Sweetwater Unit of the San Diego National Wildlife Refuge Complex; and water district lands owned by

Sweetwater Authority, Helix Water District and Otay Water District.²

Unit 2: Multiple Habitat Conservation Open Space Program (MHCOSP) for San Diego County

Unit 2 encompasses approximately 5,170 ha (12,780 ac) within the MHCOSP. Lands designated include a core population of gnatcatchers on the Cleveland National Forest south of State Route 78 near the upper reaches of the San Diego River. It also includes important corridors of sage scrub for connectivity.

Unit 3: North San Diego County Multiple Habitat Conservation Program (MHCP)

Unit 3 encompasses approximately 11,865 ha (29,320 ac) within the MHCP planning area in northwestern San

Diego County. Lands designated contain core gnatcatcher populations and sage scrub identified by the San Diego Association of Governments' (SANDAG) "Gnatcatcher Habitat Evaluation Model," dated March 24, 1999, as high or moderate value. In addition, areas designated provide connectivity between habitat valued as high or moderate. This unit also provides connectivity between core gnatcatcher populations within adjacent units.

Unit 4: Fallbrook Naval Weapons Station

Unit 4 encompasses approximately 3,515 ha (8,690 ac) on Fallbrook Naval Weapons Station in northern San Diego County. The unit provides a significant segment of a corridor of sage scrub between core gnatcatcher populations

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 have been rounded to the nearest 5, and

acres to the nearest 10, if greater than or equal to 100 (≥ 100); both hectares and acres are rounded to the nearest 5 if less than 100 (< 100).

² Federal lands include Bureau of Land Management, Department of Defense, National Forest, and Fish and Wildlife Service lands.

on Marine Corps Base Camp Pendleton (Camp Pendleton) and populations in southwestern Riverside County (Unit 10).

Unit 5: North County Subarea of the MSCP for Unincorporated San Diego County

Unit 5 encompasses approximately 16,450 ha (40,640 ac) within the planning area for the North County Subarea of the MSCP for San Diego County. Lands designated contain several core gnatcatcher populations and sage scrub identified as high or moderate value. In addition, designated areas provide connectivity between habitat valued as high or moderate. This unit constitutes the primary inland linkage between San Diego populations and those in southwestern Riverside County (Unit 10).

Unit 6: Southern Orange County/ Northwestern San Diego County

Unit 6 encompasses approximately 22,615 ha (55,880 ac) within the planning area for the Southern NCCP Subregion of Orange County and the San Onofre State Park in northwestern San Diego County. This unit contains significant core populations and provides the primary linkage for core populations on Camp Pendleton to those further north in Orange County (Unit 7).

Unit 7: Central/Coastal NCCP Subregions of Orange County (Central/ Coastal NCCP)

Unit 7 encompasses approximately 2,340 ha (5,780 ac) within the Orange County Central/Coastal NCCP planning area. It includes lands containing core gnatcatcher populations and sage scrub habitat determined to be essential for the conservation of the gnatcatcher within select Existing Use Areas, the western portion of the North Ranch Policy Plan Area (i.e., west of State Route 241), and the designated reserve (panhandle portion) of Marine Corps Air Station El Toro.

Unit 8: Palos Verdes Peninsula Subregion, Los Angeles County

Unit 8 encompasses approximately 3,225 ha (8,220 ac) within the subregional planning area for the Palos Verdes Peninsula in Los Angeles County, including the City of Rancho Palos Verdes MSHCP area. This unit includes a core gnatcatcher population and sage scrub habitat.

Unit 9: East Los Angeles County-Matrix NCCP Subregion of Orange County

Unit 9 encompasses approximately 13,575 ha (33,540 ac) within the

Montebello, Chino-Puente Hills, East Coyote Hills, and West Coyote Hills area. The unit provides the primary connectivity between core gnatcatcher populations and sage scrub habitat within the Central/Coastal Subregions of the Orange County NCCP (Unit 7) and the Western Riverside County MSHCP (Unit 10).

Unit 10: Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP)

Unit 10 encompasses approximately 80,915 ha (199,940 ac) within the proposed planning area for the Western Riverside County MSHCP. Lands designated include core populations within the Temecula/Murietta/Lake Skinner region and the Lake Elsinore/Lake Mathews region. Areas providing essential linkages between core gnatcatcher populations and additional core populations that occur along the I-15 corridor, the Lake Perris area, the Alessandro Heights area, the Box Spring Mountains/The Badlands, and along the foothills of the Santa Ana Mountains into the Chino-Puente Hills have also been designated. These areas provide connectivity between core populations within Riverside County and to populations in San Diego, San Bernardino, Orange, and Los Angeles Counties. Unit 10 encompasses some of the Core Reserves established under the Stephens' Kangaroo Rat HCP. The Estelle Mountain portion of the Lake Mathews/Estelle Mountain Reserve, Steele Peak Reserve, a portion of the Lake Perris/San Jacinto Core Reserve, the Potrero Area of Critical Environmental Concern, and the Southwestern Riverside County Multi-Species Reserve provide essential habitat for the gnatcatcher and, therefore, have been designated as critical habitat.

Unit 11: San Bernardino Valley MSHCP, San Bernardino County

Unit 11 encompasses approximately 23,795 ha (58,800 ac) along the foothills of the San Gabriel Mountains and within the Jurupa Hills on the border of San Bernardino and Riverside Counties. The unit includes lands within the San Bernardino National Forest and on Norton Air Force Base. This unit contains breeding gnatcatcher populations and constitutes a primary linkage between western Riverside County (Unit 10) and eastern Los Angeles County (Unit 9).

Unit 12: East Los Angeles County Linkage

Unit 12 encompasses approximately 4,080 ha (10,080 ac) in eastern Los

Angeles County along the foothills of the San Gabriel Mountains, including a core population of gnatcatchers in Bonelli Regional Park. Its primary function is being a regional source population for gnatcatchers (Bonelli Park) and in establishing the primary east-west connectivity of sage scrub habitat between core gnatcatcher populations in San Bernardino County (Unit 13) to those in southeastern Los Angeles County (Unit 9).

Unit 13: Western Los Angeles County

Unit 13 encompasses approximately 10,110 ha (24,980 ac) in western Los Angeles County along the foothills of the San Gabriel Mountains. It includes breeding gnatcatcher populations and sage scrub habitat in the Placerita, Box Springs Canyon, and Plum Canyon areas. This unit encompasses the northern distributional extreme of the gnatcatcher's current range.

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 survival and recovery 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 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 designated or proposed. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402. Section 7(a)(4) 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. 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. If a species is listed or critical habitat is designated, section 7(a)(2) requires Federal agencies to ensure that actions they authorize, fund, or carry out are not

likely to jeopardize the continued existence of such a species or to destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency (action agency) must enter into consultation with us. Through this consultation we would ensure that the permitted actions do not destroy or 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 destruction or adverse modification of critical habitat. Reasonable and prudent alternatives can vary from slight project modifications to extensive redesign or relocation of the project. Costs associated with implementing a reasonable and prudent alternative are similarly variable.

Regulations at 50 CFR 402.16 require Federal agencies to reinstitute 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 reinstitution of consultation with us on actions for which formal consultation has been completed if those actions may affect designated critical habitat. Further, some Federal agencies may have conferenced with us on proposed critical habitat. We may adopt the formal conference report as the biological opinion when critical habitat is designated, if no significant 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 gnatcatcher or its critical habitat will require section 7 consultation. 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 (Army Corps) under section 404 of the Clean Water Act, or some other Federal

action, including funding (e.g., from the Federal Highway Administration, Federal Aviation Administration, or Federal Emergency Management Agency) will also continue to be subject to the section 7 consultation process. 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 section 7 consultation.

Section 4(b)(8) of the Act requires us to evaluate briefly 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 result in the destruction or adverse modification of 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 gnatcatcher 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 directly or indirectly adversely affect critical habitat include, but are not limited to:

(1) Removing, thinning, or destroying gnatcatcher habitat (as defined in the primary constituent elements discussion), whether by burning or mechanical, chemical, or other means (e.g., woodcutting, grubbing, grading, overgrazing, construction, road building, mining, herbicide application, etc.); and

(2) Appreciably decreasing habitat value or quality through indirect effects (e.g., noise, edge effects, invasion of exotic plants or animals, or fragmentation).

To properly portray the effects of critical habitat designation, we must first compare the section 7 requirements for actions that may affect critical habitat with the requirements for actions that may affect a listed species. Section 7 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 both the survival and recovery of a listed species. Actions likely to result in the destruction or adverse modification of critical habitat are those that would appreciably reduce the value of critical habitat for both the survival and recovery of the listed species.

Common to both definitions is an appreciable detrimental effect on both survival and recovery of a listed species. Given the similarity of these definitions, actions likely to result in the destruction or adverse modification of 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. In those cases, critical habitat provides little additional protection to a species, and the ramifications of its designation are few or none. However, if occupied habitat becomes unoccupied in the future, there is a potential benefit from critical habitat in such areas.

Federal agencies already consult with us on activities in areas currently 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 United States by the Army Corps under section 404 of the Clean Water Act;

(2) Regulation of water flows, damming, diversion, and channelization by Federal agencies;

(3) Regulation of grazing, mining, and recreation by the BLM or Forest Service;

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

(5) Regulation of airport improvement activities by the Federal Aviation Administration jurisdiction;

(6) Military training and maneuvers on applicable DOD lands;

(7) Construction of roads and fences along the International Border with Mexico, and associated immigration enforcement activities by the Immigration and Naturalization Service;

(8) Hazard mitigation and post-disaster repairs funded by the Federal Emergency Management Agency;

(9) Construction of communication sites licensed by the Federal Communications Commission; and

(10) Activities funded by the U. S. Environmental Protection Agency, Department of Energy, or any other Federal agency.

All lands designated as critical habitat are within the geographical area occupied by the species and are likely to be used by gnatcatchers, whether by reproductive, territorial birds, or by birds merely moving through an area. Thus, we consider all critical habitat to be occupied by the species. Federal agencies already consult with us on activities in areas currently occupied by the species or if the species may be affected by the action to ensure that

their actions do not jeopardize the continued existence of the species. Thus, we do not anticipate additional regulatory protection will result from critical habitat designation.

Exclusions Under Section 3(5)(A) Definition

The Sikes Act Improvements Act of 1997 (Sikes Act) requires each military installation that includes land and water suitable for the conservation and management of natural resources to complete, by November 17, 2001, an Integrated Natural Resources Management Plan (INRMP). An INRMP integrates implementation of the military mission of the installation with stewardship of the natural resources found there. Each INRMP includes an assessment of the ecological needs on the installation, including needs to provide for the conservation of listed species; a statement of goals and priorities; a detailed description of management actions to be implemented to provide for these ecological needs; and a monitoring and adaptive management plan. We consult with the military on the development and implementation of INRMPs for installations with listed species. We believe that bases that have completed and approved INRMPs that address the needs of the species generally do not meet the definition of critical habitat discussed above, as they require no additional special management or protection. Therefore, we do not include these areas in critical habitat designations if they meet the following three criteria: (1) A current INRMP must be complete and provide a conservation benefit to the species; (2) the plan must provide assurances that the conservation management strategies will be implemented; and (3) the plan must provide assurances that the conservation management strategies will be effective, by providing for periodic monitoring and revisions as necessary. If all of these criteria are met, then the lands covered under the plan would not meet the definition of critical habitat.

To date, Marine Corps Air Base Miramar is the only DOD installation that has completed a final INRMP that provides for sufficient conservation management and protection for the gnatcatcher. We have reviewed this plan and have determined that it addresses and meets the three criteria. Therefore, lands on Marine Corps Air Base Miramar do not meet the definition of critical habitat and have been excluded from the final designation of critical habitat for the gnatcatcher.

Exclusions Under Section 4(b)(2)

Subsection 4(b)(2) of the Act allows us to exclude areas from critical habitat designation where the benefits of exclusion outweigh the benefits of designation, provided the exclusion will not result in the extinction of the species. For the following reasons, we believe that in most instances the benefits of excluding HCPs from critical habitat designations will outweigh the benefits of including them.

(1) Benefits of Inclusion

The benefits of including HCP lands in critical habitat are normally small. The principal benefit of any designated critical habitat is that activities in such habitat that may affect it require consultation under section 7 of the Act. Such consultation would ensure that adequate protection is provided to avoid adverse modification of critical habitat. Where HCPs are in place, our experience indicates that this benefit is small or non-existent. Currently approved and permitted HCPs are already designed to ensure the long-term survival of covered species within the plan area. Where we have an approved HCP, lands that we ordinarily would define as critical habitat for the covered species will normally be protected in reserves and other conservation lands by the terms of the HCPs and their implementation agreements. These HCPs and implementation agreements include management measures and protections for conservation lands that are crafted to protect, restore, and enhance their value as habitat for covered species.

In addition, an HCP application must itself be consulted upon. While this consultation will not look specifically at the issue of adverse modification of critical habitat, it will look at the very similar concept of jeopardy to the listed species in the plan area. Since HCPs, particularly large regional HCPs, address land use within the plan boundaries, habitat issues within the plan boundaries will have been thoroughly addressed in the HCP and the consultation on the HCP. Our experience is also that, under most circumstances, consultations under the jeopardy standard will reach the same result as consultations under the adverse modification standard. Implementing regulations (50 CFR Part 402) define "jeopardize the continued existence of" and "destruction or adverse modification of" in virtually identical terms. Jeopardize the continued existence of means to engage in an action "that reasonably would be expected * * * to reduce appreciably

the likelihood of both the survival and recovery of a listed species."

Destruction or adverse modification means an "alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species." Common to both definitions is an appreciable detrimental effect on both survival and recovery of a listed species, in the case of critical habitat by reducing the value of the habitat so designated. Thus, actions satisfying the standard for adverse modification are nearly always found to also jeopardize the species concerned, and the existence of a critical habitat designation does not materially affect the outcome of consultation. Additional measures to protect the habitat from adverse modification are not likely to be required.

Further, HCPs typically provide for greater conservation benefits to a covered species than section 7 consultations because HCPs assure the long term protection and management of a covered species and its habitat, and funding for such management through the standards found in the 5-Point Policy for HCPs (64 FR 35242) and the HCP No Surprises regulation (63 FR 8859). Such assurances are typically not provided by section 7 consultations which, in contrast to HCPs, often do not commit the project proponent to long term special management or protections. Thus, a consultation typically does not accord the lands it covers the extensive benefits an HCP provides.

The development and implementation of HCPs provide other important conservation benefits, including the development of biological information to guide conservation efforts and assist in species recovery and the creation of innovative solutions to conserve species while allowing for development. The educational benefits of critical habitat, including informing the public of areas that are important for the long-term survival and conservation of the species, are essentially the same as those that would occur from the public notice and comment procedures required to establish an HCP, as well as the public participation that occurs in the development of many regional HCPs. For these reasons, then, we believe that designation of critical habitat has little benefit in areas covered by HCPs.

(2) Benefits of Exclusion

The benefits of excluding HCPs from being designated as critical habitat may be more significant. During two public comment periods on our critical habitat policy, we received several comments about the additional regulatory and economic burden of designating critical

habitat. These include the need for additional consultation with the Service and the need for additional surveys and information gathering to complete these consultations. HCP applicants have also stated that they are concerned that third parties may challenge HCPs on the basis that they result in adverse modification or destruction of critical habitat, should critical habitat be designated within the HCP boundaries.

The benefits of excluding HCPs include relieving landowners, communities and counties of any additional minor regulatory review that might be imposed by critical habitat. Many HCPs, particularly large regional HCPs, take many years to develop and, upon completion, become regional conservation plans that are consistent with the recovery of covered species. Many of these regional plans benefit many species, both listed and unlisted. Imposing an additional regulatory review after HCP completion may jeopardize conservation efforts and partnerships in many areas and could be viewed as a disincentive to those developing HCPs. Excluding HCPs provides us with an opportunity to streamline regulatory compliance and confirms regulatory assurances for HCP participants.

A related benefit of excluding HCPs is that it would encourage the continued development of partnerships with HCP participants, including states, local governments, conservation organizations, and private landowners, that together can implement conservation actions we would be unable to accomplish alone. By excluding areas covered by HCPs from critical habitat designation, we preserve these partnerships, and, we believe, set the stage for more effective conservation actions in the future.

In general, then, we believe the benefits of critical habitat designation to be small in areas covered by approved HCPs. We also believe that the benefits of excluding HCPs from designation are significant. Weighing the small benefits of inclusion against the benefits of exclusion, including the benefits of relieving property owners of an additional layer of approvals and regulation, together with the encouragement of conservation partnerships, would generally result in HCPs being excluded from critical habitat designation under Section 4(b)(2) of the Act.

Not all HCPs are alike with regard to species coverage and design. Within this general analytical framework, we need to evaluate completed and legally operative HCPs in the range of the California gnatcatcher to determine

whether the benefits of excluding these particular areas outweigh the benefits of including them.

Several habitat conservation planning efforts have been completed within the range of the gnatcatcher. Principal among these are NCCP efforts in Orange and San Diego Counties. NCCP plans completed and permitted to date have resulted in the conservation of 40,208 ha (99,310 ac) of gnatcatcher habitat.

In southwestern San Diego County, the development of the MSCP has resulted in our approval of three subarea plans under section 10(a)(1)(B) of the Act. These three southern subarea plans account for approximately 95 percent of the gnatcatcher habitat in southern San Diego County. When fully implemented, the MSCP will result in the establishment of conservation areas that collectively contain 28,844 ha (71,274 ac) of coastal sage scrub vegetation within a 69,573 ha (171,917 ac) preserve area.

Additionally, we have approved the Orange County Central-Coastal NCCP/HCP and issued an incidental take permit under section 10(a)(1)(B) of the Act. Implementation of the plan will result in the conservation of 15,677 ha (38,738 ac) of Reserve lands, which contain 7,621 ha (18,831 ac) of coastal sage scrub.

The gnatcatcher habitat in the approved planning areas in San Diego and Orange Counties was selected by the local jurisdictions, with technical assistance from us and the California Department of Fish and Game (CDFG), for permanent preservation and configuration into a biologically viable interlocking system of reserves. The reserve system established within the approved planning areas includes those habitat areas that we consider essential to the long-term survival and recovery of the gnatcatcher. In addition, the plans detail management measures for the reserve lands that protect, restore, and enhance their value as gnatcatcher habitat.

All gnatcatcher habitat that is essential to the conservation of the species and is within the HCP planning areas is permanently protected in the habitat reserves. Habitat that is preserved in the HCP planning areas is already managed for the benefit of the gnatcatcher and other covered species under the terms of the plans and associated section 10(a)(1)(B) permits. The assurances afforded the gnatcatcher through the special management and protections in the implementation agreements of approved HCPs are believed to be sufficient to provide for the conservation of the gnatcatcher. Any additional benefit provided the

gnatcatcher by designating these lands as critical habitat would be minimal at best. Therefore, we have determined that no additional private lands within the HCP planning areas warrant designation as critical habitat.

In contrast, the benefits of excluding lands covered by these HCPs would be significant in preserving positive relationships with our conservation partners, lessening potential additional regulatory review and potential economic burdens, reinforcing the regulatory assurances provided for in the implementation agreements for the approved HCPs, and providing for more established and cooperative partnerships for future conservation efforts. Economic analysis completed for the gnatcatcher critical habitat designation concluded that some construction companies may be affected by any modifications to development projects or incremental delays in the implementation of projects due to consultations that occur as a result of critical habitat designation for the gnatcatcher. In addition, the economic analysis concluded that landowners may incur costs to determine whether their land contains the primary constituent elements for the gnatcatcher, and may experience temporary changes in property values as markets respond to the uncertainty associated with critical habitat designation. We believe that because of these impacts the benefits of excluding HCP areas from critical habitat designation outweigh the minor benefits, if any, of including these areas as critical habitat. Consequently, these lands have not been designated as critical habitat for the gnatcatcher.

We also have approved several smaller multiple species HCPs in San Diego, Riverside, Los Angeles, and Orange Counties. Examples include: Bennett Property, Meadowlark Estates, Fieldstone (Villages of La Costa), and Poway Subarea Plan in San Diego County; Coyote Hills East and Shell Oil in Orange County; Ocean Trails in Los Angeles County; and Lake Mathews, North Peak, Railroad Canyon, and Rancho Bella Vista in Riverside County. These efforts have resulted in the protection of 3,935 ha (9,725 ac) of gnatcatcher habitat. We believe that the reasoning for excluding regional HCPs from this designation would apply to these smaller HCPs, and therefore, they have been excluded from the designation as well.

In summary, the benefits of including HCPs in critical habitat for the gnatcatcher include minor, if any, additional protection for the gnatcatcher. The benefits of excluding HCPs from being designated as critical

habitat for the gnatcatcher include the preservation of partnerships that may lead to future conservation, and the avoidance of the minor regulatory and economic burdens associated with the designation of critical habitat. We find that the benefits of excluding these areas from critical habitat designation outweigh the benefits of including these areas. Furthermore, we have determined that these exclusions will not result in the extinction of the species. We have already completed section 7 consultation on the impacts of these HCPs on the species. We have determined that they will not jeopardize the continued existence of the species, which means that they will not appreciably reduce likelihood of the survival and recovery of the species.

In the event that future HCPs covering the gnatcatcher 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 gnatcatcher 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 gnatcatcher. 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 lands essential for the long-term conservation of the gnatcatcher and appropriate management for those lands. The take minimization and mitigation 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 gnatcatcher as a covered species is ultimately approved, the Service will reassess the critical habitat boundaries in light of the HCP. The Service will seek to undertake this review when the HCP is approved, but funding constraints may influence the timing of such a review.

In contrast to Marine Corps Air Base Miramar, other military installations within the area proposed as critical habitat for the gnatcatcher have not yet

completed their INRMPs. Most notably, Marine Corps Base Camp Pendleton (Camp Pendleton) represents one of the largest contiguous blocks of coastal sage scrub in southern California. The base provides habitat for numerous core populations of gnatcatchers and essential habitat linkages between core populations in northern San Diego County to those in southern Orange and southwestern Riverside Counties. In light of these factors, we proposed 20,613 ha (50,935 ac) of the approximately 50,000 ha (125,000 acre) base as critical habitat for the gnatcatcher.

During both public comment periods for the proposal, the Marines concluded that the designation, if it were to become final, would cripple their ability to conduct their critical training activities. They asserted that "this overwhelming proposal [if made final] will have a long term, cumulative and detrimental impact on [their] mission."

The proposed critical habitat encompassed more than 40 percent of the Base. Out of the 46 training or joint use areas on Camp Pendleton, the proposal included all of 22 and portions of 9 such areas, which were concentrated on the coastal portion of the Base. In addition, the proposal included three of four principal landing beaches and the key inland training areas adjacent to these beaches where Marines train in amphibious warfare, large and small tactics, and warfighting skills. Camp Pendleton is the Marine Corps' only amphibious training base on the Pacific coast.

The INRMP for Camp Pendleton will be completed by the statutory deadline of November 17, 2001. We will consult with the Marines under section 7 of the Act on the development and implementation of the INRMP. We fully expect that, once the INRMP is completed and approved, areas of the base included in the proposed critical habitat designation will not meet the definition of critical habitat, as they will require no additional special management or protection.

Today, as the INRMP has not yet been completed and approved, these lands on the base meet the definition of critical habitat. Nevertheless, we have determined that it is appropriate to exclude Camp Pendleton from this critical habitat designation under section 4(b)(2). The main benefit of this exclusion is ensuring that the mission-critical military training activities can continue without interruption at Camp Pendleton while the INRMP is being completed. On March 30, 2000, at the request of the Marines, we initiated formal consultation with Camp

Pendleton on their uplands activities. These activities include military training, maintenance, fire management, real estate, and recreation programs. Upon completion, this consultation will address the 93 percent of the Base not included in our 1995 opinion concerning the Base's programmatic conservation plan for riparian and estuarine/beach ecosystems (U.S. Fish and Wildlife Service 1995). Because of the immense complexity of dealing with a multitude of hard-to-define upland activities and numerous federally listed plants and animals, we expect completion of the consultation and issuance of our biological opinion to take several months to a year.

The Marines have no alternative site suitable for the kinds of training that occur on the Base. The Marines continue training, even within the areas of coastal sage scrub included in the proposed critical habitat designation, during the consultation period by implementing measures that they believe ensure their training activities are not likely to adversely affect gnatcatchers and other federally listed species found in upland habitats on Camp Pendleton and thereby ensure compliance with section 7(d) of the Act. In particular, the Marines implement a set of "programmatic instructions" that create 500-foot buffers around each 1998 gnatcatcher observation. These avoided areas, after eliminating overlapping buffers and off-Base areas, total about 3,343 ha (8,260 ac), or a little less than 7 percent of the entire area of Camp Pendleton. Although avoiding these areas constrains Marine training activities to some degree, the effectiveness of their overall mission is not compromised.

The proposed critical habitat designation, however, included about 20,613 ha (50,935 ac), or, to reiterate, about 40 percent of the Base. If this area is included in the final designation of critical habitat for the gnatcatcher, the Marines would be compelled by their interpretation of the Endangered Species Act to significantly curtail necessary training within the area designated as critical habitat, to the detriment of mission-critical training capability, until the consultation is concluded, up to a year from now. As a result, this increase in the extent of avoided areas would greatly restrict use of the Base, severely limiting the Base's utility as a Marine training site.

In contrast, the benefits of designating critical habitat on the base now are small. The primary benefit of designation is the prohibition on destruction or adverse modification of critical habitat under section 7 of the

Act. However, we believe that section 7 consultation on any proposed action on the base that would result in an adverse modification conclusion would also result in a jeopardy conclusion, and we are now engaged in formal consultation with the Marines on their activities in upland habitats on the Camp Pendleton. In addition, the Marines have a statutory obligation under the Sikes Act to complete an INRMP for Camp Pendleton about 13 months from now; as noted above, we expect that, when completed and adopted, this INRMP will provide equal or greater protection to gnatcatcher habitat on the base than a critical habitat designation.

We conclude that the benefits of excluding Camp Pendleton exceed the benefits of including the base in the critical habitat designation; further, we have determined that excluding the base will not result in the extinction of the gnatcatcher, as numerous gnatcatcher core areas remain within the final critical habitat designation and sections 7(a)(2) and 9 still apply to the activities affecting gnatcatchers on Camp Pendleton. This exclusion does not include that part of Camp Pendleton leased to the State of California and included within San Onofre State Park (including San Mateo Park). Because these lands are used minimally, if at all, by the Marines for training, the 1,195 ha (2,960 ac) of lands proposed within the state park are retained in the final designation. These lands do not include lands leased for agricultural purposes.

Should additional information become available that changes our analysis of the benefits of excluding any of these (or other) areas compared to the benefits of including them in the critical habitat designation, we may revise this final designation accordingly. Similarly, if new information indicates any of these areas should not be included in the critical habitat designation because they no longer meet the definition of critical habitat, we may revise this final critical habitat designation. If, consistent with available funding and program priorities, we elect to revise this designation, we will do so through a subsequent rulemaking.

Relationship to the 4(d) Special Rule for the Gnatcatcher

On December 10, 1993, a final special rule concerning take of the gnatcatcher was published pursuant to section 4(d) of the Act (58 FR 63088). Under the 4(d) special rule, incidental take of gnatcatchers is not considered to be a violation of section 9 of the Act if: (1) take results from activities conducted pursuant to the requirements of the NCCP and in accordance with an

approved NCCP plan for the protection of coastal sage scrub habitat, prepared consistent with the State of California's Conservation and Process Guidelines (Guidelines) dated November 1993; and (2) we issue written concurrence that the plan meets the standards for issuance of an incidental take permit under 50 CFR 17.32(b)(2). Within enrolled subregions actively engaged in the preparation of an NCCP plan, the take of gnatcatchers will not be a violation of section 9 of the Act if such take results from activities conducted in accordance with the Guidelines. The Guidelines limit habitat loss during the interim planning period to no more than 5 percent of coastal sage scrub with lower long-term conservation potential in existence at the time of adoption of the 4(d) special rule.

The Guidelines specify criteria to evaluate the long-term conservation potential of sage scrub that is proposed for loss during the period that NCCP plans are being developed to assist participating jurisdictions in providing interim protection for areas that support habitat that is likely to be important to conservation of the gnatcatcher. Participating jurisdictions within the range of the gnatcatcher in the United States that have not completed NCCP plans include: the Southern and Matrix subregions of Orange County; the cities of Rancho Palos Verdes and San Dimas in Los Angeles County; MSCP subareas in the cities of Santee, El Cajon, and Chula Vista, the MHCP Subregion of northwestern San Diego County; the North County Subarea of San Diego's MSCP; San Diego County's MHCOSP; and six water districts in San Diego County.

We anticipate that participating jurisdictions will be able to continue to apply the 4(d) special rule within designated critical habitat and to issue Habitat Loss Permits, with the joint concurrence of us and the CDFG, provided the jurisdictions are actively working to complete their subarea plans and adhere to the Guidelines. To be consistent with the Guidelines, the jurisdictions must find, and we and CDFG must concur, that:

1. The proposed habitat loss is consistent with the interim loss criteria in the Guidelines and with any subregional process if established by the subregion:

(a) The habitat loss does not cumulatively exceed the 5 percent guideline;

(b) The habitat loss will not preclude connectivity between areas of high habitat values;

(c) The habitat loss will not preclude or prevent the preparation of the subregional NCCP;

(d) The habitat loss has been minimized and mitigated to the maximum extent practicable in accordance with section 4.3 of the Guidelines.

2. The habitat loss will not appreciably reduce the likelihood of the survival and recovery of listed species in the wild, and

3. The habitat loss is incidental to otherwise lawful activities.

Because, in addition to avoiding jeopardy to the gnatcatcher, the Guidelines direct habitat loss to areas with low long-term conservation potential that will not preclude development of adequate NCCP plans and ensure that connectivity between areas of high habitat value will be maintained, we believe that allowing a small percentage of habitat loss within designated critical habitat pursuant to the 4(d) rule is not likely to result in the destruction or adverse modification of critical habitat by appreciably reducing its value for both the survival and recovery of the species. As required under 50 CFR 402.16, we will re-initiate formal consultation on the 4(d) special rule for the gnatcatcher following the publication of this final determination of critical habitat. During this re-initiation, we will re-evaluate the 4(d) special rule for the gnatcatcher to examine the effect of the issuance of Habitat Loss Permits and the effect of the 4(d) on the critical habitat determination.

Requests for copies of the regulations on listed wildlife and inquiries about prohibitions and permits may be addressed to the U.S. Fish and Wildlife Service, Branch of Endangered Species, 911 N.E. 11th Ave., Portland, OR 97232 (telephone 503-231-2063, facsimile 503-231-6143).

Summary of Comments and Recommendations

In the February 7, 2000, proposed rule (65 FR 5946), we requested all interested parties to submit comments on the specifics of the proposal including information, policy, treatment of HCPs, and proposed critical habitat boundaries as provided in the proposed rule. The first comment period closed on April 7, 2000. The comment period was reopened from June 29 to July 31, 2000 (65 FR 5957), to allow for additional comments on the proposed rule and comments on the draft economic analysis of the proposed critical habitat. Due to an error in the electronic mail address used for the submission of public comment that was

identified in the **Federal Register** notice (65 FR 5957), we published a correction on July 11, 2000 (65 FR 42662). We entered comments received from April 8 to June 28, 2000, into the administrative record for the second comment period.

We contacted all appropriate State and Federal agencies, 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: Los Angeles Times, Orange County Register, The Press Enterprise, North County Times, and the San Diego Union-Tribune. The inclusive dates of these publications were February 7 and 8, 2000, for all papers, except the Los Angeles Times which ran the notice on February 18, 2000. In these notices and the proposed rule, we announced the dates and times of three public hearings that were to be held on the proposed rule. These hearings were in Anaheim (February 15, 2000), San Diego (February 17, 2000) and Riverside (February 23, 2000). Transcripts of these hearings are available for inspection (see **ADDRESSES** section).

We requested four ornithologists and conservation biologists, who have familiarity with the gnatcatcher and reserve design to peer review the proposed critical habitat designation. None of the peer reviewers submitted comments on the proposed critical habitat designation.

We received a total of 29 oral and 121 written comments during the 2 comment periods. Of these comments, 11 of the commenters who submitted oral testimony also submitted duplicative written comments. In total, oral and written comments were received from 2 Federal agencies, 1 State agency, 1 State elected official, 8 local governments, and 107 private organizations or individuals. We reviewed all comments received for substantive issues and new data regarding critical habitat and the gnatcatcher. Comments of a similar nature are grouped into 4 general issues relating specifically to the proposed critical habitat determination and draft economic analysis on the proposed determination. These are addressed in the following summary.

Issue 1: Biological Justification and Methodology

(1) *Comment:* The broad or landscape scale of the proposed critical habitat includes areas that do not contain the primary constituent elements for the gnatcatcher. Indicating that only areas containing the primary constituent elements are being proposed as critical

habitat for the gnatcatcher is confusing and does not allow for a discriminate boundary. Several commenters questioned the biological justification for proposing critical habitat for the gnatcatcher using such a landscape scale approach when specific, detailed information is available.

Service Response: We are required to describe critical habitat (50 CFR 424.12(c)) with specific limits using reference points and lines as found on standard topographic maps of the area. Due to the time constraints imposed by the Court, and the absence of detailed GIS coverages during the preparation of the proposed determination, we followed section lines wherever possible to delineate the critical habitat boundaries. Due to the mapping scale, some areas not essential to the conservation of the gnatcatcher were included within the boundaries of proposed critical habitat.

In the preparation of the final determination, we had available for use more detailed GIS coverages that allowed us to reduce our minimum mapping unit from one square mile (one public land survey section or equivalent UTM grid square) to a 100-m UTM grid square. This allowed for the exclusion of many areas that do not contain the primary constituent elements for the gnatcatcher and the drawing of more refined critical habitat boundaries.

(2) *Comment:* Several commenters voiced concern that their property was within proposed critical habitat boundaries, even though it does not contain gnatcatcher habitat.

Service Response: We recognize that not all parcels of land within designated critical habitat will contain the habitat components essential to gnatcatcher conservation. As previously stated in this document, the minimum mapping unit that we used in defining critical habitat boundaries for the gnatcatcher did not allow us to exclude all developed areas such as towns, housing developments, or other developed lands unlikely to provide habitat for the gnatcatcher. However, these areas are within designated critical habitat since they are within the defined boundaries of the designation. Because they do not contain the primary constituent elements for the gnatcatcher, we believe that activities that occur on them will not affect critical habitat and not trigger a section 7 consultation.

(3) *Comment:* The primary constituent elements defined as being essential for the gnatcatcher are not consistent throughout the rule, are not specific, and appear to encompass most natural plant communities in southern California.

Service Response: The description of the primary constituent elements for the gnatcatcher are based on a compilation of data from peer-reviewed published literature, gray literature (non-published or non-peer-reviewed survey or research reports), and biologists knowledgeable about the gnatcatcher and its habitat. The primary constituent elements, as described, represent our best estimate of what plant communities/associations are essential for the conservation of core populations of gnatcatchers and for dispersal and connectivity between core populations. The gnatcatcher, while considered an obligate (requires a specific habitat type to survive) of sage and scrub plant communities, utilizes other plant communities/associations such as chaparral that provide similar structure and function. These additional plant communities/associations have become more important to the conservation of the gnatcatcher with the continued encroachment of urban and agricultural development on scrub plant communities. For this reason, the primary constituent elements are broadly categorized to capture the plant communities/associations and corridors of vegetation that are essential for conservation of core gnatcatcher populations and connectivity between core populations.

We have reviewed the primary constituent elements as described throughout this final determination to verify that they are being discussed in a consistent and clear manner.

(4) *Comment:* The proposed rule states that the areas proposed as critical habitat are occupied by the gnatcatcher. Several commenters stated that no more than 52,500 acres of gnatcatcher occupied habitat exists, and questioned why the proposal indicated all critical habitat is occupied.

Service Response: All critical habitat designated for the gnatcatcher is within the geographical area occupied by the species and is likely used by them, for breeding, feeding, sheltering, or dispersing at some point in time. Thus, in a broad sense, we consider all critical habitat to be occupied by the species. This differs from the common public perception that occupancy means the detectable presence of the gnatcatcher at all times throughout the breeding and non-breeding seasons.

(5) *Comment:* The approximately 799,916 acres that are being proposed as critical habitat for the gnatcatcher is significantly greater than the acreage of coastal sage scrub that was stated in the final listing rule as being available for the gnatcatcher in southern California.

Service Response: In the March 30, 1993, final listing rule for the

gnatcatcher (58 FR 16741), we stated that there were approximately 393,655 acres of coastal sage scrub in southern California available for the species. The proposed determination of critical habitat for the gnatcatcher (65 FR 5946) identified approximately 799,916 acres of land within the critical habitat boundaries. The difference of approximately 400,000 acres resulted from several sources.

Since the listing of this species, increased scientific and commercial studies on the distribution, life history, and ecological needs of the species have been conducted. We now know that the gnatcatcher utilizes a variety of scrub habitats and does not rely solely on coastal sage scrub. These additional scrub communities include Venturan coastal sage scrub, Diegan coastal sage scrub, maritime succulent scrub, Riversidean sage scrub, Riversidean alluvial fan scrub, southern coastal bluff scrub, and coastal sage-chaparral scrub.

More significantly, due to time and resource limitations, we were unable to map critical habitat in sufficient detail in the proposed rule to exclude all developed areas such as towns, housing developments, and other lands unlikely to contain gnatcatcher habitat. In the final rule, we have refined the mapping to better delineate those areas essential to the conservation of the species and exclude additional nonessential areas. While it was not possible to exclude all nonessential areas, due to mapping limitations, the refinement of critical habitat boundaries due to the revised mapping resulted in a reduction of approximately 91,559 ha (226,151 ac).

Issue 2: Policy and Regulations

(6) *Comment:* Many commenters were supportive of the policy that lands covered by approved and future HCPs that provide take authorization for the gnatcatcher should be excluded from critical habitat. Several commenters suggested that designated critical habitat be removed concurrently with approval of the HCP because they are concerned that additional consultations would be required as a result of critical habitat.

Service Response: 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 designation 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. For this designation, we find that the benefits of exclusion outweigh the benefits of designation for all legally operative HCPs issued for the gnatcatcher.

We anticipate that future HCPs in the range of the gnatcatcher will include it as a covered species and provide for its long term conservation. We expect that HCPs undertaken by local jurisdictions (e.g., counties, cities) and other parties will identify, protect, and provide appropriate management for those specific lands within the boundaries of the plans that are essential for the long-term conservation of the species. Section 10(a)(1)(B) of the Act states that HCPs must meet issuance criteria, including minimizing and mitigating any take of the listed species covered by the permit to the maximum extent practicable, and that the taking must not appreciably reduce the likelihood of the survival and recovery of the species in the wild. We fully expect that our future analyses of HCPs and section 10(a)(1)(B) permits under section 7 will show that covered activities carried out in accordance with the provisions of the HCPs and section 10(a)(1)(B) permits will not result in the destruction or adverse modification of critical habitat designated for the gnatcatcher.

In the event that future HCPs covering the gnatcatcher 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 gnatcatcher 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 gnatcatcher. 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 lands essential for the long-term conservation of the gnatcatcher and appropriate management for those lands. By definition, if the gnatcatcher is a covered species under future HCPs, the plans should provide for the long-term

conservation of the species. The take minimization and mitigation measures provided under these HCPs are expected to adequately protect the essential habitat lands designated as critical habitat in this rule, such that the value of these lands for the survival and recovery of the gnatcatcher is not appreciably diminished through direct or indirect alterations. If an HCP that addresses the gnatcatcher as a covered species is ultimately approved, the Service will reassess the critical habitat boundaries in light of the HCP. The Service will seek to undertake this review when the HCP is approved, but funding constraints may influence the timing of such a review. However, an HCP can proceed without a concurrent amendment to the critical habitat designation should all parties agree.

(7) *Comment:* It is illegal and unscientific to withdraw critical habitat designation from land covered by a currently approved HCP or to withdraw it from future HCPs when they are approved. Critical habitat protects land essential for conservation, which is a higher standard than a HCP permit or section 7 consultation which only assure that jeopardy would not occur.

Service Response: Critical habitat does not provide for a higher standard of conservation and protection than HCPs or section 7 consultations. See our response to Issue 6 for a discussion of conservation measures afforded covered species under HCPs. Further, see our response to Issue 39 for a discussion of the relationship of consultations conducted under section 7 relative to critical habitat.

(8) *Comment:* An Environmental Impact Statement as defined under NEPA should be written to address the potential significant impacts from the proposed designation of gnatcatcher critical habitat.

Service Response: We have determined that an Environmental Assessment and/or an Environmental Impact Statement as defined under the authority of the National Environmental Policy Act of 1969, need not be prepared in connection with regulations adopted pursuant to section 4(a) of the Act. A notice outlining our reason for this determination was published in the **Federal Register** on October 25, 1983 (48 FR 49244).

(9) *Comment:* Tribal lands essential to the conservation of the gnatcatcher should be included in critical habitat. More specifically, Unit 4 should be extended to include portions of Capitan Grande Indian Reservation along the upper San Diego River.

Service Response: We have no information that indicates that Capitan

Grande Indian Reservation contains a core population of gnatcatchers, or provides an essential linkage between core populations. Therefore, we did not consider lands within Capitan Grande Indian Reservation essential to the conservation of the gnatcatcher and did not designate them as critical habitat. The information and data available to us does not indicate that any other tribal lands within the range of the gnatcatcher are essential to the species' conservation.

(10) *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).

Service 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 the proposed critical habitat units 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, contact the Carlsbad Fish and Wildlife Office (see **ADDRESSES** section).

(11) *Comment:* Specific lands should be excluded using the exemption afforded pursuant to 4(b)(2) of the Act. The biological benefits of critical habitat are outweighed by the benefits of exclusion.

Service Response: 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. As discussed in this final rule, we have determined that no significant adverse economic effects will result from this critical habitat designation. Consequently, none of the proposed lands have been excluded from the designation based on economic impacts. As discussed in Issue 2, we have excluded all legally operative HCPs from the designation

pursuant to section 4(b)(2) of the Act based on other relevant impacts.

We have also excluded Camp Pendleton from designated critical habitat for the gnatcatcher because of the significant impact that such a designation would have on critical, ongoing training and related operations on the Base. Refer to the section concerning changes from the proposed determination for a more detailed discussion of this exclusion.

(12) *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; large areas where no gnatcatchers are known to occur will now be subject to section 7 consultation. Many Federal agencies have been making a "no effect" determination within unoccupied suitable habitat. Now, with critical habitat there will be "may effect" determinations, and section 7 consultation will be required if any of the constituent elements are present.

Service Response: We acknowledge that there may be some additional section 7 consultations due to critical habitat. However, we believe in most cases, the outcome of these consultations will be similar to the outcome of consultations without critical habitat. See our response to Issue 39. Since coastal sage scrub is widely recognized as a sensitive and declining habitat, projects are often required, by jurisdictions other than the Service, to offset impacts to coastal sage scrub regardless of the presence of designated critical habitat. Therefore, we believe that if there is any additional burden due to critical habitat, it will be minimal.

(13) *Comment:* Several commenters requested that once a section 7 consultation is completed addressing the gnatcatcher, that the lands covered by the consultation be excluded from critical habitat, similar to what has been proposed for lands covered by approved HCPs.

Service Response: We disagree that lands covered by a section 7 consultation should be removed from critical habitat. Section 7 of the Act requires that Federal actions not jeopardize the continued existence of a species or result in the destruction or adverse modification of critical habitat. In contrast, HCPs typically provide for greater conservation benefits to a covered species by assuring the long term protection and management of a covered species and its habitat, and funding for such management through the standards found in the 5-Point

Policy for HCPs (64 FR 35242), the HCP No Surprises regulation (63 FR 8859), and relevant regulations governing the issuance and implementation of HCPs. However, such assurances are typically not provided in connection with Federal projects subject to section 7 consultations which, in contrast to activities on non Federal lands covered by HCPs, often do not commit to long term special management or protections. Thus, a consultation typically does not accord the lands it covers the extensive benefits an HCP provides.

(14) *Comment:* Comments received from the Department of Defense (DOD) requested that their lands be excluded from the critical habitat designation because protections and management afforded the gnatcatcher under their Integrated Natural Resource Management Plans (INRMPs) pursuant to the Sike's Act were sufficient, thereby resulting in their lands not requiring special management or protection and not meeting the definition of critical habitat.

Service Response: We agree that INRMPs can provide special management for lands such that they no longer meet the definition of critical habitat when the plans meet the following criteria: (1) A current INRMP must be complete and provide a conservation benefit to the gnatcatcher, (2) the plan must provide assurances that the conservation management strategies will be implemented, and (3) the plan must provide assurances that the conservation management strategies will be effective, *i.e.*, provide for periodic monitoring and revisions as necessary. If all of these criteria are met, then the lands covered under the plan would no longer meet the definition of critical habitat.

To date, Marine Corps Air Base Miramar is the only DOD installation that has completed a final INRMP that provides for sufficient conservation management and protection for the gnatcatcher. We have reviewed this plan and have determined that it addresses and meets the three criteria. Therefore, lands on Marine Corps Air Base Miramar no longer meet the definition of critical habitat, and they have been excluded from the final designation of critical habitat for the gnatcatcher.

(15) *Comment:* One commenter believed that the protections provided to the gnatcatcher by the 4(d) rule are higher than those provided by critical habitat, therefore lands within jurisdictions enrolled in the NCCP process and that are subject to a gnatcatcher habitat loss permit under the 4(d) special rule should be excluded from the critical habitat designation.

Service Response: The 4(d) rule provides for a limited amount of incidental take (associated with up to 5 percent of sage scrub) for an interim period of time while subregions are actively engaged in preparing an NCCP plan, provided the activities resulting in such take are conducted in accordance with the NCCP Conservation and Process Guidelines finalized by the California Department of Fish and Game in November 1993. These guidelines rely on the voluntary commitment of jurisdictions to engage in the subregional conservation planning process. While we trust that jurisdictions will fulfill their commitment to complete conservation plans, this voluntary enrollment does not assure that such plans will be completed. As such, the 4(d) rule protections for gnatcatcher habitat provided through participating jurisdiction's enrollment in the NCCP process are temporary and are not assured; such protections may be lost if the jurisdiction elects to withdraw from the NCCP program. In addition, the 5 percent allowable loss of sage scrub is not an absolute cap because the 4(d) special rule does not preclude the use of sections 7 and 10 of the Act to authorize incidental take. Sections 7 and 10 of the Act are not limited to the 5 percent allowable sage scrub loss.

(16) *Comment:* Are emergency maintenance activities within designated critical habitat exempt from consultation under section 7 of the Act?

Service 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 must be initiated as soon as possible after the emergency is under control. In addition, 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.

(17) *Comment:* Designation of critical habitat areas within existing pipelines and aqueducts would negatively affect these facilities and should be excluded from critical habitat.

Service Response: Existing pipelines and aqueducts generally lack the primary constituent elements for the gnatcatcher. It was our intention to exclude such areas through the map revisions. Facilities that remain within the boundaries of this final determination are considered to be critical habitat. Periodic maintenance of

existing pipelines, roads, or aqueducts would not constitute an adverse effect to critical habitat when no primary constituent elements are affected. If maintenance activities would adversely affect constituent elements and there is a Federal nexus, then section 7 consultation may be necessary.

(18) *Comment:* Several commenters requested that we extend the comment period on the proposed determination and economic analysis to allow for additional outreach to affected property owners and to obtain their comments.

Service Response: Following the publication of the proposed critical habitat determination on February 7, 2000, we opened a 60-day public comment period which closed on April 7, 2000, held three public hearings during February, and conducted outreach notifying affected elected officials, local jurisdictions, interest groups and property owners. We conducted much of this outreach through legal notices in five regional newspapers, telephone calls, letters and news releases faxed and/or mailed to affected elected officials, local jurisdictions, and interest groups, and publication of the proposed determination and associated material on our Regional world wide web page. We published a notice in the **Federal Register** on June 29, 2000, announcing the availability of the draft economic analysis and opening a public comment period from June 29, 2000, to July 31, 2000, to allow for comments on the draft economic analysis and additional comments on the proposed determination itself. We provided notification of the draft economic analysis through telephone calls and letters and news releases faxed and/or mailed to affected elected officials, local jurisdictions, and interest groups. We also published the draft economic analysis and associated material on our Regional world wide web page following the draft's release on June 29, 2000. Because of the court-ordered time frame, we were not able to extend or open an additional public comment period.

(19) *Comment:* Critical habitat should not have been proposed before an economic and other impacts analysis was completed, and the opportunity to comment on the economic analysis and the proposed rule was limited.

Service Response: Pursuant to 50 CFR 424.19, we are not required to conduct an economic analysis at the time critical habitat is initially proposed. We published the proposed determination in the **Federal Register** (65 FR 5946), invited public comment, and held three public hearings. We used comments

received on the proposed critical habitat to develop the draft economic analysis. We invited public comments for 30 days on the draft economic analysis and additionally on the proposed determination. We were unable to provide a longer comment period given the short time frame ordered by the Court.

(20) *Comment:* Several commenters recommended adding specific lands to critical habitat. These additions involved portions of Calimesa and Live Oak Canyon in Riverside County, lands in Box Canyon in San Diego County, lands between Units 14 and Unit 15 in Los Angeles County, and Barham Ranch in Orange County.

Service Response: We did not include all of the specific lands listed above in the proposal because, at the time of proposal, we concluded that these lands were not essential for the conservation of the gnatcatcher or met the definition of critical habitat. After reassessing the requested additional lands in Calimesa and Live Oak Canyon, which are within the HCP planning area for western Riverside County, we continue to believe that these lands are not essential for the conservation of the gnatcatcher.

Lands in Box Canyon are within the planning area for the approved Fieldstone (Villages of La Costa) HCP, which provides appropriate conservation management and protections for the gnatcatcher and its habitat. Therefore, we have excluded these lands in accordance with section 4(b)(2) of the Act.

We evaluated lands between former Unit 14 (Unit 12—East Los Angeles County Linkage) and former Unit 15 (Unit 13—Western Los Angeles County) during the development of the proposal. Insufficient data are available about the gnatcatcher and its habitat in this corridor to conclude that these lands are essential to the conservation of the species. Despite our solicitation for such data concerning this corridor from the public through discussions at one of the public hearings and in general in the proposal, no substantial information concerning this area was submitted during the comment periods. As a result, we continue to maintain that these lands are not essential for the conservation of the gnatcatcher.

We received several comments to include Barham Ranch in the critical habitat designation. Because Barham Ranch is within the boundaries of the Central/Coastal NCCP Subregions of Orange County, we concluded that this area is part of the reserve system established by the NCCP/HCP for these subregions. Because Barham Ranch was thought to be part of the HCP reserve

system, we did not include this area in the proposed rule. However, we have discovered, through comments and subsequent research, that Barham Ranch is not presently incorporated into the reserve system for the Central/Coastal NCCP. Because we did not propose Barham Ranch as critical habitat and afford members of the public an opportunity to comment on its inclusion, and we are under a Court order to finalize this critical habitat designation by September, 30, 2000, we are not including Barham Ranch in this final designation.

(21) *Comment:* A number of commenters identified specific areas that they thought should not be designated as critical habitat.

Service Response: Where site-specific documentation was submitted to us providing a rationale 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. We excluded lands from the final designation that we determined to be nonessential to the conservation of the gnatcatcher (*i.e.*, not containing a core population or linkage between core populations) or that were located within an approved HCP for the gnatcatcher. We included lands in the final designation that we still considered essential using the revised mapping scale of 100-m UTM grid and did not have special management sufficient for the conservation of the gnatcatcher.

(22) *Comment:* Many landowners expressed concern about how critical habitat designation may affect their particular properties and what they would and would not be allowed to do in the future because of the designation. Some of these landowners expressed concerns that they would need to seek incidental take authorization from us for every type of action taken on their property.

Service Response: We are sensitive to the concerns of individuals concerning their property rights. The designation of critical habitat for the gnatcatcher does not impose any additional requirements or conditions on property owners beyond those imposed by the listing of the gnatcatcher as a federally threatened species. All landowners, public and private, are responsible for making sure their actions do not result in the unauthorized taking of a listed species, regardless of whether or not the activity occurs within designated critical habitat. Take is defined by regulation to include "significant habitat

modification or degradation that actually kills or injures wildlife," which was upheld by the U.S. Supreme Court in *Sweet Home Chapter of Communities for a Great Oregon et al. v. Babbitt*.

Furthermore, all Federal agencies are responsible to ensure that the actions they fund, permit, or carry out do not result in jeopardizing the continued existence of a listed species, regardless of critical habitat designation.

"Jeopardize the continued existence of" means 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 (50 CFR 402.02). Because we designated only areas within the geographic range occupied by the gnatcatcher, any activity that would result in an adverse modification of the gnatcatcher's critical habitat would virtually always also jeopardize the continued existence of the species. Federal agencies must consult pursuant to section 7 of the Act on all activities that will adversely affect the gnatcatcher taking place both within and outside designated critical habitat.

(23) *Comment:* Some landowners expressed concern that because their property was located within critical habitat, they would be subject to additional constraints under the California Environmental Quality Act (CEQA).

Service Response: According to 15065 (California Code of Regulations Title 14, Chapter 3) of CEQA guidelines, environmental impact reports are required by local lead agencies when, among other things, a project has the potential to "reduce the number or restrict the range of an endangered, rare or threatened species." Though federally listed species are presumed to meet the CEQA definition of "endangered, rare or threatened species" under 15380 (California Code of Regulations Title 14, Chapter 3), no additional constraints should result from the designation of critical habitat beyond that now in place for all federally listed species, including the gnatcatcher.

(24) *Comment:* Several commenters recommended that we postpone issuing a final determination until a more specific and defensible critical habitat proposal can be written and an accurate and quantitative economic analysis be conducted.

Service Response: We are required to use the best available information in designating critical habitat. We are under a court order to complete the designation of gnatcatcher critical

habitat by September 30, 2000. We did solicit new biological data and public participation during the comment period and public hearings on the proposed rule, and subsequent comment period for the draft economic analysis. These comments have been taken into account in the development of this final determination. Further, we will continue to monitor and collect new information and may revise the critical habitat designation in the future if new information supports a change.

Issue 3: Economic Issues

(25) *Comment:* Some commenters were concerned that, while we discussed impacts that are more appropriately attributable to the listing of the gnatcatcher than to the proposed designation of critical habitat, we did not include in the baseline costs attributable to the listing or provide quantified estimates of the costs associated with the listing.

Service Response: We do not agree that the economic impacts of the listing should be considered in the economic analysis for the designation of critical habitat. The Act is clear that the listing decision be based solely on the best available scientific and commercial data available (section 4(b) of the Act). Congress also made it clear in the Conference Report accompanying the 1982 amendments to the Act that "economic considerations have no relevance to determinations regarding the status of species * * *". If we were to consider the economic impacts of listing in the critical habitat designation analysis it would lead to confusion, because the designation analysis is meant to determine whether areas should be excluded from the designation of critical habitat based solely upon the costs and benefits of the designation, and not upon the costs and benefits of listing a species.

Additionally, because the Act specifically precludes us from considering the economic impacts of the listing, it would be improper to consider those impacts in the context of an economic analysis of the critical habitat designation. Our economic analyses address how our actions may affect current or planned activities and practices; they do not address impacts associated with previous Federal actions, which in this case includes the listing of the gnatcatcher as a threatened species.

(26) *Comment:* One commenter stated, " * * * your agency threatens to cost the Chaffey Joint Union High School over \$10 million. This estimate is based on * * * mitigation * * * plus the significant cost of delaying a major

school construction project. These costs are directly related to the "critical habitat" finding, and yet your [economic analysis] makes no mention of them."

Service Response: The inclusion of the school site within proposed critical habitat is not relevant to the school district's alleged unauthorized take of the gnatcatcher and any costs or delays related to the construction of the school. Hence, the costs associated with the construction of the school would be attributed to the presence of the gnatcatchers on the site, rather than the inclusion of the site within the proposed critical habitat.

(27) *Comment:* Several commenters were concerned that our economic analysis was incorrect to assume that a Regulatory Flexibility Analysis was not required.

Service 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 in fact not have a significant economic impact on a substantial number of small entities and as a result, we do not need to prepare either an initial or final regulatory flexibility analysis.

We have based our finding on the fact that this rule will not result in any significant additional burden to the regulated community, regardless of the size of the entity. Our economic analysis identified several potential impacts associated with critical habitat designation, including increased consultation costs, project modification costs, and potential temporary decreases in property values. However, because we have only designated property that is within the geographic range occupied by the gnatcatcher, and because the gnatcatcher is already federally listed, other Federal agencies are already required to consult with us on activities that they authorize, fund, permit, or carry out that have the potential to jeopardize the gnatcatcher. Any associated costs related to these consultations, including project modifications, will therefore be attributable to the listing of the species and not to designation of critical habitat. In a few instances, completed (or near-complete) consultations may have to be reinitiated once the critical habitat designation is finalized to ensure

Federal agencies' responsibilities under section 7 are met; as a result, the critical habitat designation could result in an economic affect associated with any delays to complete these consultations. Similarly, most decreases in property values, to the extent that they can be attributed to the gnatcatcher and result from actual restrictions in land use, would be a result of its listing and not because of critical habitat designation. We recognize that the market response to a critical habitat designation, due to the perception of an increased regulatory burden, may lower real estate values on lands within the designation; however, we expect this decrease in value to be temporary. Our draft and final economic analysis further discusses how we arrived at our conclusion regarding impacts to small entities.

(28) *Comment:* The draft economic analysis only looked at "current and planned" land uses and ignored the designation's impact on future, not yet planned uses.

Service Response: We attempted to estimate economic impacts that are reasonably certain to result from designation of critical habitat for the gnatcatcher. Consideration of unplanned and unforeseeable future costs and benefits would be purely speculative and would not add anything of appreciable value to the economic analysis.

(29) *Comment:* "The [economic] analysis fails to assess the economic consequences of halting the use of the 4(d) rule interim take provisions and the function of such interim take identified in the [Environmental Assessment] for the 4(d) rule in terms of providing a necessary economic incentive for landowners' participation in the subregional NCCP conservation planning program incorporated into the 4(d) rule.

Service Response: As previously mentioned in this determination, in addition to avoiding jeopardy to the gnatcatcher, the NCCP Guidelines direct habitat loss to areas with low long-term conservation potential that will not preclude development of adequate NCCP plans and ensure that connectivity between areas of high habitat value will be maintained. We believe that allowing a small percentage of habitat loss within designated critical habitat pursuant to the 4(d) special rule for the gnatcatcher is not likely to adversely modify or destroy critical habitat by appreciably reducing its value for both the survival and recovery of the species. As provided for in 50 CFR 402.16, we will re-initiate formal consultation on the 4(d) special rule for

the gnatcatcher following the publication of this final determination of critical habitat. During this re-initiated consultation, we will re-evaluate the 4(d) special rule for the gnatcatcher to examine the effects of the 4(d) rule and the issuance of Habitat Loss Permits on critical habitat.

(30) *Comment:* Many commenters expressed concern that the draft economic analysis failed to quantify the effects of proposed critical habitat designation.

Service Response: We were only able to identify the types of impacts likely to occur regarding the proposed critical habitat designation. The impacts we identified that could result from critical habitat designation include new consultations, reinitiation of consultations, and perhaps some prolongment of ongoing consultations to address critical habitat concerns, as required under section 7 of the Act. In some of these cases, it is possible that we might suggest reasonable and prudent alternatives to the proposed activity that triggered the consultation, which would also be an impact. Also associated with consultations is the length of time required to carry out consultations, which may result in opportunity costs associated with project delays.

In the case of proposed critical habitat for the gnatcatcher, however, we have only designated habitat that is within the geographic range occupied by the gnatcatcher. As a result, these impacts are not likely to be significant because Federal agencies are already required to consult with us on activities taking place on these lands that have the potential to adversely affect the gnatcatcher. While the Act requires agencies to consult with us on activities that may adversely affect the gnatcatcher and critical habitat, we do not believe that within proposed critical habitat for the gnatcatcher there are likely to be any actions of concern that adversely modify critical habitat without simultaneously causing concern about the potential for the action to jeopardize the gnatcatcher, which would trigger a consultation regardless of critical habitat designation.

We also recognize that in some instances, the designation of critical habitat could result in a distorted real estate market because participants may incorrectly perceive that land within critical habitat designation is subject to additional constraints. In truth, this is not the case because critical habitat designation for the gnatcatcher is not adding any extra protection, nor impacting landowners beyond that associated with the listing of the species

as threatened under the Act. As a result, we believe that any resulting distortion will be temporary and have a relatively insignificant effect on the real estate market as it should become readily apparent to market participants that critical habitat for the gnatcatcher is not imposing any additional constraints on landowner activities beyond those currently associated with the listing.

(31) *Comment:* Several commenters voiced concern that they were not directly contacted for their opinions on the economic impacts of critical habitat designation or why their specific land parcels were not addressed.

Service Response: We did not feel it was necessary to contact every potential stakeholder in order for us to develop a draft economic analysis. 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, and local government agencies, as well as some landowners. When the draft economic analysis was completed, we noticed its availability in the **Federal Register** and local newspapers, and requested public comment. In particular, we requested comments on the adequacy of the economic analysis.

(32) *Comment:* Some commenters felt that the economic analysis is flawed because it is based on the premise that we have proposed designating only occupied habitat as critical habitat.

Service Response: The determination of whether or not proposed critical habitat is within the geographic range occupied by the gnatcatcher is part of the biological decision-making process and lies beyond the scope of an economic analysis. For a discussion of the biological justification of why we believe the area being designated is within the geographical area occupied by the gnatcatcher see our response to Issues 1, 2, and 4.

(33) *Comment:* Critical habitat designation is so broad that some landowners will be forced to survey for gnatcatcher presence under Federal and State environmental laws when undertaking a project, even though some sites within designated critical habitat do not contain gnatcatchers or the primary constituent elements needed by gnatcatchers to occupy an area. In effect these commenters believe that we have shifted the economic burden of determining what lands are occupied by the gnatcatcher within the designated critical habitat boundaries to

landowners within these boundaries, irrespective of whether the lands in question have ever been occupied by the gnatcatcher.

Service Response: We do not believe that the designation of critical habitat results in additional survey requirements. Ideally, we would prefer to map critical habitat more precisely, and this final designation is more precisely mapped than the proposal. To the extent of our minimum mapping unit, we excluded lands not essential to the conservation of the gnatcatcher from this critical habitat designation.

However, we were not able to exclude all nonessential lands such as roads, buildings, and similar structures unlikely to contain primary constituent elements and contribute to the conservation of the gnatcatcher. Existing features and structures within the boundaries of the mapped units, such as buildings, roads, aqueducts, railroads, airports, other paved areas, lawns, and other urban landscaped areas will not contain one or more of the primary constituent elements and therefore are not critical habitat. Federal actions limited to those areas, therefore, would not trigger a section 7 consultation, unless they affect the species and/or primary constituent elements in adjacent critical habitat.

(34) *Comments:* Some commenters voiced concern that the designation of critical habitat could have a negative effect on their property values.

Service Response: We acknowledged in our economic analysis that the designation of critical habitat could have some effect on property values. Most of this effect, we believe, is short-term and would occur as a result of the market's uncertainty as to what critical habitat designation requires. While our economic analysis recognized this potential effect, we did not find enough credible evidence during the preparation of the draft economic analysis that would have allowed us to develop a defensible estimate.

Critical habitat designation could also affect property values if it results in any additional or more restrictive regulatory requirements. However, because we have designated critical habitat only in within the geographic range occupied by the gnatcatcher, where we would have consulted on proposed actions already because the species was already listed, we believe that any landowner activities that require a consultation and that has resulting impacts that affect property values would have occurred regardless of whether or not we designated critical habitat. This assertion is based on the fact that Federal agencies are required to consult

with us pursuant to section 7 of the Act concerning actions they fund, permit, or carry out that may jeopardize the gnatcatcher regardless of whether critical habitat is designated.

(35) *Comment:* The draft economic analysis failed to adequately estimate the potential economic impacts to agricultural lands. In particular, some commenters believed that critical habitat designation would hinder future expansion of the industry.

Service Response: By designating critical habitat for the gnatcatcher we are not precluding any lands from being farmed now or in the future. We do not exert any influence over land-use decisions on private property conducted by non-Federal government entities, unless such action results in a take of a federally listed species or requires a Federal action.

The Act only requires Federal agencies to consult with us on actions that they fund, authorize, or carry out that may jeopardize a listed species or destroy or adversely modify its critical habitat. In the case of the gnatcatcher, we are only designating critical habitat within the geographic area occupied by the species. As a result, we do not believe that there are any land-use actions within critical habitat boundaries that would destroy or adversely modify critical habitat without simultaneously jeopardizing the gnatcatcher.

(36) *Comments:* The draft economic analysis failed to consider the effect critical habitat designation would have on the demand for new housing.

Service Response: We are aware that some of the land that we have proposed as critical habitat for the gnatcatcher 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 some type of Federal nexus before work actually begins. As a result, we expect that future consultations, in part, will include planned and future real estate development.

However, these resulting consultations, we believe, will not take place solely in regard to critical habitat issues. While it is certainly 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 can jeopardize a listed species or adversely modify its critical habitat.

(37) *Comment:* One commenter submitted an economic analysis of critical habitat designation commissioned by the law offices of Nossaman, Guthner, Knox and Elliott, LLP, representing The Transportation Corridor Agencies, Forest Lawn Memorial-Park Association, and other interested parties, that reported the estimated economic impacts attributable to designating critical habitat for the gnatcatcher could result in impacts between \$300 million and \$5.5 billion. According to the study, critical habitat designation will impact between 1 to 5 percent of future expected growth in the area.

Service Response: We disagree with the author's conclusions. The conclusions apparently are largely based on the outcome of a biological opinion that we issued three years ago on the Tequesquite Landfill Flood Protection Levee project in Riverside County, California (1-6-97-F-38). In this biological opinion, a 3:1 mitigation ratio was required to compensate for permanent impacts to designated critical habitat, 2:1 for temporary impacts to designated critical habitat, and a minimum of 1:1 for project impacts occurring outside of designated critical habitat.

The use of the Tequesquite Landfill Flood Protection Levee project opinion to estimate the impacts of designating critical habitat for the gnatcatcher is inappropriate for two reasons. First, this opinion addressed impacts to the least Bell's vireo (*Vireo bellii pusillus*) and the southwestern willow flycatcher (*Empidonax traillii eximius*), not the gnatcatcher. Second, the ratios used in this opinion are in keeping with those employed for projects affecting wetland/riparian habitats along the Santa Ana River, regardless of occupancy by listed species and/or inclusion within critical habitat. As a result, the unfortunate choice of words in this opinion linking mitigation ratios and critical habitat for two riparian birds should not be used as a predictor of future consultations involving gnatcatcher critical habitat.

There are several examples where we issued draft biological opinions on projects affecting the gnatcatcher before the proposed critical habitat designation was published, and subsequently converted these drafts into final biological and conference opinions following publication of the proposal (e.g., Murrieta SCGA/HighPointe

Communities Project, 1-6-99-F-80). In these examples, the proposed conservation measures and the minimization measures in the final biological/conference opinion remained unchanged from the prior draft opinion, even though the final opinion addressed proposed critical habitat while the draft did not. We feel that such examples better characterize the expected regulatory impact of this critical habitat designation than does the Tequesquite Landfill Flood Protection Levee biological opinion.

(38) *Comment:* One commenter was concerned because our economic analysis failed to consider the impact of critical habitat on implementation of the Southern California Association of Governments (SCAG) and the San Diego Association of Governments (SANDAG) regional transportation plans.

Service Response: Because we have determined that the lands designated as critical habitat are within the geographic range occupied by the gnatcatcher, this designation does not present any significant additional regulatory burdens upon Regional transportation projects beyond those attributable to the listing of the gnatcatcher as a federally threatened species. Consequently, we do not believe that the designation of critical habitat for the gnatcatcher adds any significant additional economic burden within critical habitat boundaries. In some cases, where an existing consultation is completed, a conference opinion has not been completed, the project not yet implemented, and the Federal action agency retains discretion (or such discretion is provided by law), agencies may need to reinstate consultation to address possible impacts to critical habitat.

(39) *Comment:* The assumption applied in the economic analysis that the designation of critical habitat will cause no impacts above and beyond those caused by listing of the species is faulty, legally indefensible, and contrary to the Act. "Adverse modification" and "jeopardy" are different, will result in different impacts, and should be analyzed as such in the economic analysis.

Service Response: We disagree with the commenter's assertion that "jeopardy" and "adverse modification" represent different standards. Section 7 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. Action likely to "jeopardize the continued existence" of a species are those that would appreciably reduce the

likelihood of both the survival and recovery of a listed species. Actions likely to result in the destruction or adverse modification of critical habitat are those that would appreciably reduce the value of critical habitat for both the survival and recovery of the listed species. Common to both definitions is an appreciable detrimental effect on both survival and recovery of a listed species. Given the similarity of these definitions, actions likely to result in the destruction or adverse modification of critical habitat would almost always result in jeopardy to the species concerned, particularly where, as here, only habitat within the geographic range occupied by the gnatcatcher is designated as critical habitat.

(40) *Comment:* The proposed designation of critical habitat will impose economic hardship on private landowners and businesses. There is an expressed concern that the proposed critical habitat designation would have serious financial implications for commercial and residential development businesses. It is suggested that designation would result in reduced property values, lost tax revenues, lost jobs, and foregone economic activity.

Service Response: As stated in the economic analysis, the designation of critical habitat for the gnatcatcher is not adding any new requirements to the current regulatory process. Since the adverse modification standard for critical habitat and the jeopardy standard are almost identical, the listing of the gnatcatcher itself initiated the requirement for consultation. This critical habitat designation adds no additional requirements not already in place due to the species' listing.

(41) *Comment:* A commenter asserted that there would be delays in the acquisition of Federal permits or the inability to acquire permits for further development, as a result of section 7 consultation, which would be an economic hardship for both developers and homeowner associations.

Service Response: Some short delays in the issuance of a section 7 biological opinion may result with respect to projects for which the section 7 consultation was initiated before critical habitat for the gnatcatcher was proposed and the Federal agency chose not to request a conference opinion on the proposed critical habitat. We would not expect similar delays following the publication of this final rule because critical habitat will be taken into consideration during each consultation from the beginning. We do not expect the designation of critical habitat to result in consultation requirements that

did not already exist since the listing of the gnatcatcher.

(42) *Comment:* Some commenters were concerned that the economic analysis did not address previous letters sent to us from various organizations indicating their intent to bring a series of legal challenges to compel us (and others, such as local governments in California) to apply additional land use restrictions, obtain additional monetary extractions, and deny wholesale uses of land where such land has been designated as critical habitat.

Service Response: The concerns expressed by the commenters are regarding letters we received in response to a notice that we published in the **Federal Register** on June 14, 1999 (64 FR 31871), seeking public comment on clarifying the role of critical habitat in endangered species conservation. The commenters feel that we should consider, in our economic analyses, the impact that potential lawsuits may have on our administration of critical habitat. We are taking into consideration the comments we received in response to the June 14, 1999, notice in the development of a national policy on critical habitat and its role in endangered species conservation. Only comments submitted in response to the proposed critical habitat rule for the gnatcatcher are appropriately addressed here.

(43) *Comment:* Some commenters were concerned that we did not consult with enough local land use and economic experts in performing our economic analysis of critical habitat.

Service Response: In performing the critical habitat economic analysis for the gnatcatcher, we consulted with Federal, State, county, and local agency staff involved in the management of land within the proposed critical habitat designation. In some cases, we also consulted with individuals in the private sector. In addition to conducting these interviews, we derived information from public comments submitted in response to the proposed rule, public hearings, and maps. We believe that the information from these sources was sufficient to reasonably determine the effects of designating critical habitat for the gnatcatcher and, given the court-ordered deadline for completing this final rule, believe it represents the best effort we could have successfully accomplished. Absent the Court order, we likely would have consulted with additional land use and economic experts while developing the draft economic analysis. We have recently contracted with a private firm to develop a framework to guide our

development of economic analyses in the future.

(44) *Comment:* Some commenters stated that we should have estimated the cumulative economic effect of the critical habitat designation for the gnatcatcher along with the effect of future pending and proposed critical habitat for other species in southern California.

Service Response: We are not required to estimate the cumulative effects of critical habitat designations as part of our rulemaking procedures. We are required to only consider the effect of the proposed government action, which in this case is the designation of critical habitat for the gnatcatcher. Again, the appropriate baseline to use in an analysis of a Federal action, which in this case is the designation of critical habitat for the gnatcatcher, is the way the world would look absent the proposed regulation. Against this baseline, we attempt to identify and measure the *incremental* costs and benefits associated with the government action. Because the gnatcatcher is already a federally protected species, any effects the listing has on the regulated community is considered part of the baseline scenario, which remains unaffected by our critical habitat designation. Future pending and proposed critical habitat designations for other species in southern California will be part of separate rulemakings and consequently, their economic effects will be considered separately.

Issue 4: Other Relevant Issues

(45) *Comment:* We should have a system in place for reporting suspected violators of the Act prior to the designation of critical habitat for the gnatcatcher.

Service Response: The Act and its implementing regulations found at 50 CFR 17.21 and 17.31 set forth a series of general prohibitions and exceptions that apply to all threatened and endangered wildlife. These prohibitions, in part, make it illegal for any person subject to the jurisdiction of the United States to take (including harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect; or attempt any such conduct), import or export, ship in interstate or foreign commerce in the course of commercial activity, or sell or offer for sale in interstate or foreign commerce any listed species. It also is illegal to possess, sell, deliver, carry, transport, or ship any such wildlife that has been taken illegally. Suspected violations of the Act can be reported to any local Fish and Wildlife Office, National Wildlife Refuge Office, or Law Enforcement

Office for investigation. Additionally, suspected violations can be reported to local or State law enforcement agencies, California Department of Fish and Game offices or local jurisdictions.

Summary of Changes From the Proposed Rule

Based on a review of public comments received on the proposed determination of critical habitat for the gnatcatcher, we re-evaluated our proposed designation of critical habitat for the gnatcatcher. This resulted in five significant changes that are reflected in this final determination. These are (1) a reduction in the minimum mapping unit for defining critical habitat boundaries, (2) the loss of a primary habitat connection in Riverside County from the designation, (3) the exclusion, under section 4(b)(2), of some lands covered by approved HCPs for the gnatcatcher, (4) the exclusion of Marine Corps Air Station, Miramar from the designation due to an existing, finalized resource management plan, and (5) the exclusion under section 4(b)(2) of Camp Pendleton because the designation would significantly impair critical, ongoing training and related operations. A more detailed discussion of each of these issues follows.

Based on public comment and the availability of more current and precise GIS (spot imagery) data, we refined the minimum mapping unit for the designation from one PLS section (approximately 1 square mile) or UTM equivalent in the Spanish Land Grant areas to a 100-m UTM grid that approximates a boundaries of lands essential to gnatcatcher conservation delineated from digital aerial photography. We then superimposed the proposed critical habitat boundaries on the newer imagery data and removed lands that were not essential to the conservation of the gnatcatcher. This resulted in the removal of significant urban or developed areas including some agricultural lands. The overall refinement of critical habitat boundaries due to the revised mapping scale resulted in a reduction of approximately 91,559 ha (226,151 ac).

During this effort to refine the critical habitat boundaries, we discovered that a significant corridor in southwestern Riverside County that we included in the proposal as being essential for connectivity between core gnatcatcher populations in northern San Diego County and southwestern Riverside County was no longer in existence on the ground. The imagery and supporting data that we used in developing the proposed determination indicated that habitat corridors still existed in these

areas. Due to significant urban and agricultural development in the area and the distribution of known gnatcatcher populations, we believed that this was the sole primary corridor in the area. Upon review of the more current spot imagery and supporting data, we discovered that the lands in this proposed corridor were developed, and we removed the area from this final designation.

In our proposed determination of critical habitat for the gnatcatcher, we asked for public comment on the appropriate relationship between approved HCPs and designated critical habitat. After considering the comments we received, we have chosen to evaluate areas covered by approved HCPs for the gnatcatcher for exclusion under the benefits-balancing test found in section 4(b)(2) of the Act. This section allows us to exclude areas upon determination that the benefits of excluding the area outweigh the benefits of including the area in the critical habitat designation, provided the exclusion would not result in the extinction of the species. Our application of this balancing test to lands covered by HCPs for the gnatcatcher is described in detail in the preamble.

During the comment period for the proposed determination of critical habitat for the gnatcatcher, we received and subsequently evaluated a final Integrated Natural Resource Management Plan for Marine Corps Air Base Miramar. This plan addresses the gnatcatcher as a covered species and provides conservation management and protections for the species. We evaluated this plan and determined that the conservation management measures and protections afforded the gnatcatcher are sufficient to assure its conservation on the Base. Therefore, we have excluded Marine Corps Air Base Miramar from the final determination of critical habitat for the gnatcatcher. A more detailed discussion of the criteria and reasons for this exclusion can be found in the response to Issue 14. The removal of this base from the critical habitat determination resulted in a reduction of approximately 4,859 ha (12,007 ac) from the area proposed as critical habitat.

Marine Corps Base Camp Pendleton is the Marine Corps' only amphibious training base on the west coast. We proposed 20,613 ha (50,935 ac) of the approximately 50,000 ha (125,000 ac) Camp Pendleton, or approximately 40 percent of the Base, as critical habitat for the gnatcatcher. During the public comment periods for the proposal, the Marines informed us that the designation, if made final, would

cripple their ability to conduct their critical training activities on Camp Pendleton, which in turn would "have a long term, cumulative and detrimental impact on [their] mission." Because designation would significantly impair critical training, and in light of our ongoing consultation on the Marine Corps' activities in upland habitats on the Base and the Marine Corps' obligation to complete an Integrated Natural Resource Management Plan within the next 13 months, we excluded Camp Pendleton from this final designation. Our rationale for this exclusion is discussed in more detail in the section "Exclusions under section 4(b)(2)", above.

Economic Analysis

Section 4(b)(2) of the Act requires us to designate critical habitat on the basis of the best scientific and commercial data 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.

Economic effects caused by listing the gnatcatcher as a threatened species and by other statutes are the baseline against which the effects of critical habitat designation are evaluated. The economic analysis must then examine the incremental economic and conservation effects and benefit of the critical habitat designation. Economic effects are measured as changes in national income, regional jobs, and household income. An analysis of the economic effects of gnatcatcher critical habitat designation was prepared (Industrial Economics, Incorporated, 2000) and made available for public review (June 29-July 31, 2000; 65 FR 40073). The final analysis, which reviewed and incorporated public comments, concluded that no significant economic impacts are expected from critical habitat designation above and beyond that already imposed by listing the gnatcatcher. The most likely economic effects of critical habitat designation are on activities funded, authorized, or carried out by a Federal agency. The analysis examined the effects of the proposed designation on: (1) re-initiation of section 7 consultations, (2) length of time in which section 7 consultations are completed, and (3) new consultations resulting from the determination. Because areas proposed

for critical habitat are within the geographic range occupied by the gnatcatcher, activities that may affect critical habitat may also affect the species, and would thus be subject to consultation whether or not critical habitat is designated. We believe that any project that would adversely modify or destroy critical habitat would also jeopardize the continued existence of the species, and that reasonable and prudent alternatives to avoid jeopardizing the species would also avoid adverse modification of critical habitat. Thus, no regulatory burden or associated significant additional costs would accrue because of critical habitat above and beyond that resulting from listing. Our economic analysis does recognize that there may be costs from delays associated with reinitiating completed consultations after the critical habitat designation is made final. There may also be economic effects due to the reaction of the real estate market to critical habitat designation, as real estate values may be lowered due to perceived increase in the regulatory burden. We believe this impact will be short-term, however.

A copy of the final economic analysis and description of the exclusion process with supporting documents are included in our administrative record and may be obtained by contacting our office (see ADDRESSES section).

Required Determinations

Regulatory Planning and Review

This document has been reviewed by the Office of Management and Budget (OMB), in accordance with Executive Order 12866. OMB makes the final determination under Executive Order 12866.

(a) This rule will not have an annual economic effect of \$100 million or adversely affect an economic sector, productivity, jobs, the environment, or other units of government. A cost-benefit and economic analysis is not required. The gnatcatcher was listed as a threatened species in 1993. In fiscal years 1998 through 2000 we have conducted 50 formal section 7 consultations with other Federal agencies to ensure that their actions would not jeopardize the continued existence of the gnatcatcher. We have also issued an estimated 19 section 10(a)(1)(B) incidental take permits for entities that have prepared HCPs for areas where the species occurs.

The areas designated as critical habitat are currently within the geographic range occupied by the gnatcatcher. 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 (see Table 2 below). Section 7 requires Federal agencies to ensure that they do not jeopardize the continued existence of the species. Based upon our experience with the 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 gnatcatcher does not have 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 that 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.

(b) This rule 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 gnatcatcher since the listing in 1993. The prohibition against adverse modification of critical habitat is not expected to impose any restrictions in addition to those that currently exist because all designated critical habitat is within the geographic range occupied by the gnatcatcher. 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 will not materially affect entitlements, grants, user fees, loan programs, or the rights and obligations of their recipients. Federal agencies are currently 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 significant incremental effects.

(d) This rule will not raise novel legal or policy issues. This final determination follows the requirements for determining critical habitat contained in the Endangered Species Act.

TABLE 2.—IMPACTS OF GNATCATCHER LISTING AND CRITICAL HABITAT DESIGNATION

Categories of activities	Activities potentially affected by species listing only ¹	Additional activities potentially affected by critical habitat designation ²
Federal Activities Potentially Affected. ³	Activities the Federal Government carries out such as removing, thinning, or destroying gnatcatcher habitat (as defined in the primary constituent elements discussion), whether by burning or mechanical, chemical, or other means (e.g. woodcutting, grubbing, grading, overgrazing, construction, road building, mining, herbicide application, etc.) and appreciably decreasing habitat value or quality through indirect effects (e.g. noise, edge effects, invasion of exotic plants or animals, or fragmentation).	None.
Private Activities Potentially Affected. ⁴	Activities such as removing, thinning, or destroying gnatcatcher habitat (as defined in the primary constituent elements discussion), whether by burning or mechanical, chemical, or other means (e.g. woodcutting, grubbing, grading, overgrazing, construction, road building, mining, herbicide application, etc.) and appreciably decreasing habitat value or quality through indirect effects (e.g. noise, edge effects, invasion of exotic plants or animals, or fragmentation that require a Federal action (permit, authorization, or funding).	None.

¹ This column represents the activities potentially affected by listing the gnatcatcher as a threatened species (March 30, 1993; 58 FR 16741) under the Endangered Species Act.

² This column represents the activities potentially affected by the critical habitat designation in addition to those activities potentially affected by listing the species.

³ Activities initiated by a Federal agency.

⁴ Activities initiated by a private entity that may need Federal authorization or funding.

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

In the economic analysis, we determined that designation of critical habitat will not have a significant effect on a substantial number of small entities. As discussed under Regulatory Planning and Review above and in this final determination, this designation of critical habitat for the gnatcatcher is not expected to result in any restrictions in addition to those currently in existence. As indicated on Table 1 (see Critical Habitat Designation section) we have designated property owned by Federal, State and local governments, and private property.

Within these areas, the types of Federal actions or authorized activities

that we have identified as potential concerns are:

(1) Regulation of activities affecting waters of the United States by the Army Corps under section 404 of the Clean Water Act;

(2) Regulation of water flows, damming, diversion, and channelization by Federal agencies;

(3) Regulation of grazing, mining, and recreation by the BLM or Forest Service;

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

(5) Regulation of airport improvement activities by the Federal Aviation Administration jurisdiction;

(6) Military training and maneuvers on applicable DOD lands;

(7) Construction of roads and fences along the International Border with Mexico, and associated immigration enforcement activities by the Immigration and Naturalization Service;

(8) Hazard mitigation and post-disaster repairs funded by the Federal Emergency Management Agency;

(9) Construction of communication sites licensed by the Federal Communications Commission; and

(10) Activities funded by the U.S. Environmental Protection Agency, Department of Energy, or any other Federal agency.

Many of these activities sponsored by Federal agencies within critical habitat areas are carried out by small entities (as defined by the Regulatory Flexibility

Act) through contract, grant, permit, or other Federal authorization. As discussed in section 1 above, these actions are currently required to comply with the listing protections of the Act, and the designation of critical habitat is not anticipated to have any additional effects on these activities.

For actions on non-Federal property that do not have a Federal connection (such as funding or authorization), the current restrictions concerning take of the species remain in effect, and this final determination will have no additional restrictions.

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

In the economic analysis, we determined whether designation of critical habitat would cause (a) any effect on the economy of \$100 million or more, (b) any increases in costs or prices for consumers, individual industries, Federal, State, or local government agencies, or geographic regions in the economic analysis, or (c) any significant adverse effects on competition, employment, investment, productivity, innovation, or the ability of U.S.-based enterprises to compete with foreign-based enterprises. Refer to the final economic analysis for a discussion of the effects of this determination.

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 will not "significantly or uniquely" affect small governments. A Small Government Agency Plan is not required. Small governments will only be affected to the extent that any Federal funds, permits or other authorized activities must ensure that their actions will not adversely affect the critical habitat. However, as discussed in section 1, these actions are currently subject to equivalent restrictions through the listing protections of the species, and no further restrictions are anticipated.

(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, the rule does not have significant takings implications. A takings implication assessment is not required.

As discussed above, the designation of critical habitat affects only Federal agency actions. The rule will not increase or decrease the current restrictions on private property concerning take of the gnatcatcher. Due to current public knowledge of the species protection, the prohibition against take of the species both within and outside of the designated areas, and the fact that critical habitat provides no incremental restrictions, we do not anticipate that property values will be affected by the critical habitat designation. While real estate market values may temporarily decline following designation, due to the perception that critical habitat designation may impose additional regulatory burdens on land use, we expect any such impacts to be short term. Additionally, critical habitat designation does not preclude development of HCPs and issuance of incidental take permits. Landowners in areas that are included in the designated critical habitat will continue to have the opportunity to utilize their property in ways consistent with the survival of the gnatcatcher.

Federalism

In accordance with Executive Order 13132, the rule does not have significant Federalism effects. A Federalism assessment is not required. The designation of critical habitat within the geographic range occupied by the gnatcatcher imposes no additional restrictions to those currently in place, and therefore has little incremental impact on State and local governments and their activities. The designation may have some benefit to these governments 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 of the species are specifically identified. While this definition and identification does not alter where and what federally sponsored activities may occur, it may assist these local governments in long range planning (rather than waiting for case by case section 7 consultations to occur).

Civil Justice Reform

In accordance with Executive Order 12988, 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 Endangered Species Act. The determination uses standard property descriptions and identifies the

primary constituent elements within the designated areas to assist the public in understanding the habitat needs of the gnatcatcher.

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

This rule does not contain any information collection requirements for which OMB approval under the Paperwork Reduction Act is required.

National Environmental Policy Act

We have determined that an Environmental Assessment and/or an Environmental Impact Statement as defined by the National Environmental Policy Act of 1969 need not be prepared in connection with regulations adopted pursuant to section 4(a) of the Act. A notice outlining our reason for this determination was published in the **Federal Register** on October 25, 1983 (48 FR 49244). This final determination 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) and 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with recognized Federal Tribes on a government-to-government basis. We have determined that there are no Tribal lands essential for the conservation of the gnatcatcher because they do not support core gnatcatcher populations, nor do they provide essential linkages between core populations. Therefore, critical habitat for the gnatcatcher has not been designated on Tribal lands.

References Cited

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

Author

The primary author of this determination is Douglas Krofta, 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.

Proposed 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 “Gnatcatcher, coastal California” under “birds” to read as follows:

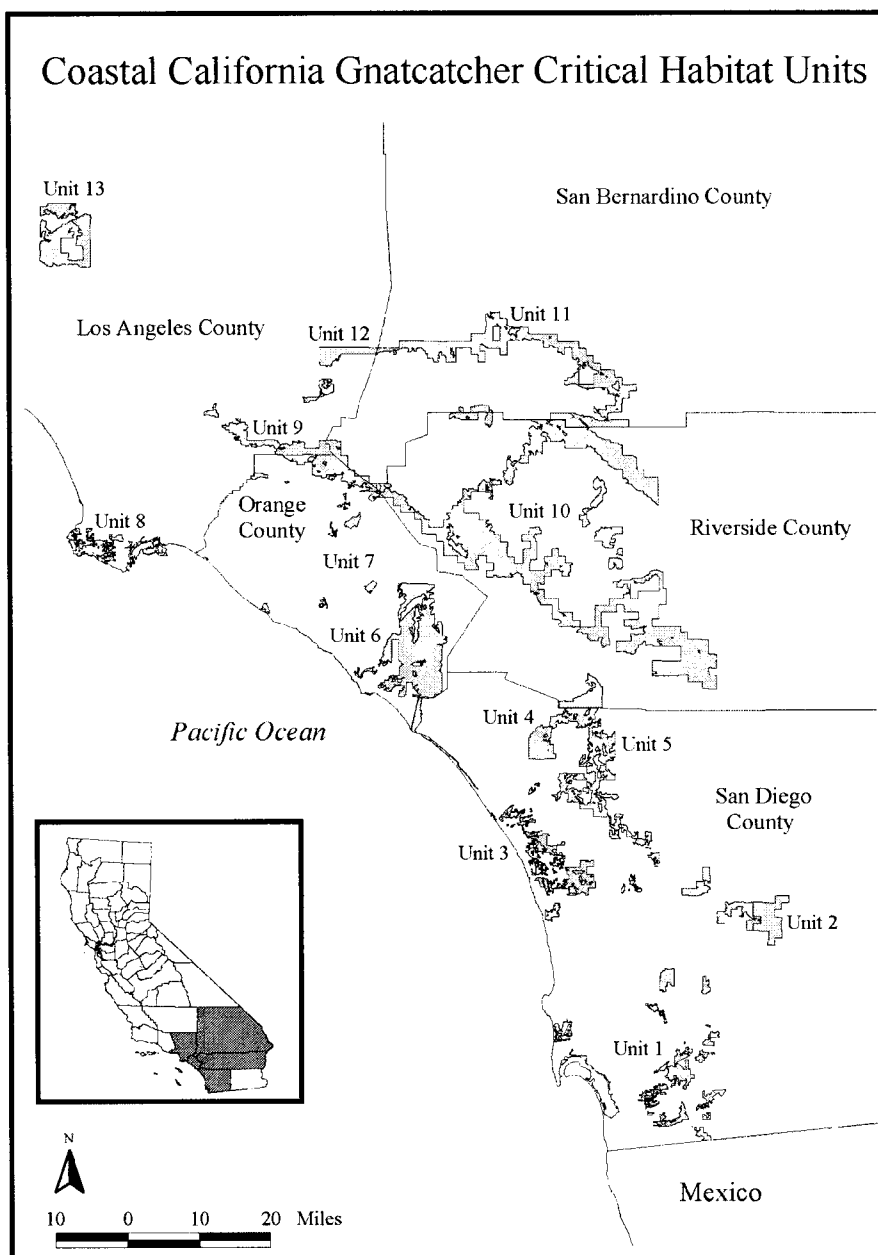
§ 17.11 Endangered and threatened wildlife.
* * * * *
(h) * * *

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
BIRDS							
*	*	*	*	*	*		*
Gnatcatcher, coastal California.	<i>Polioptila californica californica.</i>	U.S.A. (CA), Mexico	do.....	T	496	17.95(b)	17.41 (b)
*	*	*	*	*	*		*

3. In § 17.95 add critical habitat for the coastal California gnatcatcher (*Polioptila californica californica*) under paragraph (b) in the same alphabetical order as this species occurs in § 17.11(h), to read as follows:

§ 17.95 Critical habitat—fish and wildlife.
* * * * *
(b) Birds.
* * * * *
Coastal California gnatcatcher
(*Polioptila californica californica*)

1. Critical Habitat Units are depicted for Los Angeles, Orange, Riverside, San Bernardino, and San Diego Counties, California, on the maps below.



2. Within these areas, the primary constituent elements for the gnatcatcher are those habitat components that are essential for the primary biological needs of foraging, nesting, rearing of young, intra-specific communication, roosting, dispersal, genetic exchange, or sheltering (Atwood 1990). Primary constituent elements are provided in undeveloped areas that support various types of sage scrub or support chaparral, grassland, and riparian habitats where they occur proximal to sage scrub and where they may be utilized for biological needs such as breeding and foraging (Atwood *et al.* 1998, Campbell *et al.* 1998). Primary constituent elements associated with the biological needs of dispersal are also found in

undeveloped areas that provide linkage between or within larger core areas, including open space and disturbed areas that may receive only periodic use.

Primary constituent elements include, but are not limited to, the following plant communities in their natural state or those that have been recently disturbed (e.g., fire or grubbing): Venturan coastal sage scrub, Diegan coastal sage scrub, maritime succulent scrub, Riversidean sage scrub, Riversidean alluvial fan scrub, southern coastal bluff scrub, and coastal sage-chaparral scrub (Holland 1986). Based upon dominant species, these communities have been further divided into series such as black sage,

brittlebush, California buckwheat, California buckwheat-white sage, California encelia, California sagebrush, California sagebrush-black sage, California sagebrush-California buckwheat, coast prickly-pear, mixed sage, purple sage, scalebroom, and white sage (Sawyer and Keeler-Wolf 1995). Dominant species within these plant communities include California sagebrush (*Artemisia californica*), buckwheats (*Eriogonum fasciculatum* and *E. cinereum*), encelias (*Encelia californica* and *E. farinosa*), and various sages (commonly *Salvia mellifera*, *S. apiana*, and *S. leucophylla*). Other commonly occurring plants include coast goldenbush (*Isocoma menziesii*), bush monkeyflower (*Mimulus*

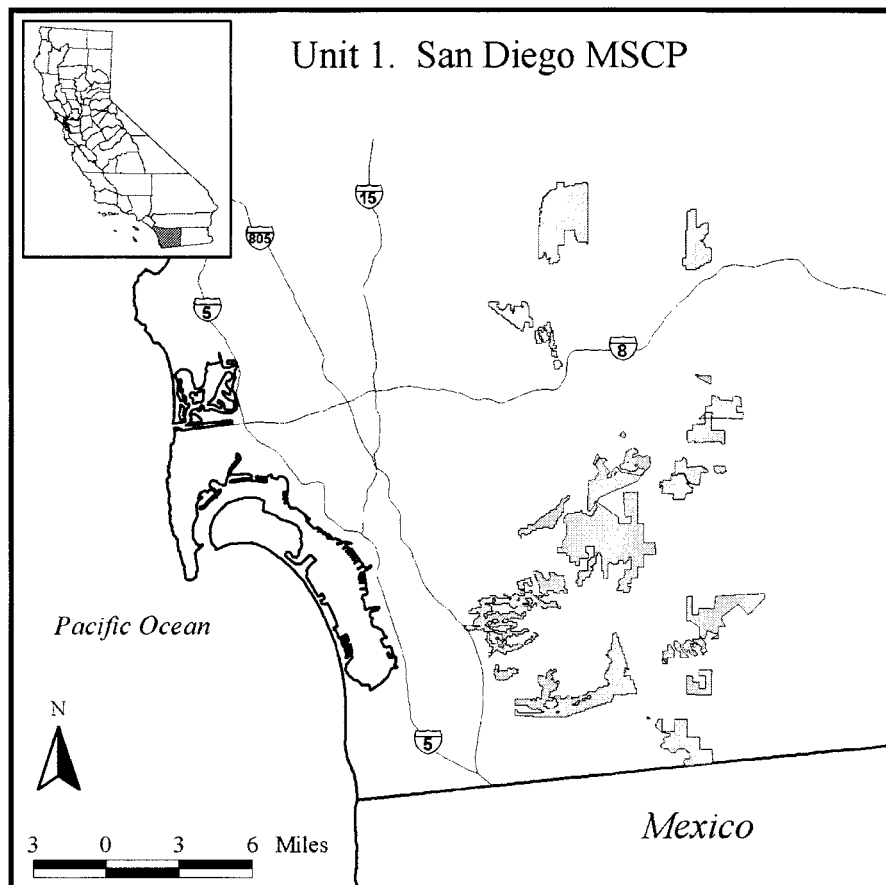
aurantiacus), Mexican elderberry (*Sambucus mexicana*), bladderpod (*Isomeris arborea*), deerweed (*Lotus scoparius*), chaparral mallow (*Malacothamnus fasciculatum*), and laurel sumac (*Malosma laurina*), and several species of *Rhus* (*R. integrifolia*, *R. ovata*, and *R. trilobata*). Succulent species, such as boxthorn (*Lycium* spp.), cliff spurge (*Euphorbia misera*), jojoba

(*Simmondsia chinensis*), and various species of cacti (*Opuntia littoralis*, *O. prolifera*, and *Ferocactus viridescens*), and live-forever (*Dudleya* spp.), are represented in maritime succulent scrub, coast prickly-pear scrub, and southern coastal bluff scrubs.

3. Critical habitat does not include non-Federal lands covered by a legally operative incidental take permit for the

coastal California gnatcatcher issued under section 10(a)(1)(B) of the Act on or before October 24, 2000.

4. Critical habitat does not include existing features and structures, such as buildings, roads, aqueducts, railroads, airports, other paved areas, lawns, and other urban landscaped areas not containing one or more of the primary constituent elements.



Map Unit 1: San Diego County Multiple Species Conservation Program (MSCP), San Diego County, California. From USGS 1:100,000 quadrangle maps San Diego (1980) and El Cajon (1982), California, lands defined by major amendment areas in the MSCP within T. 17 S., R. 01 W., San Bernardino Principle Meridian, secs. 1, 12–14, and 23–25; T. 17 S., R. 01 E., San Bernardino Principle Meridian, secs. 18, 19, and 34; T. 18 S., R. 01 E., San Bernardino Principle Meridian, secs. 3–5, 8, 9, 16, 19, 28–30, 32, and 33; and lands west of UTM NAD27 (easting, northing) x coordinate 515200 within the Jamul Land Grant.

Lands defined by the boundaries of the Otay-Sweetwater Unit of the San Diego National Wildlife Refuge Complex as mapped on September 1, 2000, and adjacent major amendment areas; and adjacent land bounded by the following UTM NAD27 coordinates (E, N): 504100, 3618800; 504200, 3618800; 504200, 3618300; 504100, 3618300; 504100, 3617900; 503500, 3617900; 503500,

3618000; 503300, 3618000; 503300, 3617900; 503000, 3617900; 503000, 3618000; 502400, 3618000; 502400, 3617900; 502300, 3617900; 502300, 3617800; 502000, 3617800; 502000, 3618100; 502100, 3618100; 502100, 3618300; 502200, 3618300; 502200, 3618400; 502700, 3618400; 502700, 3618500; 503100, 3618500; 503100, 3618600; 503200, 3618600; 503200, 3618400; 503500, 3618400; 503500, 3618300; 503700, 3618300; 503700, 3618200; 503800, 3618200; 503800, 3618300; 503900, 3618300; 503900, 3618400; 504000, 3618400; 504000, 3618600; 504100, 3618600; 504100, 3618800; and 504000, 3616300; 504500, 3616200; 504900, 3616200; 504900, 3615400; 505600, 3615400; 505600, 3615800; 506500, 3615800; 506500, 3615500; 506300, 3615500; 506300, 3615300; 506200, 3615300; 506200, 3615200; 506100, 3615200; 506100, 3615100; 505900, 3615100; 505900, 3615300; 505600, 3615300; 505600, 3615100; 505500, 3615100; 505500, 3615000; 505300, 3615000; 505300, 3615100; 505100, 3615100; 505100, 3615200; 505000, 3615200; 505000, 3615100;

504900, 3615100; 504900, 3614100; 504600, 3614100; 504600, 3614600; 504500, 3615600; 504400, 3615600; 504400, 3615800; 504200, 3615800; 504200, 3615600; 504100, 3615600; 504100, 3615100; 504000, 3615100; 504000, 3615000; 503900, 3615000; 503900, 3614900; 503800, 3614900; 503800, 3614800; 503900, 3614800; 503900, 3614600; 503800, 3614600; 503800, 3614400; 503700, 3614400; 503700, 3614200; 503400, 3614200; 503400, 3614000; 503200, 3614000; 503200, 3613600; 502900, 3613600; 502900, 3613800; 502800, 3613800; 502800, 3614000; 502900, 3614000; 502900, 3614100; 503000, 3614100; 503000, 3614200; 502900, 3614200; 502900, 3614500; 503000, 3614500; 503000, 3614600; 503600, 3614600; 503600, 3615300; 503700, 3615300; 503700, 3615400; 503800, 3615400; 503800, 3615500; 504000, 3615500; 504000, 3616300.

Land bounded by the following UTM NAD27 coordinates (E, N): 501000, 3635300; 500800, 3635300; 500800, 3635700; 500700, 3635700; 500700, 3635500; 500600, 3635500;

500600, 3635400; 500400, 3635400; 500400, 3635300; 500300, 3637500; 500400, 3637500; 500400, 3638400; 500500, 3638400; 500500, 3638500; 500400, 3638500; 500400, 3638700; 500500, 3638700; 500500, 3639100; 500600, 3639100; 500600, 3639400; 500700, 3639400; 500700, 3639500; 500800, 3639500; 500800, 3639600; 500900, 3639600; 500900, 3639700; 501000, 3639700; 501000, 3639800; 501100, 3639800; 501100, 3639900; 501400, 3639900; 501400, 3640000; 501500, 3640000; 501500, 3640400; 502000, 3640400; 502000, 3640100; 502200, 3640100; 502200, 3640200; 502700, 3640200; 502700, 3640300; 503200, 3640300; 503200, 3640400; 503500, 3640400; 503500, 3640300; 503600, 3640300; 503600, 3636300; 503500, 3636300; 503500, 3636400; 502900, 3636600; 502800, 3636600; 502800, 3636800; 502700, 3636800; 502700, 3637200; 502000, 3637200; 502000, 3636200; 501600, 3636200; 501600, 3635600; 501700, 3635600; 501700, 3635200; 501600, 3635200; 501600, 3635100; 501300, 3635100; 501300, 3635000; 501000, 3635000; 501000, 3635300; excluding land bounded by 501000, 3635300; 501100, 3635300; 501100, 3635400; 501000, 3635400; 501000, 3635300.

Land bounded by the following UTM NAD27 coordinates (E, N): 510300, 3638600; 510700, 3638600; 510700, 3637400; 510900, 3637400; 510900, 3637500; 511000, 3637500; 511000, 3637600; 511200, 3637600; 511200, 3637700; 511500, 3637700; 511500, 3637000; 511400, 3637000; 511400, 3636900; 511300, 3636900; 511300, 3636700; 511200, 3636700; 511200, 3636600; 511000, 3636600; 511000, 3636500; 511100, 3636500; 511100, 3636400; 511200, 3636400; 511200, 3636300; 511300, 3636300; 511300, 3636100; 511600, 3636100; 511600, 3636000; 511700, 3636000; 511700, 3635200; 511600, 3635200; 511600, 3635100; 511400, 3635100; 511400, 3635000; 511200, 3635000; 511200, 3634900; 511000, 3634900; 511000, 3634800; 510900, 3634800; 510900, 3634700; 510700, 3634700; 510700, 3634600; 510000, 3634600; 510000, 3634900; 509800, 3634900; 509800, 3635400; 510000, 3635400; 510000, 3637200; 510100, 3637200; 510100, 3638500; 510300, 3638500; 510300, 3638600.

Land bounded by the following UTM NAD27 coordinates (E, N): 498600, 3631900; 498600, 3632000; 498700, 3632000; 498700, 3632200; 499200, 3632200; 499200, 3632500; 499500, 3632500; 499500, 3632400; 499600, 3632400; 499600, 3632200; 499700, 3632200; 499700, 3631500; 499800, 3631500; 499800, 3631400; 499900, 3631400; 499900, 3631300; 500000, 3631300; 500000, 3630800; 499700, 3630800; 499700, 3631100; 499400, 3631100; 499400, 3630800; 499300, 3630800; 499300, 3630500; 499200, 3630500; 499200, 3630600; 499100, 3630600; 499100, 3630700; 498900, 3630700; 498900, 3630800; 498800, 3630800; 498800, 3630900; 498700, 3630900; 498700, 3631000; 498500, 3631000; 498500, 3631100; 498400, 3631100; 498400, 3631200; 498300, 3631200; 498300, 3631300; 498100, 3631300; 498100, 3631400; 498000, 3631400; 498000, 3631500; 497900, 3631500; 497900, 3631600; 497700, 3631600; 497700, 3631700; 497600, 3631700; 497600, 3631800; 497500, 3631800; 497500, 3631900; 497400, 3631900; 497400, 3632000; 497200, 3632000; 497200, 3632100; 497100, 3632100; 497100, 3632200; 497000, 3632200; 497000, 3632500; 497700, 3632500; 497700, 3632300; 497600, 3632300; 497600,

3632100; 497700, 3632100; 497700, 3632000; 497900, 3632000; 497900, 3631900; 498000, 3631900; 498000, 3632000; 498100, 3632000; 498100, 3632100; 498200, 3632100; 498200, 3632300; 498500, 3632300; 498500, 3631900; 498600, 3631900; excluding land bounded by 498600, 3631900; 498600, 3631700; 498700, 3631700; 498700, 3631900; 498600, 3631900; and land bounded by 499200, 3632200; 499200, 3632100; 499300, 3632100; 499300, 3632200; 499200, 3632200.

Land bounded by the following UTM NAD27 coordinates (E, N): 500700, 3630700; 500700, 3630900; 500900, 3630900; 500900, 3631100; 501100, 3631100; 501100, 3630800; 501200, 3630800; 501200, 3630600; 501300, 3630600; 501300, 3630500; 501200, 3630400; 501300, 3629900; 501400, 3629900; 501400, 3629700; 501300, 3629700; 501300, 3629600; 501500, 3629600; 501500, 3629400; 501100, 3629400; 501100, 3629500; 501000, 3629800; 501100, 3629800; 501100, 3630400; 500900, 3630400; 500900, 3630200; 501000, 3630200; 501000, 3629900; 500800, 3629900; 500800, 3629800; 500600, 3629800; 500600, 3630000; 500500, 3630000; 500500, 3629700; 500200, 3629700; 500200, 3630000; 500100, 3630000; 500100, 3630600; 500300, 3630600; 500300, 3630800; 500600, 3630800; 500600, 3630700; 500700, 3630700; excluding land bounded by 500800, 3630600; 500800, 3630500; 500900, 3630500; 500900, 3630600; 500800, 3630600; land bounded by 500500, 3630000; 500500, 3630200; 500400, 3630200; 500400, 3630000; 500500, 3630000; land bounded by 500700, 3630700; 500700, 3630600; 500800, 3630600; 500800, 3630700; 500700, 3630700; and land bounded by 500300, 3630600; 500300, 3630300; 500400, 3630300; 500400, 3630400; 500600, 3630400; 500600, 3630500; 500500, 3630500; 500300, 3630600.

Land bounded by the following UTM NAD27 coordinates (E, N): 501200, 3629300; 501300, 3629300; 501300, 3629200; 501500, 3629200; 501500, 3628900; 501600, 3628900; 501600, 3628800; 501400, 3628800; 501400, 3628900; 501200, 3628900; 501200, 3629300.

Land bounded by the following UTM NAD27 coordinates (E, N): 501400, 3628600; 501700, 3628600; 501700, 3628500; 501800, 3628500; 501800, 3628400; 501900, 3628400; 501900, 3628200; 501700, 3628200; 501700, 3628000; 501400, 3628000; 501400, 3628300; 501300, 3628300; 501300, 3628500; 501400, 3628500; 501400, 3628600.

Land bounded by the following UTM NAD27 coordinates (E, N): 502200, 3619600; 502400, 3619600; 502400, 3619400; 502300, 3619400; 502300, 3619300; 502200, 3619300; 502200, 3619200; 502100, 3619200; 502100, 3619100; 502000, 3619100; 502000, 3618500; 501900, 3618500; 501900, 3618300; 501800, 3618300; 501800, 3618200; 501700, 3618200; 501700, 3618100; 501600, 3618100; 501600, 3617900; 501500, 3617900; 501500, 3617700; 501400, 3617700; 501400, 3617500; 501300, 3617500; 501300, 3617400; 501000, 3617400; 500600, 3617500; 500600, 3617400; 500200, 3617400; 500200, 3617300; 499900, 3617300; 499900, 3617200; 499800, 3617200; 499800, 3617100; 499600, 3617100; 499600, 3617000; 499400, 3617000; 499400, 3617100; 499200, 3617100; 499200, 3616800; 499100, 3616800; 499100, 3617000; 499000,

3617000; 499000, 3617300; 499100, 3617300; 499100, 3617400; 499600, 3617400; 499600, 3617700; 499900, 3617700; 499900, 3617600; 500000, 3617600; 500000, 3617700; 500100, 3617700; 500100, 3617800; 500200, 3617800; 500200, 3617900; 500300, 3617900; 500300, 3618000; 500400, 3618000; 500400, 3618100; 500500, 3618100; 500500, 3618200; 500700, 3618200; 500700, 3618300; 500800, 3618300; 500800, 3618400; 501000, 3618400; 501000, 3618500; 501100, 3618500; 501100, 3618600; 501300, 3618600; 501300, 3618700; 501500, 3618700; 501500, 3618900; 501600, 3618900; 501600, 3619000; 501700, 3619000; 501700, 3619100; 501800, 3619100; 501800, 3619300; 501900, 3619300; 501900, 3619400; 502100, 3619400; 502100, 3619500; 502200, 3619500; 502200, 3619600.

Land bounded by the following UTM NAD27 coordinates (E, N): 506000, 3614700; 506500, 3614700; 506500, 3614500; 506000, 3614500; 506000, 3614700.

Land bounded by the following UTM NAD27 coordinates (E, N): 500000, 3614600; 500300, 3614600; 500300, 3614500; 500500, 3614500; 500500, 3614400; 500600, 3614400; 500600, 3614200; 500700, 3614200; 500700, 3614100; 500800, 3614100; 500800, 3614000; 501000, 3614000; 501000, 3614100; 501100, 3614100; 501100, 3614400; 501000, 3614500; 501400, 3614500; 501400, 3614400; 501500, 3614400; 501500, 3614300; 502000, 3614300; 502000, 3613900; 502100, 3613900; 502100, 3613600; 502000, 3613600; 502000, 3613500; 502100, 3613500; 502100, 3613400; 502200, 3613400; 502200, 3613100; 502000, 3613100; 502000, 3613300; 501700, 3613300; 501700, 3613100; 501500, 3613100; 501300, 3613200; 501300, 3613300; 500900, 3613300; 500900, 3613100; 501000, 3613100; 501000, 3613000; 500700, 3613000; 500700, 3613100; 500500, 3613100; 500500, 3613200; 500400, 3613200; 500400, 3613700; 500300, 3613700; 500300, 3614000; 500200, 3614000; 500200, 3614200; 500100, 3614200; 500100, 3614400; 500000, 3614400.

Land bounded by the following UTM NAD27 coordinates (E, N): 506000, 3614400; 506200, 3614400; 506200, 3614200; 506100, 3614200; 506100, 3614100; 506300, 3614100; 506300, 3613900; 506100, 3613900; 506100, 3613200; 505900, 3613200; 505900, 3613300; 505500, 3613300; 505500, 3613500; 505600, 3613500; 505600, 3613600; 505700, 3613600; 505700, 3613700; 505600, 3613700; 505600, 3614000; 505700, 3614000; 505700, 3614100; 505900, 3614100; 505900, 3614200; 506000, 3614200; 506000, 3614400.

Land bounded by the following UTM NAD27 coordinates (E, N): 499700, 3614200; 499800, 3614200; 499800, 3613900; 499900, 3613900; 499900, 3613600; 499700, 3613600; 499600, 3613700; 499600, 3613800; 499300, 3613800; 499300, 3613700; 499400, 3613700; 499400, 3613400; 499000, 3613400; 499000, 3613700; 498900, 3613700; 498900, 3613900; 499100, 3613900; 499100, 3614000; 499400, 3614000; 499400, 3614100; 499700, 3614100; 499700, 3614200.

Land bounded by the following UTM NAD27 coordinates (E, N): 498500, 3610800; 498500, 3610600; 499200, 3610600; 499200, 3610700; 499300, 3610800; 499600, 3610800; 499600, 3610700; 499700, 3610700; 499700, 3610600; 499400, 3610600;

499400, 3610500; 499300, 3610500; 499300, 3610400; 499000, 3610400; 499000, 3610300; 498800, 3610300; 498800, 3610400; 498600, 3610400; 498600, 3610300; 498500, 3610300; 498500, 3610200; 498400, 3610200; 498400, 3610300; 498300, 3610300; 498300, 3610200; 498200, 3610200; 498200, 3610100; 497900, 3610100; 497900, 3610400; 497600, 3610400; 497600, 3610500; 497400, 3610500; 497400, 3610600; 496700, 3610600; 496700, 3610800; 496600, 3610800; 496600, 3610700; 496200, 3610700; 496200, 3610800; 496100, 3610800; 496100, 3610700; 495800, 3610700; 495800, 3610600; 495700, 3610600; 495700, 3610700; 495500, 3610700; 495500, 3610800; 495400, 3610800; 495400, 3611000; 496000, 3611000; 496000, 3611300; 496100, 3611300; 496100, 3611400; 496200, 3611400; 496200, 3611500; 496300, 3611500; 496300, 3611600; 496400, 3611600; 496400, 3611800; 496300, 3611800; 496300, 3611900; 496200, 3611900; 496200, 3612000; 495900, 3612000; 495900, 3612100; 496200, 3612100; 496200, 3612200; 496500, 3612200; 496500, 3612400; 496400, 3612400; 496400, 3612600; 496300, 3612600; 496300, 3612700; 496600, 3612700; 496600, 3612800; 497100, 3612800; 497100, 3613000; 497500, 3613000; 497500, 3612900; 497600, 3612900; 497600, 3612800; 498400, 3612800; 498400, 3612700; 498500, 3612700; 498500, 3612900; 498300, 3612900; 498300, 3613000; 498000, 3613000; 498000, 3613100; 498600, 3613100; 498700, 3613100; 498700, 3613100; 499000, 3613100; 499000, 3613000; 499400, 3613000; 499400, 3613100; 499100, 3613100; 499100, 3613300; 499400, 3613300; 499700, 3613300; 499700, 3613200; 499700, 3613300; 499900, 3613300; 499900, 3613200; 499800, 3613200; 499800, 3613100; 500000, 3613100; 500000, 3613000; 500200, 3613000; 500200, 3612900; 500300, 3612900; 500600, 3612900; 500600, 3612800; 500300, 3612800; 500300, 3612700; 500500, 3612700; 500500, 3612600; 500700, 3612600; 500700, 3612500; 501100, 3612500; 501100, 3612600; 501500, 3612600; 501500, 3612400; 501600, 3612400; 501600, 3612300; 501800, 3612300; 501800, 3612100; 501600, 3612100; 501600, 3612200; 500900, 3612200; 500900, 3612100; 500600, 3612100; 500600, 3612200; 500500, 3612200; 500500, 3612300; 500200, 3612300; 500200, 3612400; 500100, 3612400; 500100, 3612500; 500000, 3612500; 500000, 3612200; 499800, 3612200; 499800, 3612000; 499600, 3612000; 499600, 3612300; 498900, 3612300; 498900, 3612200; 498800, 3612200; 498800, 3612100; 498600, 3612100; 498600, 3612200; 498500, 3612200; 498500, 3612300; 498400, 3612300; 498400, 3612500; 498300, 3612500; 498300, 3612400; 498200, 3612400; 498200, 3612500; 497900, 3612500; 497900, 3612400; 497300, 3612400; 497300, 3612500; 496800, 3612500; 496800, 3612400; 497100, 3612400; 497100, 3612300; 497200, 3612300; 497200, 3612000; 497300, 3612000; 497300, 3611900; 496900, 3611900; 496900, 3611800; 496700, 3611800; 496700, 3611600; 496800, 3611600; 496800, 3611500; 496900, 3611500; 496900, 3611700; 497200, 3611700; 497200, 3611800; 497500, 3611800; 497500, 3611900; 497700, 3611900; 497700, 3611800; 497800, 3611800; 497800, 3611700; 497900, 3611700; 497900, 3611800; 498400, 3611800; 498400, 3611900; 498800, 3611900; 498800, 3611800; 499000, 3611800;

499000, 3611700; 499100, 3611700; 499100, 3611600; 499200, 3611600; 499200, 3611800; 499300, 3611800; 499300, 3611900; 499500, 3611900; 499500, 3611600; 499300, 3611600; 499300, 3611400; 499000, 3611400; 499000, 3611500; 498500, 3611500; 498500, 3611400; 498000, 3611400; 498000, 3611300; 497900, 3611300; 497900, 3611200; 498300, 3611200; 498300, 3611300; 498600, 3611300; 498600, 3611200; 498900, 3611200; 498900, 3610900; 498700, 3610900; 498700, 3610800; 498500, 3610800; excluding land bounded by 499000, 3612700; 498900, 3612700; 498900, 3612600; 499000, 3612600; 499000, 3612700; land bounded by 497300, 3612500; 497400, 3612500; 497400, 3612600; 497500, 3612600; 497500, 3612700; 497400, 3612700; 497400, 3612800; 497300, 3612800; 497300, 3612500; land bounded by 496000, 3611000; 496000, 3610900; 496400, 3610900; 496400, 3611000; 496000, 3611000; land bounded by 497100, 3610900; 497100, 3611000; 497000, 3611000; 497000, 3611100; 497200, 3611100; 497200, 3611200; 497400, 3611200; 497400, 3611100; 497500, 3611100; 497500, 3611200; 497700, 3611200; 497700, 3611300; 497600, 3611300; 497600, 3611400; 497300, 3611400; 497300, 3611300; 497000, 3611300; 497000, 3611200; 496900, 3611200; 496900, 3611100; 496800, 3611100; 496800, 3611000; 496900, 3611000; 496900, 3610900; 497100, 3610900; land bounded by 499000, 3612700; 499100, 3612700; 499100, 3612800; 499000, 3612800; 499000, 3612700; land bounded by 498500, 3610800; 498500, 3610900; 498600, 3610900; 498600, 3611000; 497700, 3611000; 497700, 3610900; 497100, 3610900; 497100, 3610800; 497300, 3610800; 497300, 3610700; 497700, 3610700; 497700, 3610600; 498100, 3610600; 498100, 3610500; 498200, 3610500; 498200, 3610800; 498500, 3610800; land bounded by 499500, 3612800; 499500, 3612700; 499600, 3612700; 499600, 3612600; 499700, 3612600; 499800, 3612300; 499800, 3612500; 499900, 3612500; 499900, 3612700; 499800, 3612700; 499800, 3612800; 499500, 3612800; and land bounded by 499300, 3612500; 499300, 3612400; 499600, 3612400; 499600, 3612500; 499300, 3612500.

Land bounded by the following UTM NAD27 coordinates (E, N): 496900, 3610500; 497100, 3610500; 497100, 3610000; 497200, 3610000; 497200, 3609800; 497600, 3609800; 497600, 3610100; 497500, 3610100; 497500, 3610200; 497700, 3610200; 497700, 3610100; 497800, 3610100; 497800, 3610000; 497900, 3610000; 497900, 3609900; 498000, 3609900; 498000, 3609800; 498100, 3609800; 498100, 3609700; 498400, 3609700; 498400, 3609600; 498600, 3609600; 498600, 3609700; 498900, 3609700; 498900, 3609800; 499100, 3609800; 499100, 3609700; 499300, 3609700; 499300, 3609600; 499200, 3609600; 499200, 3609500; 499000, 3609500; 499000, 3609400; 498600, 3609400; 498600, 3609300; 498200, 3609300; 498200, 3609200; 498000, 3609200; 498000, 3609100; 497800, 3609100; 497800, 3609000; 497600, 3609000; 497600, 3609400; 497500, 3609400; 497500, 3609300; 497400, 3609300; 497200, 3609300; 497200, 3609200; 497200, 3609400; 497300, 3609400; 497300, 3609600; 497100, 3609600; 497100, 3609800; 497000, 3609800; 497000, 3609900; 496900, 3609900; 496900, 3610000; 496800, 3610000; 496800, 3610100; 496900, 3610100; 496900, 3610500;

excluding land bounded by 497700, 3609700; 497700, 3609600; 497900, 3609600; 497900, 3609500; 498000, 3609500; 498000, 3609700; 497700, 3609700.

Land bounded by the following UTM NAD27 coordinates (E, N): 500000, 3610500; 500200, 3610500; 500200, 3610400; 500300, 3610400; 500300, 3610300; 500200, 3610300; 500200, 3610200; 500100, 3610200; 500100, 3610100; 500000, 3610100; 500000, 3610000; 499900, 3610000; 499900, 3609900; 499700, 3609900; 499700, 3609800; 499600, 3609800; 499600, 3609700; 499400, 3609700; 499400, 3609900; 499500, 3609900; 499500, 3610000; 499600, 3610000; 499600, 3610100; 499800, 3610100; 499800, 3610300; 499900, 3610300; 499900, 3610200; 500000, 3610200; 500000, 3610500.

Land bounded by the following UTM NAD27 coordinates (E, N): 505300, 3610500; 505500, 3610500; 505500, 3610200; 505600, 3610200; 505600, 3609900; 505700, 3609900; 505700, 3609600; 505800, 3609600; 505800, 3609300; 505900, 3609300; 505900, 3609100; 506000, 3609100; 506000, 3608800; 506100, 3608800; 506100, 3608500; 506200, 3608500; 506200, 3608200; 506300, 3608200; 506300, 3608100; 506100, 3608100; 506100, 3608200; 506000, 3608200; 506000, 3608000; 506100, 3608000; 506100, 3607900; 506000, 3607900; 506000, 3607600; 506100, 3607600; 506100, 3607700; 506400, 3607700; 506400, 3607400; 506600, 3607400; 506600, 3607100; 506700, 3607100; 506700, 3606800; 506800, 3606800; 506800, 3606500; 506200, 3606500; 506200, 3606400; 505300, 3606400; 505300, 3606100; 505200, 3606100; 505200, 3606000; 505100, 3606000; 505100, 3605900; 504800, 3605900; 504800, 3605800; 504500, 3605800; 504500, 3605700; 504200, 3605700; 504200, 3605600; 503900, 3605600; 503900, 3605500; 503600, 3605500; 503600, 3605400; 503400, 3605400; 503400, 3605300; 503100, 3605300; 503100, 3605200; 502800, 3605200; 502800, 3605100; 502500, 3605100; 502500, 3605000; 502200, 3605000; 502200, 3604900; 500000, 3604900; 500000, 3605000; 498800, 3605000; 498800, 3605400; 498900, 3605400; 498900, 3605300; 499000, 3605300; 499000, 3605200; 500700, 3605200; 500700, 3605300; 500500, 3605300; 500300, 3605300; 500300, 3605400; 500300, 3605500; 500200, 3605500; 500200, 3605400; 499900, 3605400; 499900, 3605500; 499700, 3605500; 499700, 3605600; 499600, 3605600; 499600, 3605700; 498800, 3605700; 498800, 3606100; 499800, 3606100; 499800, 3606000; 499900, 3606000; 499900, 3606100; 500100, 3606100; 500100, 3606000; 500200, 3606000; 500200, 3606200; 500400, 3606200; 500400, 3606100; 500500, 3606100; 500500, 3606700; 500600, 3606700; 500600, 3607000; 500600, 3607200; 500300, 3607200; 500300, 3607700; 500600, 3607700; 500600, 3607600; 500800, 3607600; 500800, 3607500; 500900, 3607500; 500900, 3607900; 501000, 3607900; 501000, 3608000; 501100, 3608000; 501100, 3608100; 501200, 3608100; 501200, 3608000; 501300, 3608000; 501300, 3608100; 501500, 3608100; 501500, 3607900; 501300, 3607900; 501300, 3607800; 501200, 3607800; 501200, 3607700; 501300, 3607700; 501300, 3607500; 501200, 3607500; 501200, 3607400; 501400, 3607400; 501400, 3607200; 501500, 3607200; 501500, 3607300; 501700, 3607300; 501700, 3607100; 501600, 3607100; 501600, 3606900; 501500, 3606900; 501500, 3606700;

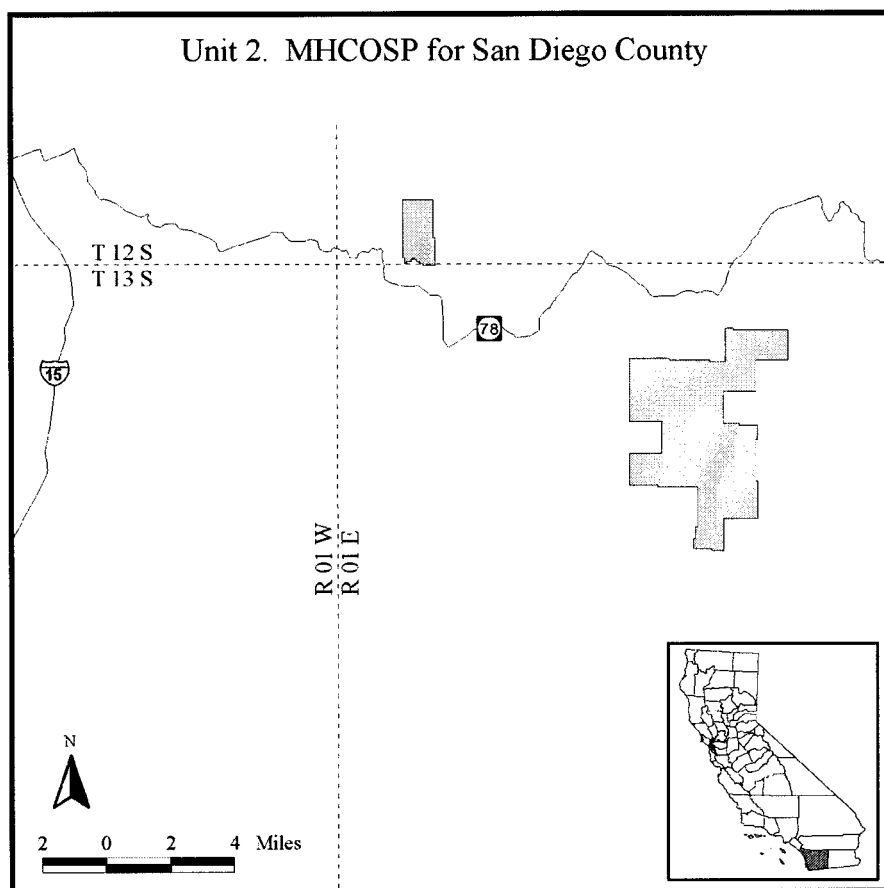
501300, 3606700; 501300, 3606600; 501100, 3606600; 501100, 3606300; 501000, 3606300; 501000, 3606200; 501400, 3606200; 501400, 3606300; 501800, 3606300; 501800, 3606100; 502100, 3606100; 502100, 3606200; 502200, 3606200; 502200, 3606300; 502500, 3606300; 502500, 3606100; 502600, 3606100; 502600, 3606200; 503000, 3606200; 503000, 3606300; 503300, 3606300; 503300, 3606400; 503500, 3606400; 503500, 3606500; 503600, 3606500; 503600, 3606600; 504100, 3606600; 504100, 3606700; 504200, 3606700; 504200, 3606800; 504300, 3606800; 504300, 3606900; 504600, 3606900; 504600, 3607000; 504900, 3607000; 504900, 3607100; 505000, 3607100; 505000, 3607200; 504900, 3607200; 504900, 3607400; 504800, 3607400; 504800, 3607500; 504700, 3607500; 504700, 3607800; 504800, 3607800; 504900, 3608000; 504900, 3608200; 505000, 3608200; 505000, 3608500; 505200, 3608500; 505200, 3608600; 505100, 3608600; 505100, 3608800; 505000, 3608800; 505000, 3608900; 504900, 3608900; 504900, 3609000; 504800, 3609000; 504800, 3609100;

504900, 3609100; 504900, 3609300; 505000, 3609300; 505000, 3609400; 505100, 3609400; 505100, 3609800; 505200, 3609800; 505200, 3610400; 505300, 3610400; 505300, 3610500; excluding land bounded by 503400, 3606100; 503200, 3606100; 503200, 3606000; 503400, 3606000; 503400, 3606100; land bounded by 503400, 3606100; 503700, 3606100; 503700, 3606200; 503800, 3606200; 503800, 3606300; 503600, 3606300; 503600, 3606200; 503400, 3606200; 503400, 3606100; land bounded by 501300, 3606100; 501300, 3606000; 500800, 3606000; 500800, 3605800; 500700, 3605800; 500700, 3605600; 500900, 3605600; 501400, 3605500; 501400, 3605600; 501500, 3605600; 501500, 3605700; 501600, 3605700; 501600, 3605900; 501500, 3605900; 501500, 3606100; 501300, 3606100; land bounded by 502900, 3606000; 502900, 3605900; 502800, 3605900; 502800, 3605800; 502600, 3605800; 502600, 3605700; 502900, 3605700; 502900, 3605800; 503000, 3605800; 503000, 3605900; 503100, 3605900; 503100, 3606000; 502900, 3606000; and land

bounded by 501500, 3605300; 501500, 3605200; 501700, 3605200; 501700, 3605300; 501500, 3605300.

Land bounded by the following UTM NAD27 coordinates (E, N): 497000, 3609200; 497200, 3609200; 497200, 3609000; 497100, 3609000; 497100, 3608900; 497000, 3608900; 497000, 3609200.

Land bounded by the following UTM NAD27 coordinates (E, N): 497500, 3608400; 497700, 3608400; 497700, 3608100; 497600, 3608100; 497600, 3607900; 497700, 3607900; 497700, 3608000; 498300, 3608000; 498300, 3608200; 498500, 3608200; 498500, 3608100; 498600, 3608100; 498600, 3608200; 498800, 3608200; 498800, 3608100; 499000, 3608100; 499000, 3608000; 498900, 3608000; 498900, 3607900; 499000, 3607900; 499000, 3607800; 498600, 3607800; 498600, 3607600; 498400, 3607600; 498400, 3607500; 498300, 3607400; 497500, 3607400; 497500, 3607700; 497400, 3607700; 497400, 3608100; 497500, 3608100; 497500, 3608400.

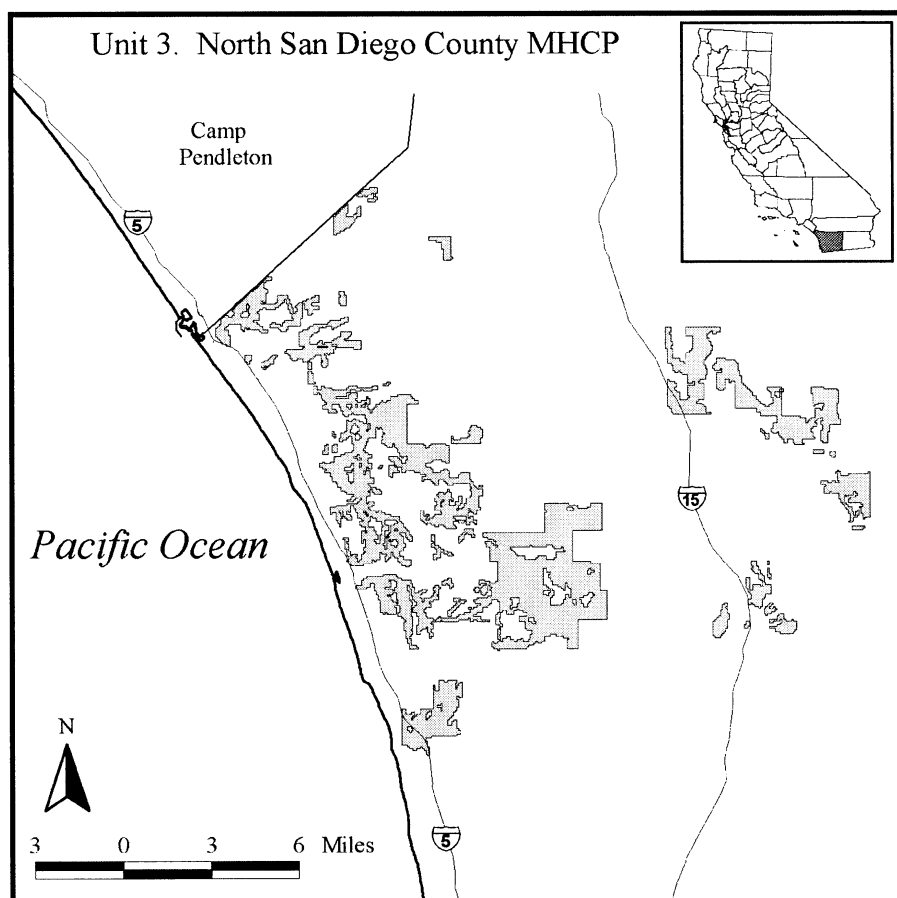


Map Unit 2: Multiple Habitat Conservation Open Space Program (MHCOSP), San Diego County, California. From USGS 1:100,000 quadrangle map Borrego Valley, California (1983), land bounded by the following UTM NAD27 coordinates (E, N): 510100, 3663200; 511600, 3663200; 511600, 3661300; 511700, 3661300; 511700, 3659900; 511100, 3659900; 511100, 3660000; 510900, 3660000; 510900, 3660100; 510800, 3660100; 510800, 3660200; 510700, 3660200; 510700, 3660300; 510600,

3660300; 510600, 3660200; 510500, 3660200; 510500, 3660100; 510300, 3660100; 510300, 3660000; 510200, 3660000; 510200, 3660300; 510100, 3660300; 510100, 3663200.

Land bounded by the following UTM NAD27 coordinates (E, N): 526200, 3656700; 526600, 3656700; 526600, 3656600; 529300, 3656600; 529300, 3655100; 527700, 3655100; 527700, 3653500; 526100, 3653500; 526100, 3651900; 526900, 3651900; 526900, 3651800; 527800, 3651800; 527800, 3651100; 527700,

3651100; 527700, 3649000; 527800, 3649000; 527800, 3647100; 526100, 3647100; 526100, 3645500; 525500, 3645500; 525500, 3645600; 524600, 3645600; 524600, 3646100; 524700, 3646100; 524700, 3646700; 524800, 3646700; 524800, 3648700; 522800, 3648700; 522800, 3648800; 521400, 3648800; 521400, 3650400; 523000, 3650400; 523000, 3652000; 521400, 3652000; 521400, 3655200; 523400, 3655200; 523400, 3655100; 525400, 3655100; 525400, 3655000; 526200, 3655000; 526200, 3656700.



Map Unit 3: North San Diego County Multiple Habitat Conservation Plan (MHCP), San Diego County, California. From USGS 1:100,000 quadrangle map Oceanside, California (1984), land bounded by the following UTM NAD27 coordinates (E, N): 472900, 3682200; 473300, 3682200; 473300, 3681900; 473200, 3681900; 473200, 3681700; 473300, 3681700; 473300, 3681500; 473200, 3681500; 473200, 3681400; 472800, 3681400; 472800, 3681600; 473100, 3681600; 473100, 3681900; 473000, 3681900; 473000, 3681800; 472800, 3681800; 472800, 3681700; 472600, 3681700; 472600, 3681800; 472500, 3681800; 472500, 3681700; 472200, 3681800; 472300, 3681800; 472300, 3681900; 472400, 3681900; 472400, 3682000; 472500, 3682000; 472500, 3682100; 472900, 3682100; 472900, 3682200.

Land bounded by the following UTM NAD27 coordinates (E, N): 471600, 3681300; 471700, 3681300; 471700, 3680800; 471600, 3680800; 471600, 3680600; 472000, 3680600; 472000, 3680700; 472100, 3680700; 472100, 3680800; 472200, 3680800; 472200, 3681100; 472300, 3681100; 472300, 3681200; 472400, 3681200; 472400, 3680600; 472200, 3680600; 472200, 3680500; 472100, 3680500; 472100, 3680300; 472000, 3680300; 472000, 3680200; 471900, 3680200; 471900, 3680100; 471800, 3680100; 471800, 3680000; 471600, 3680000; 471600, 3679900; 471500, 3679900; 471300, 3679800; 471300, 3679700; 471100, 3679700; 471100, 3679600; 470900, 3679600; 470900, 3680600; 471000, 3680600; 471000, 3680700; 471100, 3680700; 471100, 3680800; 471200, 3680800; 471200, 3680900;

471300, 3680900; 471300, 3681000; 471400, 3681000; 471400, 3681100; 471500, 3681100; 471500, 3681200; 471600, 3681200; 471600, 3681300.

Land bounded by the following UTM NAD27 coordinates (E, N): 476100, 3679500; 477300, 3679500; 477300, 3678400; 477400, 3678400; 477400, 3678300; 477300, 3678300; 477300, 3678200; 476900, 3678200; 476900, 3678800; 476800, 3678800; 476800, 3679200; 476500, 3679200; 476500, 3679300; 476100, 3679300; 476100, 3679500.

Land bounded by the following UTM NAD27 coordinates (E, N): 467200, 3677300; 467500, 3677300; 467500, 3677100; 467200, 3677100; 467200, 3677000; 467100, 3677000; 467100, 3676700; 467200, 3676700; 467200, 3676600; 467300, 3676600; 467300, 3676400; 467200, 3676400; 467200, 3675900; 467000, 3675900; 467000, 3676000; 466900, 3676000; 466900, 3675800; 467700, 3675800; 467700, 3675900; 467800, 3675900; 467800, 3676300; 468400, 3676300; 468400, 3676100; 468500, 3676100; 468500, 3675800; 468600, 3675800; 468700, 3675600; 468700, 3675600; 468700, 3675300; 468800, 3675300; 468800, 3675400; 468900, 3675400; 468900, 3675600; 468800, 3675600; 468800, 3675700; 468900, 3675700; 468900, 3675800; 469000, 3675800; 469000, 3675900; 469200, 3675900; 469200, 3676000; 469400, 3676000; 469400, 3676100; 469700, 3676100; 469700, 3676200; 469900, 3676200; 469900, 3676300; 470100, 3676300; 470100, 3675900; 469700, 3675900; 469700, 3675700; 470100, 3675700; 470100, 3675500; 469800, 3675500; 469800, 3675300; 469700, 3675300; 469700, 3675200; 469500, 3675200; 469500,

3675500; 469300, 3675500; 469300, 3675800; 469200, 3675800; 469200, 3675000; 469100, 3675000; 469100, 3674600; 468400, 3674600; 468400, 3674400; 468300, 3674400; 468300, 3674300; 468000, 3674300; 468000, 3674400; 467900, 3674400; 467900, 3674500; 467400, 3674500; 467400, 3674700; 467500, 3674700; 467500, 3674800; 467700, 3674800; 467700, 3674700; 468000, 3674700; 468000, 3674600; 468100, 3674600; 468100, 3674800; 468200, 3674800; 468200, 3674900; 468700, 3674900; 468700, 3675000; 468600, 3675000; 468600, 3675300; 468500, 3675300; 468500, 3675500; 468400, 3675500; 468400, 3675800; 468300, 3675800; 468300, 3676100; 468200, 3676100; 468200, 3675900; 468100, 3675900; 468100, 3675800; 468000, 3675800; 468000, 3675700; 467900, 3675700; 467900, 3675600; 467700, 3675600; 467700, 3675500; 467200, 3675500; 467200, 3675600; 467000, 3675600; 467000, 3675500; 466800, 3675500; 466800, 3675400; 466700, 3675400; 466700, 3675300; 466800, 3675300; 466800, 3674900; 466500, 3674900; 466500, 3674800; 466700, 3674800; 466700, 3674700; 466800, 3674700; 466800, 3674600; 467000, 3674600; 467000, 3674400; 467300, 3674400; 467300, 3674200; 466900, 3674200; 466900, 3674300; 466800, 3674300; 466800, 3674400; 466300, 3674400; 466300, 3674500; 466200, 3674500; 466200, 3674400; 466100, 3674400; 466100, 3674500; 466000, 3674500; 466000, 3674300; 465900, 3674300; 465900, 3674400; 465800, 3674400; 465800, 3674700; 465100, 3674700; 465100, 3674600; 465000, 3674600; 465000, 3674500; 464900, 3674500; 464900, 3674400; 465100, 3674400; 465100, 3674100; 465200, 3674100; 465200, 3673500;

471100, 3665700; 471100, 3665900; 471000, 3665900; 471000, 3666000; 470800, 3666000; 470800, 3666300; 470700, 3666300; 470700, 3666500; 470400, 3666500; 470400, 3666600; 470500, 3666600; 470500, 3666700; 470300, 3666700; 470300, 3666800; 470100, 3666800; 470100, 3667000; 470300, 3667000; 470300, 3667100; 470400, 3667000; 470700, 3667000; 470700, 3667100; 470900, 3667100; 470900, 3667400; 471300, 3667400; 471300, 3667500; 471500, 3667500; 471500, 3667600; 471900, 3667600; 471900, 3667700; 472000, 3667700; 472000, 3668100; 471900, 3668100; 471900, 3668500; 471700, 3668500; 471700, 3668400; 471600, 3668400; 471600, 3668300; 471400, 3668300; 471400, 3668200; 471200, 3668200; 471200, 3668400; 471300, 3668400; 471300, 3668700; 471500, 3668700; 471500, 3668800; 471600, 3668800; 471600, 3669400; 471700, 3669400; 471700, 3669300; 471900, 3669300; 471900, 3669400; 472000, 3669400; 472000, 3669500; 472100, 3669500; 472100, 3669400; 472300, 3669300; 472500, 3669300; 472500, 3669200; 472700, 3669200; 472700, 3669500; 472600, 3669500; 472600, 3669700; 472000, 3669700; 472000, 3669800; 471900, 3669800; 471900, 3669700; 471700, 3669600; 471500, 3669600; 471500, 3669700; 471400, 3669700; 471400, 3669900; 471300, 3669900; 471300, 3670100; 471200, 3670100; 471200, 3670300; 470800, 3670300; 470800, 3670000; 471000, 3670000; 471000, 3669900; 471100, 3669900; 471100, 3669800; 470600, 3669800; 470600, 3670000; 470300, 3670200; 470400, 3670200; 470400, 3670300; 470500, 3670300; 470500, 3670400; 470400, 3670400; 470400, 3670500; 470300, 3670500; 470300, 3670600; 470200, 3670600; 470200, 3670800; 470100, 3670800; 470100, 3670900; 470000, 3670900; 470000, 3670800; 469800, 3670800; 469800, 3671300; 470000, 3671300; 470000, 3671100; 470200, 3671100; 470400, 3671300; 470400, 3671200; 470800, 3671200; 470800, 3671100; 471600, 3671100; 471600, 3671200; 471700, 3671200; 471700, 3671300; 472200, 3671300; 472200, 3671200; 472300, 3671300; 473300, 3671300; 473300, 3671100; 473000, 3671100; 473000, 3671000; 472500, 3671000; 472500, 3671100; 472400, 3671100; 472400, 3671000; 472100, 3671000; 472100, 3671100; 471800, 3671100; 471800, 3670900; 472200, 3670900; 472200, 3670600; 472100, 3670600; 472100, 3670500; 472200, 3670500; 472200, 3670400; 472400, 3670400; 472400, 3670500; 472700, 3670500; 472700, 3670700; 472800, 3670700; 472800, 3670600; 472900, 3670600; 472900, 3670300; 472800, 3670300; 472800, 3670000; 472900, 3669800; 473000, 3669800; 473000, 3670000; 473100, 3670000; 473100, 3670100; 473200, 3670100; 473200, 3670300; 473400, 3670300; 473400, 3670400; 473500, 3670400; 473500, 3670500; 473600, 3670500; 473600, 3670400; 473800, 3670400; 473800, 3670500; 474000, 3670500; 474000, 3670700; 474400, 3670700; 474400, 3670800; 475100, 3670800; 475100, 3670700; 475200, 3670700; 475200, 3670600; 475300, 3670600; 475300, 3670500; 475500, 3670500; 475500, 3670300; 474900, 3670300; 474900, 3668100; 475800, 3668100; 475800, 3668000; 475900, 3668000; 475900, 3667800; 476000, 3667800; 476000, 3667900; 476100, 3667900; 476100, 3668000; 476200, 3668000; 476200, 3668100; 477000, 3668000; 477000, 3668100; 477000, 3668200; 477000, 3668300; 477000, 3668400; 477000, 3668500; 477000, 3668600; 477000, 3668700; 477000, 3668800; 477000, 3668900; 477000, 3669000; 477000, 3669100; 477000, 3669200; 477000, 3669300; 477000, 3669400; 477000, 3669500; 477000, 3669600; 477000, 3669700; 477000, 3669800; 477000, 3669900; 477000, 3670000; 477000, 3670100; 477000, 3670200; 477000, 3670300; 477000, 3670400; 477000, 3670500; 477000, 3670600; 477000, 3670700; 477000, 3670800; 477000, 3670900; 477000, 3671000; 477000, 3671100; 477000, 3671200; 477000, 3671300; 477000, 3671400; 477000, 3671500; 477000, 3671600; 477000, 3671700; 477000, 3671800; 477000, 3671900; 477000, 3672000; 477000, 3672100; 477000, 3672200; 477000, 3672300; 477000, 3672400; 477000, 3672500; 477000, 3672600; 477000, 3672700; 477000, 3672800; 477000, 3672900; 477000, 3673000; 477000, 3673100; 477000, 3673200; 477000, 3673300; 477000, 3673400; 477000, 3673500; 477000, 3673600; 477000, 3673700; 477000, 3673800; 477000, 367390

3668600; 478200, 3668600; 478200, 3668800; 478300, 3668800; 478300, 3669000; 478400, 3669000; 478400, 3669100.

Land bounded by the following UTM
NAD27 coordinates (E, N): 494200, 3668900; 494300, 3668900; 494300, 3668800; 494400, 3668800; 494400, 3668700; 494500, 3668700; 494500, 3668600; 494700, 3668600; 494700, 3668300; 494500, 3668300; 494500, 3668500; 494400, 3668500; 494400, 3668600; 494300, 3668600; 494300, 3668700; 494200, 3668700; 494200, 3668900.

Land bounded by the following UTM
NAD27 coordinates (E, N): 470800, 3668800; 470900, 3668800; 470900, 3668600; 471000, 3668600; 471000, 3668400; 470900, 3668400; 470900, 3668500; 470800, 3668500; 470800, 3668800.

Land bounded by the following UTM
NAD27 coordinates (E, N): 470500, 3668100; 470600, 3668100; 470600, 3667500; 470300, 3667500; 470300, 3667700; 470400, 3667700; 470400, 3668000; 470500, 3668000; 470500, 3668100.

Land bounded by the following UTM
NAD27 coordinates (E, N): 470900, 3668100; 471100, 3668100; 471100, 3667600; 470800, 3667600; 470800, 3668000; 470900, 3668000; 470900, 3668100.

Land bounded by the following UTM
NAD27 coordinates (E, N): 497100, 3667700; 497700, 3667700; 497700, 3667500; 497100, 3667500; 497100, 3667700.

Land bounded by the following UTM
NAD27 coordinates (E, N): 498000, 3667600; 498300, 3667600; 498300, 3667300; 498100, 3667300; 498100, 3667400; 498000, 3667400; 498000, 3667600.

Land bounded by the following UTM
NAD27 coordinates (E, N): 473400, 3666900; 473600, 3666900; 473600, 3666800; 473500, 3666800; 473500, 3666700; 473300, 3666700; 473300, 3666800; 473400, 3666800; 473400, 3666900.

Land bounded by the following UTM
NAD27 coordinates (E, N): 498400, 3666600; 498500, 3666600; 498500, 3666500; 498600, 3666500; 498600, 3666300; 499000, 3666300; 499000, 3666400; 500100, 3666400; 500100, 3666500; 500200, 3666500; 500200, 3664000; 499900, 3664000; 499900, 3663900; 499800, 3663900; 499800, 3664200; 499700, 3664200; 499700, 3664500; 499600, 3664500; 499600, 3664600; 499800, 3664600; 499800, 3664700; 499700, 3664700; 499700, 3664800; 499000, 3664800; 499000, 3665000; 499100, 3665000; 499100, 3665100; 499400, 3665200; 499500, 3665200; 499500, 3665300; 499400, 3665300; 499400, 3665400; 499300, 3665400; 499300, 3665200; 499000, 3665200; 499000, 3665100; 498900, 3665200; 498800, 3665200; 498800, 3664800; 498900, 3664800; 498900, 3664700; 499000, 3664700; 499000, 3664600; 499200, 3664600; 499200, 3664300; 499300, 3664300; 499300, 3664100; 499400, 3664100; 499400, 3664300; 499500, 3664300; 499500, 3664400; 499600, 3664400; 499600, 3664100; 499500, 3664100; 499500, 3664000; 499300, 3664000; 499300, 3663800; 499200, 3663800; 499200, 3663700; 499000, 3663700; 499000, 3663800; 499100, 3663800; 499100, 3664200; 499000, 3664200; 499000, 3664400; 498900, 3664400; 498900, 3664500; 498800, 3664500; 498800, 3664700; 498700, 3664700; 498700, 3664800; 498600, 3664800; 498600, 3665000; 498500, 3665000;

498500, 3665300; 498100, 3665300; 498100, 3665400; 498000, 3665400; 498000, 3665300; 497700, 3665300; 497700, 3665700; 497800, 3665700; 497800, 3665800; 497500, 3665800; 497500, 3666000; 497900, 3666000; 497900, 3665900; 498100, 3665900; 498100, 3666000; 498300, 3666000; 498300, 3665900; 498500, 3665900; 498500, 3666000; 498400, 3666000; 498400, 3666400; 498300, 3666400; 498300, 3666500; 498400, 3666500; 498400, 3666600.

Land bounded by the following UTM
NAD27 coordinates (E, N): 478800, 3665800; 479000, 3665800; 479000, 3665700; 478800, 3665700; 478800, 3665800.

Land bounded by the following UTM
NAD27 coordinates (E, N): 479700, 3662500; 479700, 3662700; 479600, 3662700; 479600, 3662800; 479300, 3662800; 479300, 3662900; 479000, 3662900; 479000, 3663200; 482400, 3663200; 482400, 3664300; 482500, 3664300; 482500, 3664400; 482400, 3664400; 482400, 3664700; 483700, 3664700; 483700, 3664800; 483700, 3664700; 484200, 3664700; 484200, 3664500; 484700, 3664500; 484700, 3664600; 484900, 3664600; 484900, 3664800; 485500, 3664800; 485500, 3663300; 483900, 3663300; 483900, 3661600; 484900, 3661600; 484900, 3661500; 485400, 3661500; 485400, 3660000; 485800, 3660000; 485800, 3658400; 484200, 3658400; 484200, 3658600; 483600, 3658600; 483600, 3657300; 483700, 3657300; 483700, 3657400; 483400, 3657400; 483400, 3657500; 483000, 3657500; 483000, 3657600; 482700, 3657600; 482700, 3657500; 482400, 3657500; 482400, 3657200; 482200, 3657200; 482200, 3657100; 482000, 3657100; 482000, 3657200; 481900, 3657200; 481900, 3657100; 481800, 3657100; 481800, 3657000; 481500, 3657000; 481500, 3656900; 481400, 3656900; 481400, 3656800; 479900, 3656800; 479900, 3656700; 479800, 3656700; 479800, 3656800; 479600, 3656800; 479600, 3656900; 479500, 3656900; 479500, 3657200; 479600, 3657200; 479600, 3657100; 479800, 3657100; 479800, 3657200; 479900, 3657200; 479900, 3657300; 479800, 3657300; 479800, 3657900; 479900, 3657900; 479900, 3658100; 479700, 3658100; 479700, 3658700; 479800, 3658700; 479800, 3658800; 479900, 3658800; 479900, 3659400; 479800, 3659400; 479800, 3659500; 479500, 3659500; 479500, 3659300; 479400, 3659300; 479400, 3659200; 479300, 3659200; 479300, 3659100; 479000, 3659100; 479000, 3658800; 478700, 3658800; 478700, 3658700; 478500, 3658700; 478500, 3658600; 478900, 3658600; 478900, 3658400; 479400, 3658400; 479400, 3658300; 478700, 3658300; 478700, 3658400; 478500, 3658400; 478500, 3658300; 478300, 3658300; 478300, 3658500; 478200, 3658500; 478200, 3658400; 477700, 3658400; 477700, 3658300; 476800, 3658300; 476800, 3658400; 476700, 3658400; 476700, 3658300; 476200, 3658300; 476200, 3658200; 476300, 3658200; 476300, 3657900; 476200, 3657900; 476200, 3657700; 476300, 3657700; 476300, 3657500; 476200, 3657500; 476100, 3657400; 476100, 3657700; 476000, 3657700; 476000, 3658000; 475900, 3658000; 475900, 3657900; 475700, 3657900; 475700, 3657800; 475600, 3657800; 475600, 3657600; 475400, 3657600; 475400, 3658100; 475500, 3658100; 475500, 3658600; 475400, 3658600; 475400, 3658800; 475200, 3658800; 475200, 3659100; 475300, 3659100; 475300, 3659200; 475400, 3659200; 475400, 3659400; 475300, 3659400; 475300, 3659500; 475200, 3659500; 475200, 3659700; 475100, 3659700;

475100, 3660100; 475000, 3660100; 475000, 3660300; 474900, 3660300; 474900, 3660000; 475000, 3660000; 475000, 3659500; 475100, 3659500; 475100, 3659400; 475200, 3659400; 475200, 3659200; 475100, 3659200; 475100, 3658600; 475200, 3658600; 475200, 3657900; 475100, 3657900; 475100, 3657800; 475200, 3657800; 475200, 3657600; 475100, 3657600; 475100, 3657500; 475000, 3657500; 475000, 3657000; 475400, 3657000; 475400, 3656900; 475500, 3656900; 475500, 3656800; 475000, 3656800; 475000, 3657100; 474900, 3657100; 474900, 3657400; 474800, 3657400; 474800, 3657800; 474700, 3657800; 474700, 3658300; 474800, 3658300; 474800, 3658400; 474700, 3658400; 474700, 3658500; 474600, 3658500; 474600, 3658600; 474400, 3658600; 474400, 3658800; 474500, 3658800; 474500, 3659200; 474200, 3659200; 474200, 3659100; 474300, 3659100; 474300, 3658700; 473800, 3658700; 473700, 3658700; 473600, 3658700; 473600, 3658800; 473400, 3658800; 473400, 3659500; 473300, 3659500; 473300, 3659800; 473200, 3659800; 473200, 3660000; 473100, 3660000; 473100, 3660400; 472900, 3660400; 472900, 3660200; 472700, 3660200; 472700, 3660100; 472100, 3660100; 472100, 3660300; 472400, 3660300; 472400, 3660600; 472500, 3660600; 472500, 3660700; 472700, 3660700; 472700, 3660800; 473600, 3660800; 473600, 3660900; 474300, 3660900; 474300, 3660800; 474400, 3660800; 474400, 3660700; 474600, 3660700; 474600, 3660600; 475100, 3660600; 475100, 3660400; 475200, 3660400; 475200, 3660200; 475300, 3660200; 475300, 3659900; 475500, 3659900; 475500, 3659800; 475500, 3660000; 475700, 3660000; 475700, 3660100; 476000, 3660100; 476000, 3660000; 475900, 3660000; 475900, 3659900; 475700, 3659900; 475700, 3659800; 475600, 3659800; 475600, 3659600; 475700, 3659600; 475700, 3659400; 475800, 3659400; 475800, 3659600; 476200, 3659600; 476200, 3659700; 476300, 3659700; 476300, 3659900; 476400, 3659900; 476400, 3660000; 476300, 3660000; 476300, 3660200; 476400, 3660200; 476400, 3660300; 476600, 3660300; 476600, 3660200; 476700, 3660200; 476700, 3660100; 476600, 3660100; 476600, 3659800; 476500, 3659800; 476500, 3659700; 476600, 3659700; 476600, 3659500; 476300, 3659500; 476300, 3659400; 476100, 3659400; 476100, 3659300; 476200, 3659300; 476200, 3659100; 475900, 3659100; 475900, 3659000; 475800, 3659000; 475800, 3658800; 475900, 3658800; 475900, 3658600; 476000, 3658600; 476000, 3658500; 476300, 3658500; 476300, 3658400; 476500, 3658400; 476500, 3658500; 476600, 3658500; 476600, 3658600; 476700, 3658600; 476700, 3658500; 477600, 3658500; 477600, 3658600; 477700, 3658600; 477700, 3658700; 478000, 3658700; 478000, 3658800; 478300, 3658800; 478300, 3659000; 478200, 3659000; 478200, 3659100; 478400, 3659100; 478400, 3659000; 478500, 3659000; 478500, 3659200; 478700, 3659200; 478700, 3659300; 478600, 3659300; 478600, 3659400; 478500, 3659400; 478500, 3659500; 478700, 3659500; 478700, 3659600; 479300, 3659600; 479300, 3659700; 479500, 3659700; 479500, 3660000; 479400, 3660000; 479400, 3660100; 479500, 3660100; 479500, 3660200; 479400, 3660200; 479400, 3660300; 479300, 3660300; 479300, 3659900; 479200, 3659900; 479200, 3659800; 479100, 3659800; 479100, 3659700; 479000, 3659700;

479000, 3659800; 478900, 3659800; 478900, 3660000; 478800, 3660000; 478800, 3659900; 478600, 3659900; 478600, 3660000; 478500, 3660000; 478500, 3660100; 478600, 3660100; 478600, 3660200; 478800, 3660200; 478800, 3660100; 478900, 3660100; 478900, 3660200; 479000, 3660200; 479000, 3660300; 479200, 3660300; 479200, 3660400; 478900, 3660400; 478900, 3660300; 478800, 3660300; 478800, 3660600; 479100, 3660600; 479100, 3660500; 479400, 3660500; 479400, 3660400; 479700, 3660400; 479700, 3660500; 479800, 3660500; 479800, 3661600; 479400, 3661600; 479400, 3662400; 479200, 3662400; 479200, 3662600; 479100, 3662600; 479100, 3662700; 479500, 3662700; 479500, 3662600; 479600, 3662600; 479600, 3662500; 479700, 3662500; excluding land bounded by 479700, 3662500; 479700, 3662400; 479800, 3662400; 479800, 3662500; 479700, 3662500; land bounded by 483600, 3664600; 483600, 3664400; 484000, 3664400; 484000, 3664500; 483900, 3664500; 483900, 3664600; 483600, 3664600; land bounded by 481600, 3662500; 481600, 3662400; 480500, 3662400; 480500, 3662300; 480600, 3662300; 480600, 3662200; 480700, 3662200; 480700, 3662100; 480800, 3662100; 480800, 3662000; 480900, 3662000; 480900, 3661900; 481300, 3661900; 481300, 3661700; 481900, 3661700; 481900, 3661800; 482000, 3661800; 482000, 3661900; 482500, 3661900; 482500, 3661700; 482900, 3661700; 482900, 3661800; 483000, 3661800; 483000, 3662100; 483500, 3662100; 483500, 3662200; 483400, 3662200; 483400, 3662400; 483300, 3662400; 483300, 3662300; 482900, 3662300; 482900, 3662400; 482800, 3662400; 482800, 3662500; 482500, 3662500; 481700, 3662400; 481700, 3662500; 481600, 3662500; land bounded by 482300, 3661200; 482300, 3660300; 482500, 3660300; 482500, 3660200; 482600, 3660200; 482600, 3660100; 482800, 3660100; 482800, 3660000; 482900, 3660000; 482900, 3659700; 482800, 3659700; 482800, 3659600; 482700, 3659600; 482700, 3659200; 483300, 3659200; 483300, 3659300; 483400, 3659300; 483400, 3659500; 483500, 3659500; 483500, 3659800; 483700, 3659800; 483700, 3659600; 483800, 3659600; 483800, 3660100; 483700, 3660100; 483700, 3660200; 483600, 3660200; 483600, 3660400; 483500, 3660400; 483500, 3660000; 483400, 3660000; 483400, 3660100; 483300, 3660100; 483300, 3660200; 483100, 3660200; 483100, 3660300; 482800, 3660300; 482800, 3660500; 482700, 3660500; 482700, 3660700; 482600, 3660700; 482600, 3660900; 482700, 3660900; 482700, 3661000; 482500, 3661000; 482500, 3661200; 482300, 3661200; land bounded by 484800, 3661200; 484800, 3661100; 484700, 3661100; 484700, 3660900; 484900, 3660900; 484900, 3661000; 485100, 3661000; 485100, 3661100; 484900, 3661100; 484900, 3661200; 484800, 3661200; land bounded by 473900, 3660600; 473900, 3660500; 474000, 3660500; 474000, 3660200; 473700, 3660200; 473700, 3660100; 474100, 3660100; 474100, 3660000; 474200, 3660000; 474200, 3660200; 474300, 3660200; 474300, 3660500; 474200, 3660500; 474200, 3660600; 473900, 3660600; land bounded by 482300, 3660000; 482300, 3659800; 482500, 3659800; 482500, 3659700; 482600, 3659700; 482600, 3659900; 482700, 3659900; 482700, 3660000; 482300, 3660000; land bounded by 474100, 3659900; 474100, 3659800; 473800, 3659800; 473800, 3659700; 474000, 3659700; 474000,

3659500; 474100, 3659500; 474100, 3659400; 474300, 3659400; 474300, 3659300; 474400, 3659300; 474400, 3659500; 474300, 3659500; 474300, 3659900; 474100, 3659900; land bounded by 484800, 3659900; 484800, 3659800; 484700, 3659800; 484700, 3659700; 484500, 3659700; 484500, 3659600; 484300, 3659600; 484300, 3659500; 484400, 3659500; 484400, 3659300; 484500, 3659300; 484500, 3659100; 484700, 3659300; 484800, 3659300; 484800, 3659400; 484900, 3659400; 484900, 3659600; 485000, 3659600; 485000, 3659700; 485100, 3659700; 485100, 3659800; 485000, 3659800; 485000, 3659900; 484800, 3659900; land bounded by 480500, 3659600; 480500, 3659500; 480600, 3659500; 480600, 3659200; 480500, 3659200; 480500, 3659000; 480600, 3659000; 480600, 3659100; 480900, 3659100; 480900, 3659300; 481000, 3659300; 481000, 3659600; 480500, 3659600; land bounded by 483900, 3659500; 483900, 3659300; 484000, 3659300; 484000, 3659200; 484100, 3659200; 484100, 3659500; 483900, 3659500; land bounded by 480900, 3659000; 480900, 3658900; 480700, 3658900; 480700, 3658700; 480300, 3658700; 480300, 3658900; 480100, 3658900; 480100, 3658800; 480000, 3658800; 480000, 3658500; 479900, 3658500; 479900, 3658300; 480000, 3658300; 480000, 3658200; 480100, 3658200; 480100, 3658000; 480000, 3658000; 480000, 3657600; 479900, 3657600; 479900, 3657500; 480000, 3657500; 480000, 3657200; 480100, 3657200; 480100, 3657400; 480300, 3657400; 480300, 3657500; 480500, 3657500; 480500, 3657300; 480700, 3657300; 480700, 3657200; 480900, 3657200; 480900, 3657300; 481100, 3657300; 481100, 3657400; 481200, 3657400; 481200, 3657200; 481500, 3657200; 481500, 3657300; 481600, 3657300; 481600, 3657600; 481700, 3657600; 481700, 3657800; 481400, 3657800; 481400, 3657900; 481300, 3657900; 481300, 3658300; 481000, 3658300; 481000, 3658600; 481400, 3658600; 481400, 3658800; 481200, 3658800; 481200, 3658900; 481000, 3658900; 481000, 3659000; 480900, 3659000; and land bounded by 481500, 3658500; 481500, 3658300; 481700, 3658300; 481700, 3658200; 481900, 3658200; 481900, 3658300; 481800, 3658300; 481800, 3658500; 481500, 3658500.

Land bounded by the following UTM
NAD27 coordinates (E, N): 499200, 3663500; 499900, 3663500; 499900, 3663400; 499800, 3663400; 499800, 3663300; 499200, 3663300; 499200, 3663500.

Land bounded by the following UTM
NAD27 coordinates (E, N): 478000, 3663400; 478500, 3663100; 478600, 3663100; 478600, 3662900; 478400, 3662900; 478400, 3663100; 478200, 3663100; 478200, 3663200; 478100, 3663200; 478100, 3663100; 478000, 3663100; 478000, 3662800; 477900, 3662800; 477900, 3662700; 477800, 3662700; 477800, 3662600; 477700, 3662600; 477700, 3663000; 477800, 3663000; 477800, 3663100; 477900, 3663100; 477900, 3663200; 478000, 3663200; 478000, 3663400.

Land bounded by the following UTM
NAD27 coordinates (E, N): 476200, 3663100; 476400, 3663100; 476400, 3662500; 476600, 3662500; 476600, 3662400; 476700, 3662400; 476700, 3662300; 476900, 3662300; 476900, 3662200; 477100, 3662200; 477100, 3662100; 477300, 3662100; 477300, 3662000; 477400, 3662000; 477400, 3661900; 477100, 3661900; 477100, 3662000; 476900, 3662000; 476900,

3662100; 476700, 3662100; 476700, 3661800; 476500, 3661800; 476500, 3661700; 476300, 3661700; 476300, 3662000; 476500, 3662000; 476500, 3662300; 476400, 3662300; 476400, 3662400; 476200, 3662400; 476200, 3662600; 476300, 3662600; 476300, 3662700; 476200, 3662700; 476200, 3663100.

Land bounded by the following UTM
NAD27 coordinates (E, N): 493700, 3661600; 494000, 3661600; 494000, 3661300; 494100, 3661300; 494100, 3661100; 494200, 3661100; 494200, 3660900; 494300, 3660900; 494300, 3660800; 494400, 3660800; 494400, 3660400; 494500, 3660400; 494500, 3660300; 494800, 3660300; 494800, 3659800; 494500, 3659800; 494500, 3659600; 494400, 3659600; 494400, 3659500; 494300, 3659500; 494300, 3659100; 494200, 3659100; 494200, 3659000; 494100, 3659000; 494100, 3659100; 493900, 3659100; 493900, 3659200; 493800, 3659200; 493800, 3659300; 493700, 3659300; 493700, 3659200; 493500, 3659200; 493500, 3659500; 493700, 3659500; 493700, 3659800; 493600, 3659800; 493600, 3659900; 493500, 3659900; 493500, 3660100; 493400, 3660100; 493400, 3660700; 493600, 3660700; 493600, 3660000; 493800, 3660000; 493800, 3660300; 494200, 3660300; 494200, 3660200; 494300, 3660200; 494300, 3660500; 494200, 3660500; 494200, 3660600; 494100, 3660600; 494100, 3660900; 493900, 3660900; 493900, 3661000; 493800, 3661000; 493800, 3661100; 493700, 3661100; 493700, 3661200; 493800, 3661200; 493800, 3661300; 493700, 3661300; 493700, 3661600.

Land bounded by the following UTM
NAD27 coordinates (E, N): 494600, 3661600; 494700, 3661600; 494700, 3661400; 494600, 3661400; 494600, 3661600.

Land bounded by the following UTM
NAD27 coordinates (E, N): 494600, 3661200; 494700, 3661200; 494700, 3660900; 494800, 3660900; 494800, 3660600; 494700, 3660600; 494700, 3660700; 494600, 3660700; 494600, 3661200.

Land bounded by the following UTM
NAD27 coordinates (E, N): 477100, 3660700; 477300, 3660700; 477300, 3660400; 477400, 3660400; 477400, 3660200; 477300, 3660200; 477300, 3660100; 477200, 3660100; 477200, 3660300; 477100, 3660300; 477100, 3660400; 477000, 3660400; 477000, 3660300; 476800, 3660300; 476800, 3660500; 476900, 3660500; 476900, 3660600; 477100, 3660600; 477100, 3660700.

Land bounded by the following UTM
NAD27 coordinates (E, N): 477800, 3659500; 478100, 3659500; 478100, 3659400; 478000, 3659400; 478000, 3659300; 477800, 3659300; 477800, 3659200; 477700, 3659200; 477700, 3659100; 477600, 3659100; 477600, 3659000; 477500, 3659000; 477500, 3658900; 477400, 3658900; 477400, 3658800; 477300, 3658800; 477300, 3658600; 477100, 3658600; 477100, 3658900; 477200, 3658900; 477200, 3659000; 477300, 3659000; 477300, 3659100; 477400, 3659100; 477400, 3659200; 477500, 3659200; 477500, 3659300; 477600, 3659300; 477600, 3659400; 477400, 3659400; 477400, 3659600; 477800, 3659600; 477800, 3659500; excluding land bounded by 477800, 3659500; 477700, 3659500; 477700, 3659400; 477800, 3659400; 477800, 3659500.

Land bounded by the following UTM
NAD27 coordinates (E, N): 492200, 3659300; 492400, 3659300; 492400, 3659100; 492300, 3659100; 492300, 3659000; 492400, 3659000;

492400, 3658700; 492500, 3658700; 492500, 3658400; 492400, 3658400; 492400, 3657900; 492300, 3657900; 492300, 3657700; 492200, 3657700; 492200, 3657600; 492100, 3657600; 492100, 3657500; 492000, 3657500; 492000, 3657400; 491700, 3657400; 491700, 3657500; 491600, 3657500; 491600, 3658300; 491700, 3658300; 491700, 3658400; 491800, 3658400; 491800, 3658500; 491900, 3658500; 491900, 3658600; 492000, 3658600; 492000, 3658900; 492100, 3658900; 492100, 3659200; 492200, 3659200; 492200, 3659300.

Land bounded by the following UTM NAD27 coordinates (E, N): 494700, 3659300; 494900, 3659300; 494900, 3659200; 494800, 3659200; 494800, 3659100; 494700, 3659100; 494700, 3659000; 494900, 3659000; 494900, 3659100; 495000, 3659000; 495000, 3659000; 495100, 3658900; 495000, 3658900; 495000, 3658800; 494800, 3658800; 494800, 3658700; 494600, 3658700; 494600, 3658600; 494500, 3658600; 494500, 3658700; 494400, 3658700; 494400, 3659000; 494500, 3659000; 494500, 3659100; 494600, 3659100; 494600, 3659200; 494700, 3659200; 494700, 3659300.

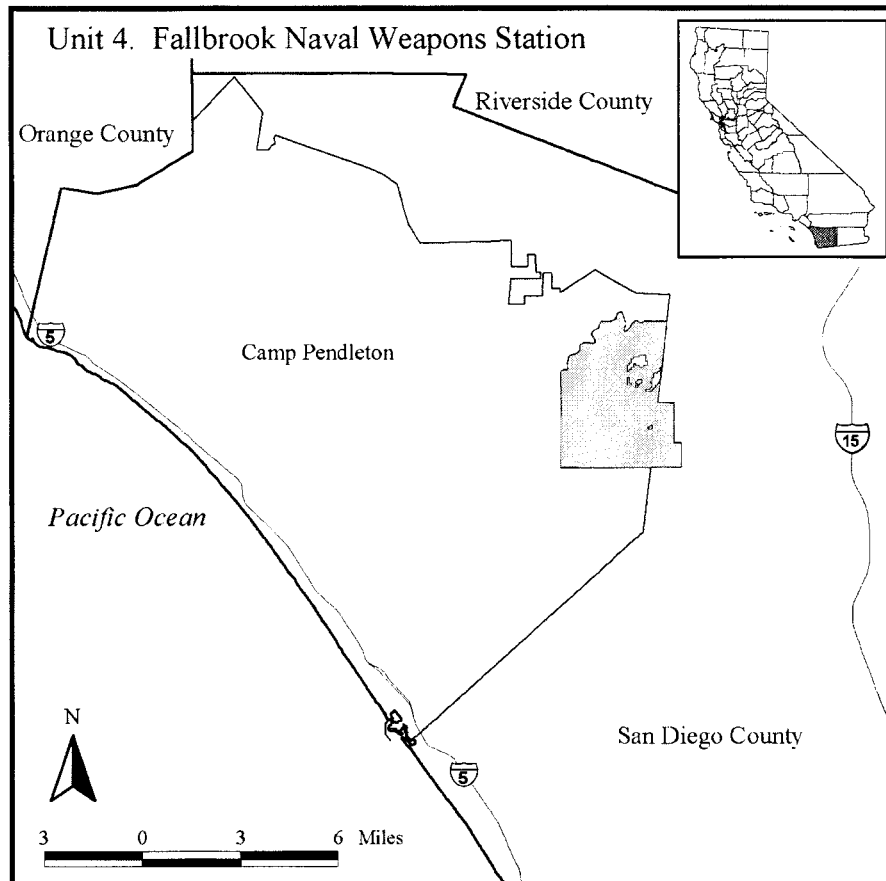
Land bounded by the following UTM NAD27 coordinates (E, N): 495200, 3658700; 495500, 3658700; 495500, 3658400; 495600, 3658400; 495600, 3658300; 495900, 3658300; 495900, 3658400; 496000, 3658400; 496000, 3658300; 496200, 3658300; 496200, 3657800; 496100, 3657800; 496100, 3657700; 496000, 3657700; 496000, 3657600; 495300, 3657600; 495300, 3657700; 495000, 3657700; 495000, 3657900; 494700, 3657900; 494700, 3658000;

495100, 3658000; 495100, 3658100; 495300, 3658100; 495300, 3658200; 495400, 3658200; 495400, 3658400; 495300, 3658400; 495300, 3658300; 494900, 3658300; 494900, 3658200; 494700, 3658200; 494700, 3658400; 495100, 3658400; 495100, 3658600; 495200, 3658600; 495200, 3658700.

Land bounded by the following UTM NAD27 coordinates (E, N): 493400, 3658300; 493600, 3658300; 493600, 3658000; 493500, 3658000; 493500, 3657900; 493300, 3657900; 493300, 3658100; 493400, 3658100; 493400, 3658300.

Land bounded by the following UTM NAD27 coordinates (E, N): 475300, 3653100; 475400, 3653100; 475400, 3653200; 475600, 3653200; 475600, 3653500; 476300, 3653500; 476300, 3654800; 476400, 3654500; 476600, 3654500; 476600, 3655100; 476900, 3655100; 476900, 3655000; 477100, 3655000; 477100, 3655100; 477600, 3655100; 477600, 3654900; 477500, 3654900; 477500, 3654600; 477600, 3654600; 477600, 3654800; 477700, 3654800; 477700, 3654900; 477800, 3654900; 477800, 3655000; 477900, 3655000; 477900, 3654100; 477700, 3654100; 477700, 3654200; 477600, 3654200; 477600, 3654000; 477700, 3654000; 477700, 3653600; 477600, 3653600; 477600, 3653400; 477500, 3653400; 477500, 3653300; 477400, 3653300; 477400, 3653100; 477300, 3653100; 477300, 3653000; 477200, 3653000; 477200, 3652900; 477100, 3652900; 477100, 3652600; 477300, 3652600; 477300, 3652800; 477400, 3652800; 477400, 3652900; 477600, 3652900; 477600, 3652400; 477700, 3652400; 477700, 3652300; 477800,

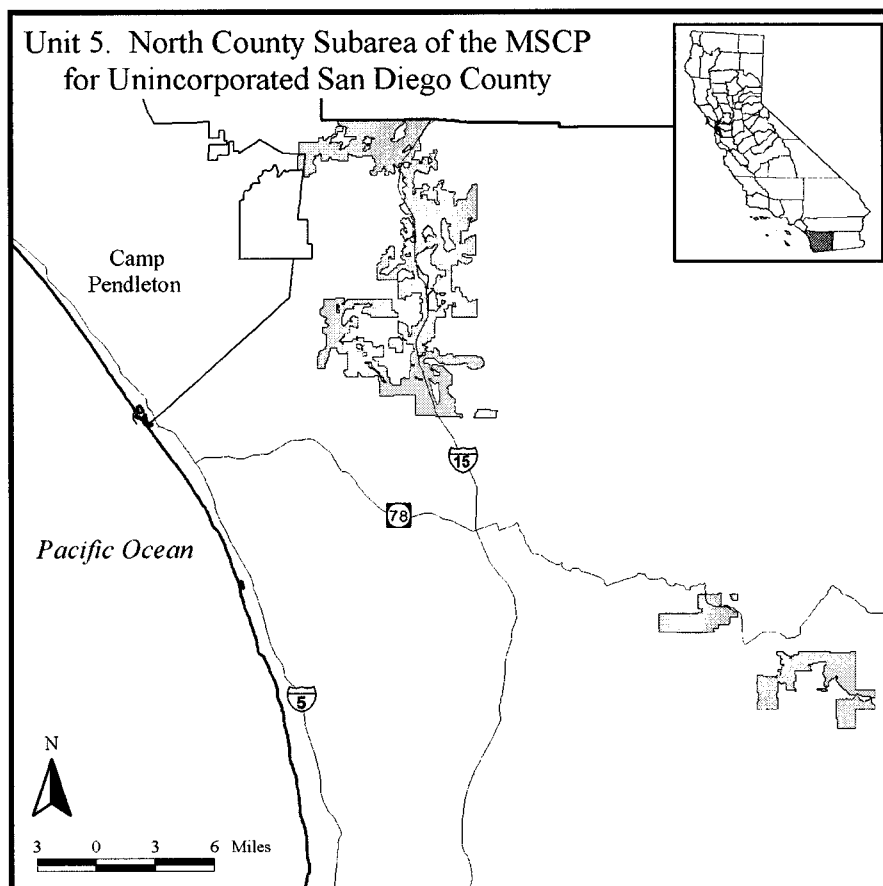
3652300; 477800, 3652100; 477600, 3652100; 477600, 3652000; 476200, 3652000; 476200, 3651900; 475900, 3651900; 475900, 3651700; 476000, 3651700; 476000, 3651400; 476100, 3651400; 476100, 3650900; 476000, 3650900; 476000, 3651000; 475900, 3651000; 475900, 3651200; 475800, 3651200; 475800, 3651300; 475700, 3651300; 475700, 3651400; 475600, 3651400; 475600, 3651300; 475400, 3651300; 475400, 3651200; 475200, 3651200; 475200, 3651300; 475000, 3651300; 475000, 3651400; 474900, 3651400; 474900, 3651500; 474600, 3651500; 474600, 3653500; 474800, 3653500; 474800, 3653200; 475100, 3653200; 475100, 3653300; 475300, 3653300; 475300, 3653100; excluding land bounded by 475200, 3653000; 475100, 3653000; 475100, 3652900; 475200, 3652900; 475200, 3653000; land bounded by 475200, 3653000; 475300, 3653000; 475300, 3653100; 475200, 3653100; 475200, 3653000; land bounded by 476700, 3653800; 476700, 3653700; 476500, 3653700; 476500, 3653600; 476700, 3653600; 476700, 3653400; 476800, 3653400; 476800, 3653800; 476700, 3653800; land bounded by 476100, 3653400; 476100, 3653300; 476000, 3653300; 476000, 3653200; 475900, 3653200; 475900, 3652900; 476000, 3652900; 476000, 3653000; 476100, 3653000; 476100, 3653100; 476200, 3653100; 476200, 3653400; 476100, 3653400; and land bounded by 474900, 3652500; 474900, 3652300; 475000, 3652300; 475000, 3652200; 475100, 3652200; 475100, 3652300; 475200, 3652300; 475200, 3652400; 475100, 3652400; 475100, 3652500; 474900, 3652500.



Map Unit 4: Fallbrook Naval Weapons Station, San Diego County, California. From USGS 1:100,000 quadrangle map Oceanside, California (1984). Lands within the Santa Margarita y Las Flores Land Grant: Fallbrook Naval Weapons Station; and Federal Lands associated with the Fallbrook Naval Weapons Station within T. 09 S., R. 04 W., San Bernardino Principal Meridian, secs. 35 and 36; and T. 10 S., R. 04 W., San Bernardino Principal Meridian, secs. 1 and 2; excluding land bounded by 476000, 3692600; 475800, 3692600; 475800, 3692400; 475700, 3692400; 475700, 3692300; 475500, 3692300; 475500, 3692100; 475400, 3692100; 475400, 3691900; 475300, 3691900; 475300, 3691800; 475400,

3691800; 475400, 3691600; 475300, 3691600; 475300, 3691500; 475100, 3691500; 475100, 3691400; 475400, 3691400; 475400, 3691500; 475500, 3691500; 475500, 3691600; 475600, 3691600; 475600, 3691700; 475700, 3691700; 475700, 3691800; 476000, 3691800; 476000, 3692600; land bounded by 474700, 3691700; 474600, 3691700; 474600, 3691600; 474700, 3691600; 474700, 3691700; land bounded by 474700, 3691700; 474800, 3691700; 474800, 3691800; 474900, 3691800; 474900, 3692000; 474700, 3692000; 474700, 3691900; 474600, 3691900; 474600, 3691800; 474700, 3691800; 474700, 3691700; land bounded by 474800, 3693200; 474800, 3693100; 474500, 3693100; 474500, 3693000; 474400, 3693000; 474400,

3692800; 474300, 3692800; 474300, 3692700; 474200, 3692700; 474200, 3692400; 474300, 3692400; 474300, 3692500; 474400, 3692500; 474400, 3692600; 474500, 3692600; 474500, 3692800; 474600, 3692800; 474600, 3692700; 474800, 3692700; 474800, 3692600; 475000, 3692600; 475000, 3692700; 475200, 3692900; 475100, 3692900; 475100, 3693200; 474800, 3693200; land bounded by 474200, 3692100; 474200, 3691700; 474400, 3691700; 474400, 3691800; 474300, 3692100; 474200, 3692100; and land bounded by 475300, 3689700; 475300, 3689600; 475200, 3689600; 475200, 3689500; 475400, 3689500; 475400, 3689700; 475300, 3689700.



Map Unit 5: North County Subarea of the Multiple Species Conservation Program (MSCP) for Unincorporated San Diego County, California. From USGS 1:100,000 quadrangle map Oceanside, California (1984), beginning at the San Diego/Riverside County line at UTM NAD27 x coordinate 486600; land bounded by the following UTM NAD27 coordinates (E, N): 486600, 3698900; 486500, 3698900; 486500, 3698800; 486400, 3698800; 486400, 3698600; 486300, 3698600; 486300, 3698500; 486200, 3698500; 486200, 3698300; 486100, 3698300; 486100, 3698200; 486000, 3698200; 486000, 3698000; 485900, 3698000; 485900, 3697800; 485800, 3697800; 485800, 3697700; 485700, 3697700; 485700, 3697500; 485600, 3697500; 485600, 3697400; 485700, 3697400; 485700, 3697100; 485800, 3697100; 485800, 3696500; 485300, 3696500; 485300,

3696300; 485200, 3696300; 485200, 3696000; 485100, 3696000; 485100, 3695900; 485000, 3695900; 485000, 3695800; 485700, 3695800; 485700, 3695500; 485900, 3695500; 485900, 3695600; 485800, 3695600; 485800, 3695700; 485900, 3695700; 485900, 3695800; 486000, 3695800; 486000, 3695900; 485900, 3695900; 485900, 3696000; 486400, 3696000; 486400, 3695400; 486500, 3695400; 486500, 3695600; 486700, 3695600; 486700, 3695800; 486600, 3695800; 486600, 3695900; 486500, 3695900; 486500, 3696300; 486900, 3696300; 486900, 3696400; 486800, 3696400; 486800, 3696600; 487100, 3696600; 487100, 3696300; 487000, 3696300; 487000, 3696000; 486900, 3696000; 486900, 3695800; 487000, 3695700; 487100, 3695700; 487100, 3694900; 486900, 3694900; 486900, 3695000; 486800, 3695000; 486800, 3695100;

486700, 3695200; 486600, 3695200; 486600, 3695100; 486500, 3695100; 486500, 3694800; 486400, 3694800; 486400, 3694600; 486100, 3694600; 486100, 3694700; 485800, 3694700; 485800, 3694800; 485600, 3694800; 485600, 3694900; 485400, 3694900; 485400, 3694800; 485300, 3694800; 485300, 3694700; 485200, 3694700; 485200, 3694200; 485100, 3694200; 485100, 3693800; 485200, 3693800; 485200, 3693500; 485100, 3693500; 485100, 3692900; 485200, 3692900; 485200, 3693000; 485300, 3693000; 485300, 3693400; 485900, 3693400; 485900, 3693700; 486000, 3693700; 486000, 3693800; 486300, 3693800; 486300, 3693600; 486500, 3693600; 486500, 3693400; 486400, 3693400; 486400, 3693200; 486000, 3693200; 486000, 3693100; 485800, 3693100; 485800, 3692600; 485900, 3692600; 485900, 3692900; 486300, 3692900; 486300, 3692500; 486900,

3692500; 486900, 3692300; 487000, 3692300;	3678500; 489900, 3678600; 489700, 3678600;	3683400; 483600, 3683300; 483700, 3683300;
487000, 3692100; 487300, 3692100; 487300,	489700, 3678700; 489600, 3678700; 489600,	483700, 3683200; 483900, 3683200; 483900,
3692300; 487200, 3692300; 487200, 3692400;	3679000; 489200, 3679000; 489200, 3678900;	3682800; 481600, 3682800; 481600, 3683000;
487100, 3692400; 487100, 3693200; 486800,	487700, 3678900; 487700, 3679000; 487200,	481400, 3683000; 481400, 3683100; 480900,
3693200; 486800, 3693500; 487100, 3693500;	3679000; 487200, 3679100; 487100, 3679100;	3683100; 480900, 3683300; 481000, 3683300;
487100, 3693700; 487200, 3693700; 487200,	487100, 3679200; 487000, 3679200; 487000,	481000, 3683600; 481100, 3683600; 481100,
3694000; 487400, 3694000; 487400, 3694100;	3679300; 486900, 3679300; 486900, 3679400;	3683700; 481600, 3683700; 481600, 3683800;
487700, 3694100; 487700, 3693900; 487500,	486100, 3679400; 486100, 3679300; 486000,	481700, 3683800; 481700, 3683900; 481500,
3693900; 487500, 3693800; 487600, 3693800;	3679300; 486000, 3679000; 486400, 3679000;	3683900; 481500, 3684000; 481400, 3684000;
487600, 3693500; 487500, 3693500; 487500,	486400, 3678900; 486500, 3678900; 486500,	481400, 3683900; 480300, 3683900; 480300,
3693300; 487900, 3693300; 487900, 3693200;	3678500; 486600, 3678500; 486600, 3678400;	3683700; 480200, 3683700; 480200, 3683600;
488100, 3693200; 488100, 3693100; 488600,	486800, 3678400; 486800, 3678000; 487300,	480300, 3683600; 480300, 3683500; 479600,
3693100; 488600, 3692900; 488500, 3692900;	3678000; 487300, 3678300; 487000, 3678300;	3683500; 479600, 3683400; 479500, 3683400;
488500, 3692000; 488700, 3692000; 488700,	487000, 3678400; 486900, 3678400; 486900,	479500, 3683100; 479400, 3683100; 479400,
3692400; 488800, 3692400; 488800, 3692500;	3678500; 486700, 3678500; 486700, 3678600;	3682900; 479300, 3682900; 479300, 3682200;
489500, 3692500; 489500, 3692600; 489600,	486600, 3678600; 486600, 3678800; 486700,	479400, 3682200; 479400, 3682100; 479500,
3692600; 489600, 3693000; 489700, 3693000;	3678800; 486700, 3678900; 487100, 3678900;	3682100; 479500, 3682200; 479600, 3682200;
489700, 3693100; 489800, 3693100; 489800,	487100, 3678800; 487600, 3678800; 487600,	479600, 3682300; 479700, 3682300; 479700,
3693300; 489900, 3693300; 489900, 3693400;	3678700; 487700, 3678700; 487700, 3678600;	3682500; 480000, 3682500; 480000, 3682600;
490000, 3693400; 490000, 3693700; 490200,	487800, 3678600; 487800, 3678500; 487900,	479900, 3682600; 479900, 3682700; 480000,
3693700; 490200, 3693800; 490400, 3693800;	3678500; 487900, 3678400; 488000, 3678400;	3682700; 480000, 3682800; 480100, 3682800;
490400, 3690800; 490200, 3690800; 490200,	488000, 3678300; 488100, 3678300; 488100,	480100, 3682900; 480400, 3682900; 480400,
3690700; 490000, 3690700; 490000, 3690600;	3678200; 488200, 3678200; 488200, 3678100;	3682800; 480600, 3682800; 480600, 3681000;
489900, 3690600; 489900, 3690700; 489800,	488300, 3678100; 488300, 3677200; 488100,	480500, 3681900; 480500, 3682000; 480200,
3690700; 489800, 3690300; 489700, 3690300;	3677200; 488100, 3677100; 488000, 3677100;	3682000; 480200, 3682100; 479900, 3682100;
489700, 3689900; 489100, 3689900; 489100,	488000, 3677000; 487900, 3677000; 487900,	479900, 3681500; 479500, 3681500; 479500,
3689000; 489800, 3689000; 489000, 3688900;	3676900; 488000, 3676900; 488000, 3676500;	3681200; 479400, 3681200; 479400, 3681100;
489400, 3688900; 489400, 3689200; 489500,	488100, 3676500; 488100, 3676400; 488200,	479300, 3681100; 479300, 3681000; 479200,
3689200; 489500, 3689300; 489700, 3689300;	3676400; 488200, 3676300; 488300, 3676300;	3681000; 479200, 3680900; 479100, 3680900;
489700, 368940		

3684500; 485800, 3684800; 485000, 3684800; 485000, 3684600; 484900, 3684500; 484500, 3684500; 484500, 3684200; 484400, 3684200; 484400, 3684300; 484300, 3684300; 484300, 3684400; 484200, 3684400; 484200, 3684300; 483900, 3684300; 483900, 3685800; 484300, 3685800; 484300, 3685900; 484400, 3685900; 484400, 3686000; 484500, 3686000; 484500, 3686100; 484700, 3686100; 484700, 3686100; 485000, 3686000; 485000, 3686100; 485100, 3686000; 485200, 3686000; 485200, 3686300; 485100, 3686300; 485100, 3686600; 485000, 3686600; 485000, 3686500; 484800, 3686500; 484800, 3686600; 484600, 3686700; 484500, 3686700; 484500, 3686800; 484200, 3686800; 484200, 3686700; 484100, 3686700; 484100, 3686600; 484000, 3686600; 483900, 3686500; 483900, 3685900; 482200, 3685900; 482200, 3687200; 482300, 3687200; 482300, 3687300; 482500, 3687300; 482500, 3687700; 482600, 3687700; 482600, 3688000; 482900, 3688000; 482900, 3688100; 483000, 3688100; 483000, 3688200; 482900, 3688200; 482900, 3688400; 483100, 3688600; 483200, 3688600; 483200, 3688700; 483500, 3688700; 483500, 3688600; 483600, 3688600; 483600, 3687600; 483300, 3687600; 483300, 3687800; 483200, 3687800; 483100, 3687700; 483100, 3687000; 483000, 3687000; 483000, 3686900; 482800, 3686900; 482800, 3686800; 482600, 3686800; 482600, 3686700; 482500, 3686700; 482500, 3686500; 482400, 3686500; 482400, 3686400; 482800, 3686400; 482800, 3686300; 483100, 3686300; 483100, 3686400; 483200, 3686400; 483200, 3686500; 483300, 3686500; 483300, 3686600; 483400, 3686600; 483500, 3686700; 483500, 3686900; 483800, 3686900; 483800, 3687100; 483900, 3687100; 483900, 3687200; 484500, 3687200; 484500, 3687500; 484300, 3687600; 484200, 3687600; 484200, 3687700; 484100, 3687700; 484100, 3687900; 484300, 3687900; 484300, 3688200; 484200, 3688200; 484200, 3688300; 484300, 3688500; 484400, 3688500; 484400, 3688600; 484500, 3688600; 484500, 3688700; 484400, 3688700; 484400, 3689100; 484600, 3689200; 484400, 3689200; 484400, 3689400; 484300, 3689400; 484300, 3689600; 484100, 3689600; 484100, 3690000; 484200, 3690000; 484200, 3690100; 484400, 3690100; 484400, 3690200; 484500, 3690200; 484400, 3690200; 484400, 3690500; 484300, 3690500; 484300, 3690600; 484100, 3690600; 484200, 3690800; 484200, 3690900; 484300, 3690900; 484300, 3691000; 484500, 3691000; 484500, 3690900; 484600, 3690900; 484600, 3691000; 484800, 3691000; 484800, 3690800; 484900, 3690800; 484900, 3690600; 485000, 3690600; 485000, 3690500; 485100, 3690500; 485100, 3690900; 485000, 3690900; 485000, 3691100; 484900, 3691100; 484900, 3691300; 484500, 3691300; 484500, 3691400; 484400, 3691400; 484400, 3691500; 484300, 3691500; 484300, 3691600; 484200, 3691600; 484200, 3691700; 484100, 3691700; 484100, 3691900; 484000, 3691900; 484000, 3692000; 484100, 3692000; 484100, 3692100; 484300, 3692100; 484300, 3692200; 484400, 3692200; 484400, 3692600; 484500, 3692600; 484400, 3692900; 484400, 3693100; 484300, 3693100; 484300, 3693500; 484500, 3693500; 484500, 3693600; 484600, 3693600; 484500, 3693800; 484500, 3693900; 484400, 3693900; 484400, 3694000; 484300, 3694000; 484300, 3694300; 484500, 3694300; 484500, 3694400; 484300, 3694400; 484300, 3694700; 484100, 3694700; 484100, 3694800; 484000, 3694800; 484000, 3695000; 484100, 3695000; 484100, 3695200; 484200, 3695200; 484200, 3695400; 484400, 3695400; 484400, 3695100; 484800, 3695100; 484800, 3695400; 485000, 3695500; 484800, 3695500; 484800, 3695600; 484400, 3695600; 484400, 3695500; 484000, 3695500; 484000, 3695100; 483800, 3695100; 483800, 3695200; 483700, 3695200; 483700, 3695300; 483600, 3695300; 483600, 3695400; 483500, 3695400; 483500, 3695200; 483600, 3695200; 483600, 3694900; 483700, 3694900; 483700, 3694700; 483600, 3694700; 483600, 3694600; 483400, 3694600; 483400, 3694700; 483300, 3694700; 483300, 3694800; 483100, 3694800; 483100, 3694500; 482800, 3694500; 482800, 3694800; 482900, 3694800; 482900, 3695000; 482800, 3695000; 482800, 3695200; 482700, 3695200; 482700, 3695000; 482600, 3695000; 482600, 3694800; 482200, 3694800; 482200, 3694500; 481700, 3694500; 481700, 3694600; 481600, 3694600; 481600, 3694900; 481900, 3694900; 481900, 3695200; 482100, 3695200; 482100, 3695100; 482100, 3695600; 482000, 3695600; 482000, 3695900; 481800, 3695900; 481800, 3696100; 481000, 3696100; 481000, 3696000; 480500, 3696000; 480500, 3696100; 480100, 3696100; 480100, 3696200; 479900, 3696200; 479900, 3696300; 479800, 3696300; 479800, 3695700; 479000, 3695700; 479000, 3695800; 478500, 3695800; 478500, 3695900; 478400, 3695900; 478400, 3696000; 478300, 3696000; 478200, 3695900; 478200, 3695700; 477600, 3695700; 477600, 3696300; 477500, 3696300; 477500, 3696200; 477400, 3696200; 477400, 3696100; 477100, 3696100; 477100, 3695900; 477200, 3695900; 477100, 3695800; 477000, 3695800; 477000, 3695400; 477100, 3695400; 477200, 3695300; 477200, 3694700; 476900, 3694700; 476900, 3694600; 476600, 3694600; 476600, 3694400; 476200, 3694400; 476200, 3694900; 475700, 3694900; 475700, 3694600; 475800, 3696100; 475800, 3697200; 477400, 3697200; 477400, 3697600; 477700, 3697600; 477700, 3697700; 477800, 3697700; 477800, 3697400; 478000, 3697400; 478000, 3697500; 478100, 3697500; 478200, 3697600; 478200, 3697700; 478500, 3697700; 478500, 3697800; 478600, 3697800; 478600, 3697900; 478800, 3697900; 478800, 3698400; 478900, 3698400; 478900, 3698500; 479300, 3698500; 479300, 3698600; 479100, 3698600; 479100, 3698700; 479000, 3698700; to the San Diego/Riverside County line at UTM NAD27 x coordinate 479000; and returning to the point of beginning; excluding land bounded by 478400, 3697200; 478300, 3697200; 478300, 3697100; 478400, 3697100; 478400, 3697200; land bounded by 485100, 3690500; 485100, 3690200; 485200, 3690200; 485200, 3690500; 485100, 3690500; land bounded by 484600, 3689200; 484900, 3689200; 484900, 3689100; 485000, 3689100; 485000, 3689000; 485200, 3689000; 485200, 3689400; 484900, 3689400; 484900, 3689300; 484600, 3689300; 484600, 3689200; land bounded by 487300, 3683700; 487400, 3683700; 487400, 3683800; 487300, 3683800; 487300, 3683700; land bounded by 487300, 3683700; 487100, 3683700; 487100, 3684300; 487000, 3684300; 487000, 3684700; 487100, 3684700; 487100, 3684800; 486900, 3684800; 486900, 3685000; 486800, 3685000; 486800, 3685500; 486900, 3685500; 486900, 3685600; 487000, 3685600; 487000, 3686100; 487100, 3686100; 487100, 3686300; 487400, 3686300; 487400, 3686100; 487500, 3686100; 487500, 3686200; 487800, 3686200; 487800, 3686700; 487300, 3686700; 487300, 3686800; 487000, 3686800; 487000, 3687100; 486700, 3687100; 486700, 3687200; 486600, 3687200; 486600, 3688000; 486700, 3688000; 486700, 3688100; 486800, 3688100; 486800, 3688300; 486900, 3688300; 487000, 3688400; 487000, 3688600; 487100, 3688600; 487100, 3688800; 486900, 3688800; 486900, 3688700; 486800, 3688700; 486800, 3688600; 486700, 3688600; 486700, 3688500; 486300, 3688500; 486300, 3688600; 486200, 3688600; 486200, 3688400; 486200, 3688300; 486000, 3688300; 486000, 3688200; 485800, 3688200; 485800, 3688100; 485600, 3688100; 485600, 3688000; 485500, 3688000; 485500, 3687900; 485400, 3687900; 485400, 3687700; 485300, 3687700; 485300, 3687400; 485400, 3687400; 485400, 3687100; 485600, 3687100; 485600, 3686900; 485700, 3686900; 485700, 3686700; 485800, 3686700; 485800, 3686500; 485900, 3686500; 485900, 3686400; 486000, 3686400; 486000, 3686300; 486300, 3686300; 486300, 3686200; 486400, 3686200; 486400, 3685700; 486300, 3685700; 486300, 3685200; 486700, 3685200; 486700, 3684900; 486600, 3684900; 486600, 3684800; 486500, 3684800; 486500, 3684700; 486400, 3684700; 486400, 368400; 486900, 368400; 486900, 3683300; 487100, 3683300; 487100, 3683500; 487200, 3683500; 487200, 3683600; 487300, 3683600; 487300, 3683700; land bounded by 480000, 3682500; 480000, 3682400; 480100, 3682400; 480100, 3682500; 480000, 3682500; land bounded by 480500, 3681000; 480500, 3680900; 480600, 3680900; 480600, 3681000; 480500, 3681000; land bounded by 480900, 3680200; 480900, 3680100; 481000, 3680100; 481000, 3680200; 480900, 3680200; land bounded by 480900, 3680200; 480900, 3680400; 481000, 3680400; 481000, 3680500; 480800, 3680500; 480800, 3680600; 480500, 3680600; 480500, 3680300; 480600, 3680300; 480600, 3680200; 480900, 3680200; land bounded by 485600, 3679600; 485600, 3679700; 485500, 3679700; 485500, 3679600; 485600, 3679600; land bounded by 485800, 3679600; 486100, 3679600; 486100, 3679900; 485900, 3679900; 485900, 3679700; 485800, 3679700; 485800, 3679600; land bounded by 481800, 3678600; 481800, 3678500; 481900, 3678500; 481900, 3678600; 481800, 3678600; land bounded by 481800, 3678600; 481800, 3678700; 481700, 3678700; 481700, 3679000; 481600, 3679000; 481600, 3679100; 481200, 3679100; 481200, 3679000; 481500, 3679000; 481500, 3678700; 481600, 3678700; 481600, 3678600; 481800, 3678600; land bounded by 482100, 3678400; 482100, 3678500; 482000, 3678500; 482000, 3678400; 482100, 3678400; land bounded by 482200, 3678300; 482200, 3678200; 482300, 3678200; 482300, 3678100; 482400, 3678100; 482400, 3678300; 482200, 3678300; land bounded by 482500, 3677900; 482500, 3677600; 482600, 3677600; 482600, 3677500; 482700, 3677500; 482700, 3677400; 482900, 3677400; 482900, 3677500; 482800, 3677500; 482800, 3677600;

482700, 3677600; 482700, 3677800; 482600, 3677800; 482600, 3677900; 482500, 3677900; land bounded by 482500, 3677900; 482500, 3678000; 482400, 3678000; 482400, 3677900; 482500, 3677900; land bounded by 485800, 3679600; 485600, 3679600; 485600, 3679500; 485800, 3679500; 485800, 3679600; land bounded by 482200, 3678300; 482200, 3678400; 482100, 3678400; 482100, 3678300; 482200, 3678300; land bounded by 478400, 3697200; 479000, 3697200; 479000, 3697100; 479100, 3697100; 479100, 3697200; 479200, 3697200; 479200, 3697300; 479300, 3697300; 479300, 3697200; 479400, 3697200; 479400, 3697000; 479200, 3697000; 479200, 3696900; 479300, 3696900; 479300, 3696800; 479200, 3696800; 479200, 3696700; 479100, 3696700; 479300, 3696600; 479300, 3696600; 479500, 3696600; 479500, 3696800; 479600, 3696800; 479600, 3696900; 479800, 3696900; 479800, 3697000; 479900, 3697000; 479900, 3697300; 480000, 3697300; 480000, 3697400; 480100, 3697400; 480100, 3697500; 480500, 3697500; 480500, 3697700; 479500, 3697700; 479500, 3697900; 479600, 3697900; 479600, 3698300; 479700, 3698300; 479600, 3698400; 479600, 3698400; 479600, 3698500; 479400, 3698500; 479400, 3698100; 479000, 3698100; 479000, 3697900; 478900, 3697900; 478900, 3697700; 478700, 3697600; 478500, 3697600; 478500, 3697500; 478400, 3697500; 478400, 3697200; land bounded by 484400, 3698900; 484400, 3698700; 484300, 3698700; 484300, 3698600; 484100, 3698600; 484100, 3698500; 484000, 3698500; 484000, 3698400; 483900, 3698400; 483900, 3698300; 483800, 3698300; 483800, 3698200; 483700, 3698200; 483600, 3697900; 483600, 3697500; 483300, 3697500; 483300, 3697400; 483400, 3697400; 483400, 3697300; 483900, 3697300; 483900, 3697400; 484000, 3697500; 484200, 3697500; 484200, 3697600; 484400, 3697600; 484400, 3697700; 484500, 3697700; 484500, 3698100; 484400, 3698100; 484400, 3698200; 484500, 3698200; 484500, 3698300; 484600, 3698300; 484600, 3698800; 484500, 3698800; 484500, 3698900; 484400, 3698900; land bounded by 481200, 3697700; 481200, 3697600; 481300, 3697600; 481300, 3697500; 481200, 3697500; 481200, 3697400; 481000, 3697400; 481000, 3697100; 481100, 3697100; 481100, 3697200; 481200, 3697200; 481200, 3697100; 481300, 3697100; 481400, 3697000; 481400, 3697100; 481500, 3697100; 481500, 3696900; 481200, 3696900; 481200, 3696700; 481000, 3696700; 481000, 3696600; 481100, 3696600; 481100, 3696500; 481300, 3696500; 481300, 3696600; 481500, 3696600; 481500, 3696700; 481600, 3696700; 481600, 3697100; 481700, 3697100; 481700, 3697500; 482000, 3697500; 482000, 3697600; 481500, 3697600; 481500, 3697700; 481200, 3697700; land bounded by 484800, 3697000; 484800, 3696900; 484700, 3696900; 484700, 3696800; 484600, 3696800; 484600, 3696700; 484500, 3696700; 484500, 3696600; 484400, 3696600; 484300, 3696500; 484300, 3696400; 484500, 3696400; 484500, 3696500; 484700, 3696500; 484700, 3696600; 484900, 3696600; 484900, 3696700; 485000, 3696700; 485000, 3696800; 484900, 3696800; 484900, 3697000; 484800, 3697000; land bounded by 487700, 3691000; 487700, 3690900; 487600, 3690800; 487500, 3690800; 487500, 3689400; 487600,

3689400; 487600, 3689300; 487700, 3689300; 487700, 3689100; 487800, 3689100; 487800, 3688900; 487700, 3688900; 487700, 3688400; 487800, 3688400; 487800, 3688300; 487900, 3688300; 487900, 3688200; 488100, 3688200; 488100, 3688300; 488300, 3688300; 488300, 3688400; 488600, 3688400; 488600, 3688800; 488500, 3688800; 488500, 3688900; 488400, 3688900; 488400, 3689100; 488300, 3689100; 488300, 3689200; 488200, 3689200; 488200, 3689300; 488100, 3689300; 488100, 3689900; 488000, 3689900; 488000, 3690300; 488200, 3690300; 488200, 3690500; 487900, 3690500; 487900, 3690700; 487800, 3690700; 487700, 3691000; land bounded by 489700, 3691000; 489700, 3690800; 489900, 3690800; 489900, 3690900; 490000, 3690900; 490000, 3691000; 489700, 3691000; land bounded by 486300, 3690400; 486300, 3690200; 486200, 3690200; 486200, 3690100; 486100, 3690100; 486100, 3690000; 486000, 3690000; 486000, 3689800; 485900, 3689800; 485900, 3689600; 486000, 3689600; 486000, 3689400; 486100, 3689400; 486100, 3689000; 486200, 3689000; 486200, 3689400; 486300, 3689400; 486300, 3689500; 486400, 3689500; 486400, 3689600; 486500, 3689600; 486500, 3689500; 486700, 3689500; 486700, 3689400; 487000, 3689400; 487000, 3689600; 486800, 3689600; 486800, 3689800; 486700, 3689800; 486700, 3690100; 486600, 3690100; 486600, 3690200; 486500, 3690200; 486500, 3690300; 486400, 3690300; 486400, 3690400; 486300, 3690400; land bounded by 484800, 3688100; 484800, 3688000; 484500, 3688000; 484500, 3687800; 484900, 3687800; 484900, 3688100; 484800, 3688100; land bounded by 487300, 3684800; 487300, 3684700; 487400, 3684700; 487400, 3684600; 487700, 3684600; 487700, 3684700; 487800, 3684700; 487800, 3684800; 487300, 3684800; land bounded by 487500, 3684200; 487500, 3683900; 487700, 3683900; 487700, 3684000; 487800, 3684000; 487800, 3684100; 487700, 3684100; 487700, 3684200; 487500, 3684200; land bounded by 479300, 3684000; 479300, 3683900; 479500, 3683900; 479500, 3684000; 479300, 3684000; land bounded by 478900, 3683900; 478900, 3683200; 479100, 3683200; 479100, 3683400; 479000, 3683400; 479000, 3683700; 479100, 3683700; 479100, 3683800; 479000, 3683800; 479000, 3683900; 478900, 3683900; land bounded by 481000, 3679900; 481000, 3679600; 481300, 3679600; 481300, 3679900; 481000, 3679900; land bounded by 485200, 3677900; 485200, 3677800; 485300, 3677800; 485300, 3677700; 485500, 3677700; 485500, 3677800; 485400, 3677800; 485400, 3677900; 485200, 3677900; land bounded by 485600, 3677700; 485600, 3677600; 485900, 3677600; 485900, 3677700; 485600, 3677700; and land bounded by 486400, 3677700; 486400, 3677600; 486500, 3677600; 486500, 3677200; 486600, 3677200; 486600, 3676800; 486700, 3676800; 486700, 3676400; 486800, 3676400; 486800, 3676100; 486900, 3676100; 486900, 3675800; 487000, 3675800; 487000, 3675600; 487200, 3675600; 487200, 3675800; 487300, 3675800; 487300, 3676700; 487200, 3676700; 487200, 3677400; 487000, 3677400; 486800, 3677400; 486800, 3677300; 486700, 3677300; 486700, 3677400; 486700, 3677500; 486600, 3677500; 486600, 3677700; 486400, 3677700.

Land bounded by the following UTM NAD27 coordinates (E, N): 483900, 3681200; 484000, 3681200; 484000, 3681100; 484100,

3681100; 484100, 3681000; 484200, 3681000; 484200, 3680900; 484300, 3680900; 484300, 3679900; 483700, 3679900; 483700, 3680300; 483100, 3680300; 483100, 3681000; 483200, 3681000; 483200, 3681100; 483900, 3681100; 483900, 3681200.

Land bounded by the following UTM NAD27 coordinates (E, N): 490400, 3675200; 491500, 3675200; 491500, 3675100; 492100, 3675100; 492100, 3675000; 492000, 3675000; 492000, 3674500; 490100, 3674500; 490200, 3674600; 490200, 3674900; 490300, 3674900; 490300, 3675000; 490400, 3675000; 490400, 3675200.

Land bounded by the following UTM NAD27 coordinates (E, N): 510200, 3660000; 510400, 3660000; 510400, 3659000; 510300, 3659000; 510300, 3658900; 510600, 3658900; 510600, 3659000; 510900, 3659000; 510900, 3658900; 511100, 3658900; 511100, 3658800; 511400, 3658800; 511400, 3658700; 511500, 3658700; 511500, 3658600; 511600, 3658600; 511600, 3658500; 511700, 3658500; 511700, 3658000; 511100, 3658000; 511100, 3657500; 511000, 3657500; 511000, 3657400; 510200, 3657400; 510200, 3657100; 509700, 3657100; 509700, 3656900; 509800, 3656900; 509800, 3656800; 509200, 3656800; 509200, 3656700; 506800, 3656700; 506800, 3656800; 505300, 3656800; 505300, 3658300; 508500, 3658300; 508500, 3658400; 508800, 3658400; 508800, 3658700; 508500, 3659900; 510200, 3659900; 510200, 3660000.

Land bounded by the following UTM NAD27 coordinates (E, N): 511100, 3659900; 511700, 3659900; 511700, 3659400; 511300, 3659400; 511300, 3659500; 511200, 3659500; 511200, 3659700; 511100, 3659700; 511100, 3659900.

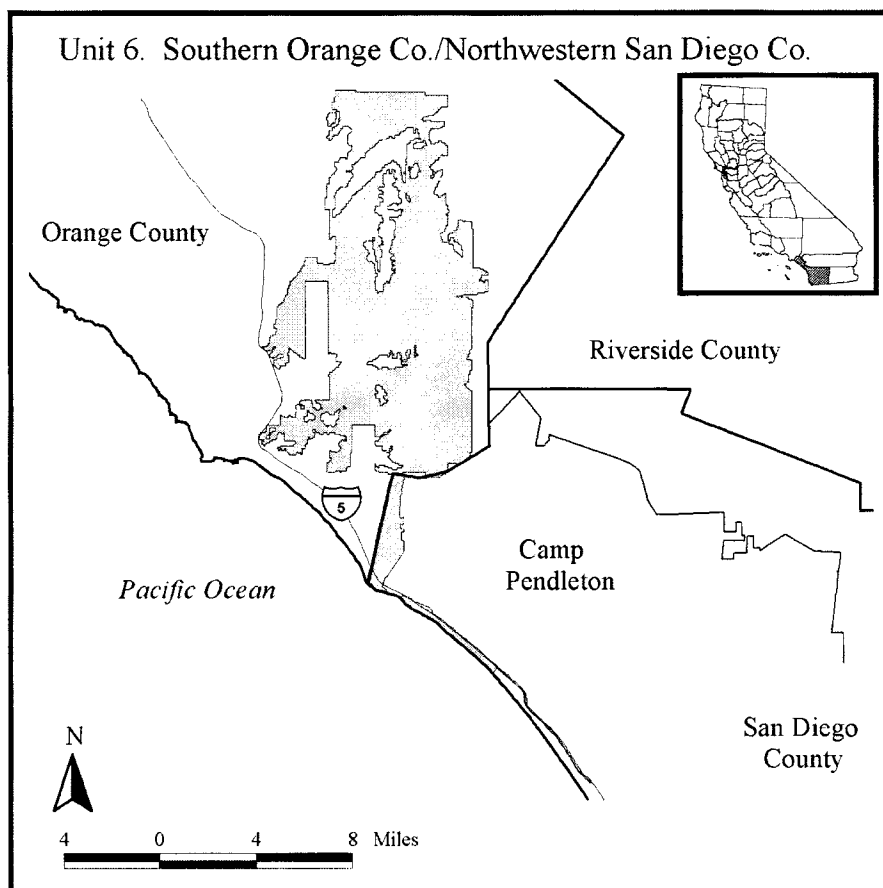
Land bounded by the following UTM NAD27 coordinates (E, N): 514900, 3655200; 515500, 3655200; 515500, 3655100; 515600, 3655100; 515600, 3655000; 515700, 3655000; 515700, 3654900; 515800, 3654900; 515800, 3654800; 516000, 3654800; 516000, 3654600; 516100, 3654600; 516100, 3654800; 516300, 3654800; 516300, 3654900; 516700, 3654900; 516700, 3655200; 519300, 3655200; 519300, 3655100; 521000, 3655100; 521000, 3655200; 521400, 3655200; 521400, 3652000; 523000, 3652000; 523000, 3651300; 522700, 3651300; 522700, 3651400; 522600, 3651400; 522600, 3651500; 521900, 3651500; 521900, 3651600; 521600, 3651600; 521600, 3651700; 521500, 3651700; 521500, 3651600; 520900, 3651600; 520900, 3651700; 520800, 3651700; 520800, 3651800; 520700, 3651800; 520700, 3651900; 520600, 3651900; 520600, 3652000; 520400, 3652000; 520400, 3652100; 520300, 3652100; 520200, 3652200; 520200, 3652300; 520100, 3652300; 520100, 3652400; 520000, 3652400; 520000, 3652600; 519900, 3652600; 519900, 3652700; 519800, 3652700; 519800, 3652900; 519900, 3652900; 519900, 3653100; 519800, 3653100; 519800, 3653000; 519600, 3653000; 519600, 3652900; 519400, 3652900; 519400, 3652800; 519300, 3652800; 519200, 3652700; 519200, 3652700; 519200, 3652300; 519100, 3652300; 519100, 3652200; 518900, 3652200; 518900, 3652300; 518800, 3652300; 518800, 3652700; 518900, 3652700; 518900, 3653000; 518800, 3653000; 518700, 3653000; 518700, 3653500; 518800, 3653500; 518800, 3654000; 518900, 3654000; 518900, 3654100; 519000, 3654100; 519000, 3654300; 518300, 3654300; 518300,

3654200; 517900, 3654200; 517900, 3654100;
517500, 3654100; 517500, 3654000; 517700,
3654000; 517700, 3653700; 517800, 3653700;
517800, 3653600; 516400, 3653600; 516400,
3653200; 516500, 3653200; 516500, 3652700;
516300, 3652700; 516300, 3652200; 516400,
3652200; 516400, 3652100; 516500, 3652100;
516500, 3651900; 516400, 3651900; 516400,
3652000; 515700, 3652000; 515700, 3652600;
515500, 3652600; 515500, 3652500; 515200,
3652500; 515200, 3652600; 515100, 3652600;
515100, 3652700; 515000, 3652700; 515000,
3651800; 514900, 3651800; 514900, 3651300;
515000, 3651300; 515000, 3650400; 513300,
3650400; 513300, 3651000; 513400, 3651000;
513400, 3651800; 513300, 3651800; 513300,

3653200; 513800, 3653200; 513800, 3653100;
514800, 3653100; 514800, 3653000; 514900,
3653000; 514900, 3653200; 515200, 3653200;
515200, 3653500; 515000, 3653500; 515000,
3653700; 515300, 3653700; 515300, 3654000;
515500, 3654000; 515500, 3654100; 515200,
3654100; 515200, 3654500; 515400, 3654500;
515400, 3654600; 515200, 3654600; 515200,
3654800; 515000, 3654800; 515000, 3654900;
514900, 3654900; 514900, 3655200.

Land bounded by the following UTM
NAD27 coordinates (E, N): 518200, 3652100;
519000, 3652100; 519000, 3652000; 519100,
3652000; 519100, 3651900; 518600, 3651900;
518600, 3652000; 518200, 3652000; 518200,
3652100.

Land bounded by the following UTM
NAD27 coordinates (E, N): 521300, 3651400;
521600, 3651400; 521600, 3651300; 521700,
3651300; 521700, 3651200; 521800, 3651200;
521800, 3651100; 522000, 3651100; 522000,
3651000; 522200, 3651000; 522200, 3651100;
522500, 3651100; 522500, 3651200; 522600,
3651200; 522600, 3651300; 522700, 3651300;
522700, 3650900; 522800, 3650900; 522800,
3650800; 523000, 3650800; 523000, 3650400;
521400, 3650400; 521400, 3648800; 519900,
3648800; 519900, 3649600; 519800, 3649600;
519800, 3651200; 520600, 3651200; 520600,
3651300; 520700, 3651300; 520700, 3651200;
521200, 3651200; 521200, 3651300; 521300,
3651300; 521300, 3651400.



Map Unit 6: Southern Orange County/
Northwestern San Diego County, California.
From USGS 1:100,000 quadrangle maps
Oceanside (1984) and Santa Ana (1985),
California, land bounded by the following
UTM NAD27 coordinates (E, N): 445500,
3704000; 445100, 3704000; 445100, 3704800;
443600, 3704800; 443600, 3702900; 443500,
3702900; 443500, 3702000; 443300, 3702000;
443300, 3701900; 443200, 3701900; 443200,
3701700; 442900, 3701700; 442900, 3701600;
442800, 3701600; 442800, 3701700; 442500,
3701700; 442500, 3701600; 441900, 3701600;
441900, 3702300; 442100, 3702300; 442100,
3702400; 442200, 3702400; 442200, 3702600;
442100, 3702600; 442100, 3703100; 442200,
3703100; 442200, 3703000; 442500, 3703000;
442500, 3702900; 442600, 3702900; 442600,
3703000; 442700, 3703000; 442700, 3703100;

442800, 3703100; 442800, 3703200; 442900,
3703200; 442900, 3703300; 442800, 3703300;
442800, 3703400; 442700, 3703400; 442700,
3703600; 442800, 3703600; 442800, 3703700;
442900, 3703700; 442900, 3703800; 443000,
3703800; 443000, 3703700; 443200, 3703700;
443200, 3703800; 443100, 3703800; 443100,
3703900; 443200, 3703900; 443200, 3704000;
443100, 3704000; 443100, 3704100; 442800,
3704100; 442800, 3704200; 442400, 3704200;
442400, 3704300; 442100, 3704300; 442100,
3704200; 441900, 3704200; 441900, 3704300;
441700, 3704300; 441700, 3704200; 441400,
3704200; 441400, 3704300; 441200, 3704300;
441200, 3704400; 441100, 3704400; 441100,
3704500; 441000, 3704500; 441000, 3704300;
441100, 3704300; 441100, 3704000; 441000,
3704000; 441000, 3703900; 440800, 3703900;
440800, 3704000; 440700, 3704000; 440700,

3703800; 440600, 3703800; 440600, 3703500;
440500, 3703500; 440500, 3703200; 440300,
3703200; 440300, 3702800; 440200, 3702800;
440200, 3702900; 440000, 3702900; 440000,
3703000; 439900, 3703000; 439900, 3702800;
439400, 3702800; 439400, 3702900; 439300,
3702900; 439300, 3703000; 439200, 3703000;
439200, 3703200; 439100, 3703200; 439100,
3703100; 438900, 3703100; 438900, 3703200;
438800, 3703200; 438800, 3703100; 438700,
3703100; 438700, 3703200; 438600, 3703200;
438600, 3703300; 438800, 3703300; 438800,
3703400; 439700, 3703400; 439700, 3703500;
439800, 3703500; 439800, 3703700; 439100,
3703700; 439100, 3704300; 439000, 3704300;
439000, 3704200; 438900, 3704200; 438900,
3704300; 438700, 3704300; 438700, 3704200;
438600, 3704200; 438600, 3703900; 438500,
3703900; 438500, 3703800; 438300, 3703800;

[illegible]

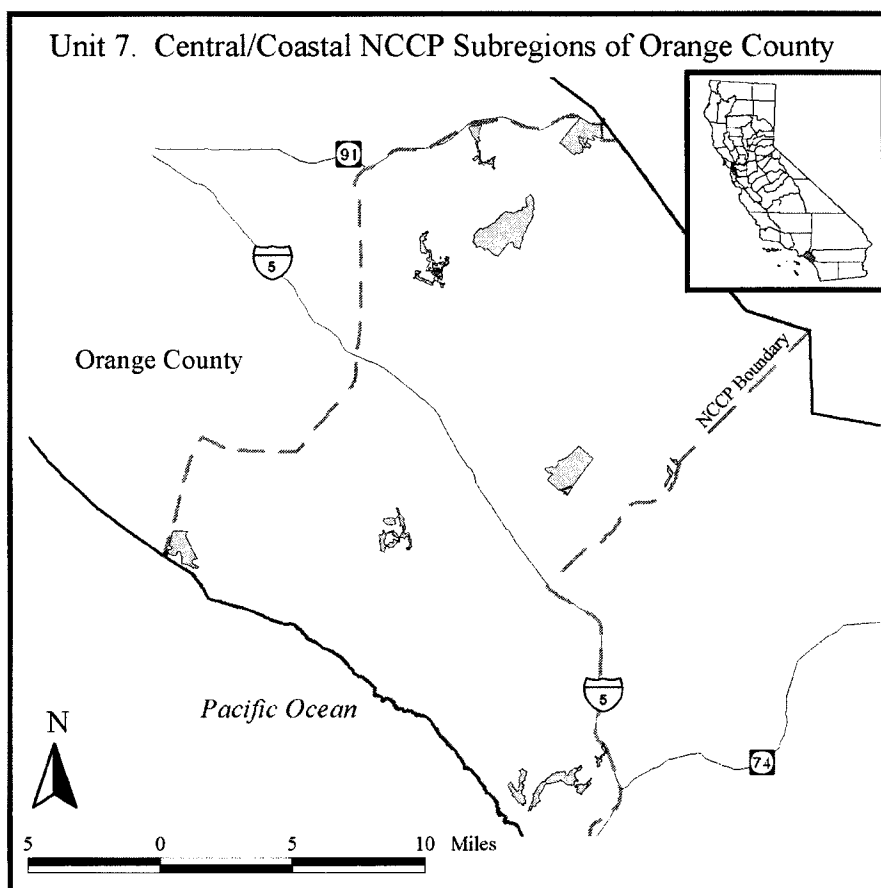
451300, 3707600; 451100, 3707600; 451100, 3707500; 451200, 3707500; 451200, 3707400; 451300, 3707400; 451300, 3707300; 451400, 3707300; 451400, 3707200; 451500, 3707200; 451500, 3707100; 451600, 3707100; 451600, 3702900; 451500, 3702900; 451500, 3702500; 451300, 3702500; 451300, 3702400; 451100, 3702400; 451100, 3702300; 451000, 3702200; 450000, 3702200; 450000, 3701600; 449900, 3701600; 449900, 3701500; 449700, 3701500; 449700, 3701400; 449500, 3701400; 449500, 3701300; 448600, 3701300; 448600, 3701200; 448500, 3701200; 448500, 3701600; 447000, 3701600; 447000, 3701400; 446800, 3701400; 446800, 3701500; 446000, 3701500; 446000, 3701600; 445400, 3701600; 445400, 3701700; 445200, 3701700; 445200, 3701800; 445100, 3701800; 445100, 3702200; 445200, 3702200; 445200, 3702000; 445300, 3702000; 445300, 3701900; 445400, 3701900; 445400, 3702100; 445800, 3702100; 445800, 3702000; 446000, 3702000; 446000, 3701900; 446300, 3701900; 446300, 3701800; 446600, 3701800; 446600, 3701900; 446900, 3702000; 447000, 3702000; 447000, 3702100; 446700, 3702100; 446700, 3702200; 446500, 3702200; 446500, 3702300; 446300, 3702300; 446300, 3702400; 446200, 3702400; 446200, 3702500; 446100, 3702500; 446100, 3702600; 446000, 3702600; 446000, 3702700; 446100, 3702700; 446100, 3702900; 445900, 3702900; 445800, 3703100; 445800, 3703000; 445700, 3703000; 445700, 3703100; 445600, 3703100; 445600, 3703400; 445200, 3703400; 445200, 3703500; 445100, 3703500; 445100, 3703700; 445400, 3703700; 445400, 3703900; 445500, 3703900; 445500, 3704000; excluding land bounded by 448100, 3724100; 448100, 3724400; 448000, 3724400; 448000, 3724700; 447900, 3724700; 447900, 3724400; 447700, 3724400; 447700, 3724800; 447300, 3724800; 447300, 3724700; 447200, 3724700; 447200, 3724600; 447100, 3724600; 447100, 3724500; 446900, 3724500; 446900, 3724400; 446800, 3724400; 446800, 3724300; 446500, 3724300; 446500, 3724100; 446300, 3724100; 446300, 3724200; 446100, 3724200; 446100, 3724100; 445900, 3724100; 445900, 3724000; 445600, 3724000; 445600, 3723900; 445400, 3723900; 445400, 3723800; 445300, 3723700; 445200, 3723700; 445200, 3723600; 445100, 3723600; 445100, 3723500; 445000, 3723500; 445000, 3723400; 444800, 3723400; 444800, 3723300; 444700, 3723300; 444700, 3723200; 444600, 3723200; 444600, 3723100; 444500, 3723100; 444500, 3722800; 444200, 3722800; 444200, 3722700; 444100, 3722700; 444100, 3722600; 444000, 3722600; 444000, 3722500; 443900, 3722500; 443900, 3722400; 443800, 3722400; 443800, 3722300; 443600, 3722300; 443600, 3722200; 443700, 3722200; 443700, 3722000; 443600, 3722000; 443600, 3721900; 443200, 3721900; 443200, 3721800; 443600, 3721800; 443600, 3721700; 443700, 3721700; 443700, 3721500; 443600, 3721500; 443600, 3721400; 443500, 3721400; 443500, 3721200; 443400, 3721200; 443400, 3721000; 443300, 3721000; 443300, 3720800; 442800, 3720800; 442800, 3720700; 442700, 3720700; 442700, 3720600; 442600, 3720600; 442600, 3720400; 442500, 3720400; 442500, 3720200; 442400, 3720200; 442400, 3720100; 442500, 3720100; 442500, 3719400; 442400, 3719400; 442400, 3719300; 442300, 3719300; 442300, 3718800; 442500, 3718800; 442500, 3718900; 442600, 3718900; 442600, 3718800; 442600, 3718900; 442600, 3719000; 442600, 3719100; 442600, 3719200; 442600, 3719300; 442600, 3719400; 442600, 3719500; 442600, 3719600; 442600, 3719700; 442600, 3719800; 442600, 3719900; 442600, 3720000; 442600, 3720100; 442600, 3720200; 442600, 3720300; 442600, 3720400; 442600, 3720500; 442600, 3720600; 442600, 3720700; 442600, 3720800; 442600, 3720900; 442600, 3721000; 442600, 3721100; 442600, 3721200; 442600, 3721300; 442600, 3721400; 442600, 3721500; 442600, 3721600; 442600, 3721700; 442600, 3721800; 442600, 3721900; 442600, 3722000; 442600, 3722100; 442600, 3722200; 442600, 3722300; 442600, 3722400; 442600, 3722500; 442600, 3722600; 442600, 3722700; 442600, 3722800; 442600, 3722900; 442600, 3723000; 442600, 3723100; 442600, 3723200; 442600, 3723300; 442600, 3723400; 442600, 3723500; 442600, 3723600; 442600, 3723700; 442600, 3723800; 442600, 3723900; 442600, 3724000; 442600, 3724100; 442600, 372420

3704100; 445800, 3704200; 446000, 3704200; 446000, 3704300; 445700, 3704300; 445700, 3704200; 445600, 3704200; 445600, 3704100; land bounded by 445600, 3704100; 445500, 3704100; 445500, 3704000; 445600, 3704000; 445600, 3704100; land bounded by 448400, 3723900; 448400, 3723800; 447900, 3723800; 447900, 3723700; 447700, 3723700; 447700, 3723400; 448300, 3723400; 448300, 3723500; 448400, 3723500; 448400, 3723600; 448600, 3723600; 448600, 3723700; 448500, 3723700; 448500, 3723900; 448400, 3723900; land bounded by 447800, 3722400; 447800, 3722300; 447700, 3722300; 447700, 3722100; 447600, 3722100; 447600, 3722000; 447500, 3722000; 447500, 3722200; 447400, 3722200; 447400, 3721900; 447500, 3721900; 447500, 3721400; 447900, 3721400; 447900, 3721500; 448000, 3721500; 448000, 3721800; 448200, 3721800; 448200, 3721900; 448100, 3721900; 448100, 3722200; 448000, 3722200; 448000, 3722400; 447800, 3722400; land bounded by 447200, 3720400; 447200, 3720100; 447300, 3720100; 447300, 3719900; 447400, 3719900; 447400, 3719800; 447500, 3719800; 447500, 3720000; 447400, 3720000; 447400, 3720200; 447300, 3720200; 447300, 3720400; 447200, 3720400; land bounded by 447800, 3710200; 447800, 3709400; 447900, 3709400; 447900, 3709500; 448000, 3709500; 448000, 3709600; 447900, 3709600; 447900, 3710200; 447800, 3710200; land bounded by 447300, 3709900; 447300, 3709700; 447200, 3709700; 447200, 3709500; 447300, 3709500; 447300, 3709300; 447400, 3709300; 447400, 3709600; 447500, 3709600; 447500, 3709900; 447300, 3709900; land bounded by 446200, 3709800; 446200, 3709700; 446100, 3709700; 446100, 3709600; 446200, 3709600; 446200, 3709500; 446100, 3709500; 446000, 3709400; 446000, 3709500; 445400, 3709500; 445400,

3709400; 445300, 3709400; 445300, 3709300; 445200, 3709300; 445200, 3709200; 445000, 3709200; 445000, 3709100; 444700, 3709100; 444700, 3709000; 444600, 3709000; 444600, 3708900; 445000, 3708900; 445000, 3708800; 445200, 3708800; 445200, 3708700; 445300, 3708700; 445300, 3708600; 445600, 3708600; 445600, 3708700; 446000, 3708700; 446000, 3708600; 446500, 3708600; 446500, 3708700; 447000, 3708700; 447000, 3708800; 447300, 3708800; 447300, 3708900; 446900, 3708900; 446900, 3709200; 446800, 3709200; 446800, 3709300; 446900, 3709300; 446900, 3709500; 446800, 3709500; 446800, 3709700; 446600, 3709700; 446600, 3709300; 446300, 3709300; 446300, 3709500; 446400, 3709500; 446400, 3709600; 446300, 3709600; 446300, 3709800; 446200, 3709800; land bounded by 447000, 3709200; 447000, 3709100; 447300, 3709100; 447300, 3709200; 447000, 3709200; land bounded by 445200, 3707500; 445200, 3707300; 445100, 3707300; 445100, 3707200; 445200, 3707200; 445200, 3707100; 445300, 3707100; 445300, 3706900; 445100, 3706900; 445100, 3706800; 445200, 3706800; 445200, 3706600; 445500, 3706600; 445500, 3706500; 445400, 3706500; 445400, 3706400; 445500, 3706400; 445500, 3706100; 445600, 3706100; 445600, 3706200; 445700, 3706200; 445700, 3706300; 445900, 3706300; 445900, 3706400; 446000, 3706400; 446000, 3706500; 445800, 3706500; 445800, 3706600; 445700, 3706600; 445700, 3706800; 445900, 3706800; 445900, 3707000; 445800, 3707000; 445800, 3707200; 445600, 3707200; 445600, 3707400; 445500, 3707400; 445500, 3707500; 445200, 3707500; land bounded by 443000, 3706100; 443000, 3705900; 443200, 3705900; 443200, 3706000; 443100, 3706000; 443100, 3706100; 443000, 3706100; land bounded by 442700, 3705900; 442700, 3705800; 442600, 3705800; 442600,

3705700; 442400, 3705700; 442400, 3705500; 442100, 3705500; 442100, 3705600; 442000, 3705600; 442000, 3705700; 441800, 3705700; 441800, 3705600; 441600, 3705600; 441600, 3705500; 441500, 3705500; 441500, 3705100; 441700, 3705100; 441700, 3704900; 441800, 3704900; 441800, 3704800; 441900, 3704800; 441900, 3704700; 442000, 3704700; 442000, 3704800; 442200, 3704800; 442200, 3704700; 442400, 3704700; 442400, 3704800; 442600, 3704800; 442600, 3704900; 442500, 3704900; 442500, 3705100; 442600, 3705100; 442600, 3705200; 442700, 3705200; 442700, 3705700; 442800, 3705700; 442800, 3705900; 442700, 3705900; land bounded by 440600, 3705800; 440600, 3705400; 440400, 3705400; 440400, 3705000; 440600, 3705000; 440600, 3705100; 440700, 3705100; 440700, 3705200; 440900, 3705200; 440900, 3705100; 441000, 3705100; 441000, 3705200; 441100, 3705200; 441100, 3705500; 441000, 3705500; 441000, 3705600; 440800, 3705600; 440800, 3705700; 440700, 3705700; 440700, 3705800; 440600, 3705800; and land bounded by 446200, 3703400; 446200, 3703200; 446100, 3703200; 446100, 3703000; 446200, 3703000; 446200, 3703100; 446300, 3703100; 446300, 3703400; 446200, 3703400.

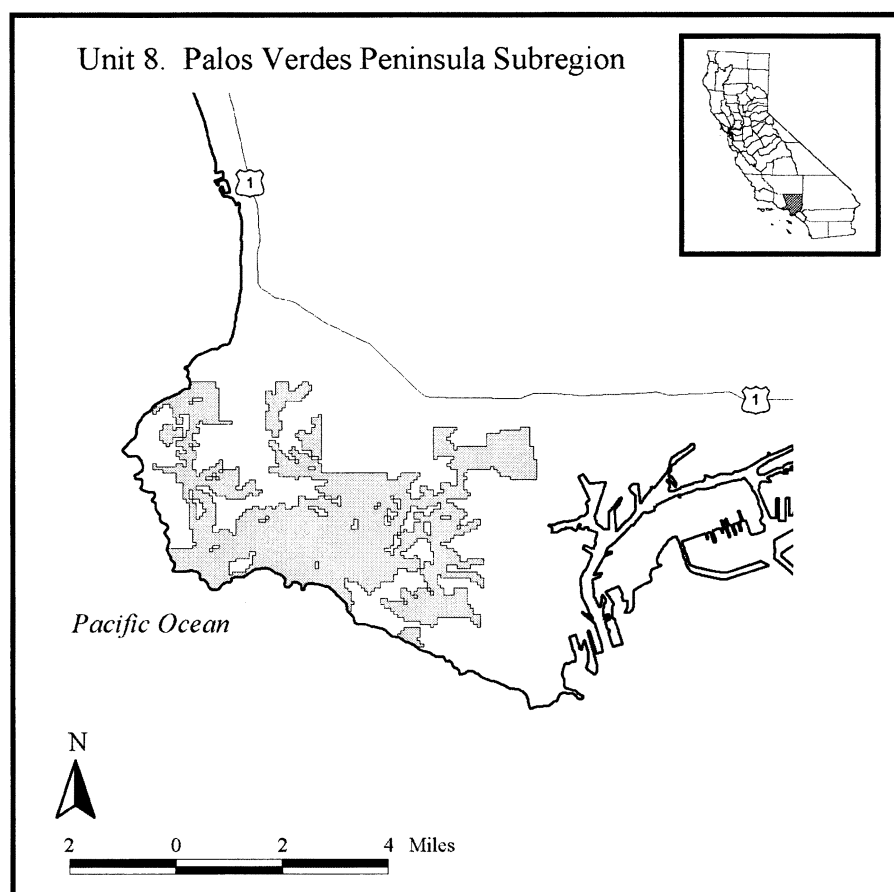
Land bounded by the following UTM NAD27 coordinates (E, N): 442100, 3725800; 442600, 3725800; 442600, 3725400; 442500, 3725400; 442500, 3725100; 442300, 3725100; 442300, 3725000; 442200, 3725000; 442200, 3724900; 442000, 3724900; 442000, 3725300; 441900, 3725300; 441900, 3725500; 442000, 3725500; 442000, 3725700; 442100, 3725700; 442100, 3725800; and Marine Corps Base Camp Pendleton Designated Areas: San Onofre State Park Lease Area and San Onofre State Beach.



Map Unit 7: Central/Coastal Natural Communities Conservation Plan (NCCP) Subregions of Orange County, Orange County, California. From USGS 1:100,000

quadrangle maps Santa Ana (1985) and Oceanside (1984), California, land defined by the boundary of the designated reserve within Marine Corps Air Station El Toro and

selected Existing Land Use areas within the NCCP for the Central/Coastal Subregions.



Map Unit 8: Palos Verdes Peninsula Subregion, Los Angeles County, California.
 From USGS 1:100,000 quadrangle map Long Beach, California (1981), land within the Los Palos Verdes Land Grant bounded by the following UTM NAD27 coordinates (E, N):
 377000, 3733600; 377000, 3733800; 376900, 3733800; 376900, 3734000; 376800, 3734000; 376800, 3734200; 376700, 3734200; 376700, 3734100; 376400, 3734100; 376400, 3734200; 376100, 3734200; 376100, 3734000; 376000, 3734000; 376000, 3733800; 375600, 3733800; 375600, 3733600; 375400, 3733600; 375400, 3733500; 375300, 3733500; 375300, 3733400; 375200, 3733400; 375200, 3733500; 375100, 3733500; 375100, 3733600; 375000, 3733600; 375000, 3733700; 374900, 3733700; 374900, 3733800; 374600, 3733800; 374600, 3733900; 374500, 3733900; 374500, 3733600; 374600, 3733600; 374600, 3733500; 374700, 3733500; 374700, 3733200; 374800, 3733200; 374800, 3733100; 374700, 3733100; 374700, 3732900; 374500, 3732900; 374500, 3733100; 374400, 3733100; 374400, 3733200; 374300, 3733200; 374300, 3733300; 374200, 3733300; 374200, 3733400; 374100, 3733400; 374100, 3733500; 374000, 3733500; 374000, 3733600; 373700, 3733600; 373700, 3733700; 373400, 3733700; 373400, 3733600; 373300, 3733600; 373300, 3733500; 373100, 3733500; 373100, 3733700; 372900, 3733700; 372900, 3733600; 372600, 3733600; 372600, 3733900; 372500, 3733900; 372500, 3734000; 372300, 3734000; 372300, 3734100; 372100, 3734100; 372100, 3734200; 372000, 3734200; 372000, 3734100; 371700, 3734100; 371700, 3734000; 371600, 3734000; 371600, 3733900; 371100, 3733900; 371100,

3733700; 370800, 3733700; 370800, 3733600; 370700, 3733600; 370700, 3733500; 370400, 3733500; 370400, 3733600; 370300, 3733600; 370300, 3733800; 370100, 3733800; 370100, 3734000; 369900, 3734000; 369900, 3734100; 369300, 3734100; 369300, 3734400; 369200, 3734400; 369200, 3734600; 369100, 3734600; 369100, 3734800; 369900, 3734800; 369900, 3734900; 370000, 3734900; 370000, 3735000; 369900, 3735000; 369900, 3735400; 369800, 3735400; 369800, 3736200; 369700, 3736200; 369700, 3736300; 369600, 3736300; 369600, 3736800; 369400, 3736800; 369400, 3737100; 369000, 3737100; 369000, 3737200; 368700, 3737200; 368700, 3737400; 368800, 3737400; 368800, 3737300; 368800, 3737400; 369600, 3737400; 369600, 3737300; 369700, 3737300; 369700, 3737500; 369500, 3737500; 369500, 3737600; 369400, 3737600; 369400, 3737800; 369500, 3737800; 369700, 3737800; 369700, 3737800; 369600, 3737800; 369600, 3737900; 369400, 3737900; 369400, 3738100; 369600, 3738100; 369600, 3738200; 369700, 3738200; 369800, 3738400; 369800, 3738400; 369800, 3738900; 369500, 3738900; 369500, 3738800; 369600, 3738800; 369600, 3738800; 369400, 3738800; 369300, 3738800; 369300, 3739100; 369200, 3739100; 369200, 3739200; 369000, 3739200; 369000, 3739100; 368900, 3739100; 368900, 3739000; 368800, 3739000; 368800, 3738900; 368700, 3738900; 368700, 3738900; 368800, 3739300; 368900, 3739300; 368900, 3739400; 369100, 3739400; 369100, 3739500; 369300, 3739500; 369300, 3739600; 369500, 3739600; 369500, 3739700; 369700, 3739700; 369700, 3739800;

369800, 3739800; 369800, 3739900; 370600, 3739900; 370600, 3739700; 370700, 3739700; 370700, 3738700; 371100, 3738700; 371100, 3738600; 370200, 3738600; 370200, 3738700; 370100, 3738700; 370100, 3738600; 370000, 3738600; 370000, 3738500; 370100, 3738500; 370100, 3738300; 369900, 3738300; 369900, 3738100; 370000, 3738100; 370000, 3738000; 370100, 3738000; 370100, 3737900; 369900, 3737900; 369900, 3737800; 370000, 3737800; 370000, 3737500; 369900, 3737500; 369900, 3737200; 370000, 3737200; 370000, 3737000; 370100, 3737000; 370100, 3737100; 370200, 3737100; 370200, 3737200; 370400, 3737200; 370400, 3737300; 370600, 3737300; 370600, 3737400; 370700, 3737400; 370700, 3737500; 370800, 3737500; 370800, 3737200; 371200, 3737200; 371200, 3737300; 371300, 3737300; 371300, 3736700; 371200, 3736700; 371200, 3736600; 371400, 3736600; 371400, 3736700; 371500, 3736700; 371500, 3736800; 371600, 3736800; 371600, 3736900; 371800, 3736900; 371800, 3736600; 372000, 3736600; 372000, 3736500; 371900, 3736500; 371900, 3736400; 371700, 3736400; 371700, 3736500; 371600, 3736500; 371600, 3736400; 371500, 3736400; 371500, 3736300; 370900, 3736300; 370900, 3736400; 370600, 3736400; 370600, 3736500; 370500, 3736500; 370500, 3736600; 370400, 3736600; 370400, 3736700; 370000, 3736700; 370000, 3736600; 370200, 3736600; 370200, 3736500; 370400, 3736500; 370400, 3736400; 370500, 3736400; 370500, 3736200; 370600, 3736200; 370600, 3735500; 370500, 3735500; 370500, 3735300; 370700, 3735300; 370700, 3735400; 371000, 3735400; 371000, 3735300; 371100, 3735300; 371100, 3735200; 371200,

3735200; 371200, 3735700; 371300, 3735700;
371300, 3735800; 371400, 3735800; 371400,
3735900; 371500, 3735900; 371500, 3736000;
371700, 3736000; 371700, 3736100; 371900,
3736100; 371900, 3736000; 372100, 3736000;
372100, 3736100; 372300, 3736100; 372300,
3736000; 372400, 3736000; 372400, 3736100;
372500, 3736100; 372500, 3736200; 372700,
3736200; 372700, 3736000; 372900, 3736000;
372900, 3736100; 373100, 3736100; 373100,
3736400; 373300, 3736400; 373300, 3736300;
373700, 3736300; 373700, 3736400; 373900,
3736400; 373900, 3736500; 373700, 3736500;
373700, 3736600; 373600, 3736600; 373600,
3736700; 373900, 3736700; 373900, 3736800;
374000, 3736800; 374000, 3736900; 373500,
3736900; 373500, 3737000; 373100, 3737000;
373100, 3736900; 373000, 3736900; 373000,
3737000; 372500, 3737000; 372500, 3737100;
372200, 3737100; 372200, 3737300; 372500,
3737300; 372500, 3737400; 372400, 3737400;
372400, 3737800; 372300, 3737800; 372300,
3737900; 372200, 3737900; 372200, 3738100;
372400, 3738100; 372400, 3738000; 372500,
3738000; 372500, 3737800; 372600, 3737800;
372600, 3737700; 372700, 3737700; 372700,
3737600; 372800, 3737600; 372800, 3737500;
373000, 3737500; 373000, 3737600; 372900,
3737600; 372900, 3737700; 372800, 3737700;
372800, 3737800; 372900, 3737800; 372900,
3737900; 373000, 3737900; 373000, 3737800;
373100, 3737800; 373100, 3737700; 373400,
3737700; 373400, 3737600; 373500, 3737600;
373500, 3737500; 373700, 3737500; 373700,
3737400; 373800, 3737400; 373800, 3737100;
375800, 3737100; 375800, 3736900; 376100,
3736900; 376100, 3737000; 376200, 3737000;
376200, 3737100; 376800, 3737100; 376800,
3737000; 376700, 3737000; 376700, 3736900;
376600, 3736900; 376600, 3736800; 376500,
3736800; 376500, 3736600; 376400, 3736600;
376400, 3736500; 376500, 3736500; 376500,
3736300; 376800, 3736300; 376800, 3736400;
376900, 3736400; 376900, 3736500; 376800,
3736500; 376800, 3736700; 377000, 3736700;
377000, 3736600; 377200, 3736600; 377200,
3736400; 377300, 3736400; 377300, 3736500;
377500, 3736500; 377500, 3736600; 377400,
3736600; 377400, 3736800; 377700, 3736800;
377700, 3736700; 377900, 3736700; 377900,
3737200; 377700, 3737200; 377700, 3737300;
377600, 3737300; 377600, 3737400; 377700,
3737400; 377700, 3737500; 377800, 3737500;
377800, 3737600; 377300, 3737600; 377300,
3737500; 377200, 3737500; 377200, 3738500;
377900, 3738500; 377900, 3738400; 377800,
3738400; 377800, 3738300; 377700, 3738300;
377700, 3738200; 377600, 3738200; 377600,
3738100; 377700, 3738100; 377700, 3738000;
377800, 3738000; 377800, 3737800; 377900,
3737800; 377900, 3737900; 378800, 3737900;
378800, 3738300; 379200, 3738300; 379200,
3738400; 379800, 3738400; 379800, 3738500;
380100, 3738500; 380100, 3737900; 380200,
3737900; 380200, 3737500; 380300, 3737500;
380300, 3736900; 379500, 3736900; 379500,
3737000; 379200, 3737000; 379200, 3737100;
379100, 3737100; 379100, 3737200; 379000,
3737200; 379000, 3737300; 378900, 3737300;
378900, 3737200; 378200, 3737200; 378200,
3737100; 378100, 3737100; 378100, 3737000;
378200, 3737000; 378200, 3736900; 378100,
3736900; 378100, 3736600; 378200, 3736600;
378200, 3736500; 378300, 3736500; 378300,
3736400; 378200, 3736400; 378200, 3736300;
377600, 3736300; 377600, 3736200; 377800,
3736200; 377600, 3736100; 377600, 3736000;
377800, 3736000; 378100, 3736000; 378100,
3735900; 378200, 3735900; 378200, 3735800;
378100, 3735800; 378100, 3735700; 378000,
3735700; 378000, 3735500; 378200, 3735500;
378200, 3735600; 378400, 3735600; 378400,
3735700; 378600, 3735700; 378600, 3735500;
378500, 3735500; 378500, 3735400; 378300,
3735400; 378300, 3735300; 378100, 3735300;
378100, 3735200; 377800, 3735200; 377800,
3735100; 377700, 3735100; 377700, 3735000;
377400, 3735000; 377400, 3734900; 377600,
3734900; 377600, 3734800; 377800, 3734800;
377800, 3734700; 377900, 3734700; 377900,
3734600; 378000, 3734600; 378000, 3734400;
378200, 3734400; 378200, 3734500; 378700,
3734500; 378700, 3734300; 378300, 3734300;
378300, 3734200; 377900, 3734200; 377900,
37343

3736400; 373900, 3736300; 374100, 3736300; 374100, 3736400; 373900, 3736400; land bounded by 377000, 3733600; 377000, 3733500; 377100, 3733500; 377100, 3733600; 377000, 3733600; land bounded by 369900, 3739300; 370200, 3739300; 370200, 3739400; 369900, 3739400; 369900, 3739300; land bounded by 373400, 3737300; 373400, 3737200; 373600, 3737200; 373600, 3737300; 373400, 3737300; land bounded by 373400, 3736100; 373400, 3736000; 373600, 3736000; 373600, 3735900; 373700, 3735900; 373700, 3735800; 374000, 3735800; 374000, 3735900; 373900, 3735900; 373900, 3736000; 373700, 3736000; 373700, 3736100; 373400, 3736100; land bounded by 377400, 3735800; 377400, 3735700; 377700, 3735700; 377700, 3735800; 377400, 3735800; land bounded by 374800, 3735700; 374800, 3735500; 374700, 3735500; 374700, 3735400; 374900, 3735400; 374900, 3735700; 374800, 3735700; land bounded by 376900, 3735600; 376900, 3735300; 377000, 3735300; 377000, 3735200; 377100, 3735200; 377100, 3735600; 376900, 3735600; land bounded by 371600, 3734700; 371600, 3734500; 371200, 3734500; 371200, 3734400; 371000, 3734400; 371000, 3734000; 371100, 3734000; 371100, 3734100; 371500, 3734100;

371500, 3734200; 371600, 3734200; 371600, 3734300; 371700, 3734300; 371700, 3734600; 371800, 3734600; 371800, 3734700; 371600, 3734700; and land bounded by 373600, 3734400; 373600, 3734200; 373700, 3734200; 373700, 3734400; 373600, 3734400.

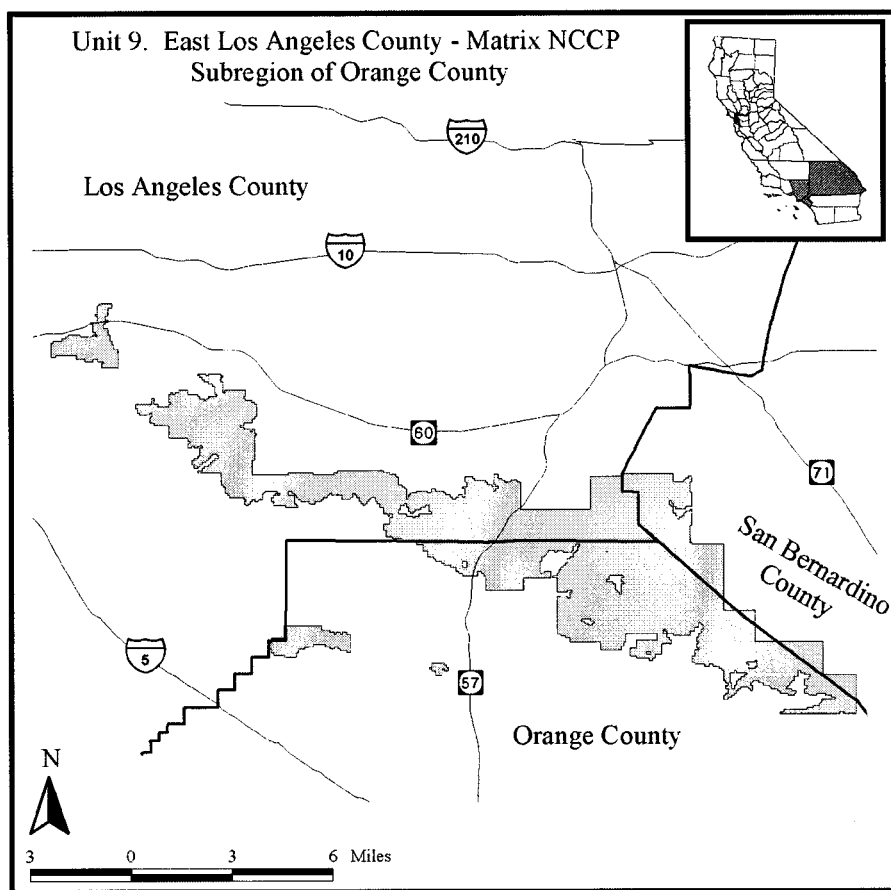
Land bounded by the following UTM NAD27 coordinates (E, N): 372400, 3739900; 372800, 3739900; 372800, 3739600; 373000, 3739600; 373000, 3739700; 373100, 3739700; 373100, 3739800; 373200, 3739800; 373200, 3739900; 373400, 3739900; 373400, 3739800; 373500, 3739800; 373500, 3739600; 373400, 3739600; 373400, 3739500; 373300, 3739500; 373300, 3739400; 373200, 3739400; 373200, 3739300; 372700, 3739300; 372700, 3739100; 372600, 3739100; 372600, 3739000; 372500, 3739000; 372500, 3738700; 372600, 3738700; 372600, 3738400; 372500, 3738400; 372300, 3738200; 372300, 3738400; 372100, 3738400; 372100, 3739000; 372200, 3739000; 372200, 3739200; 372100, 3739200; 372100, 3739600; 372300, 3739600; 372400, 3739500; 372400, 3739900.

Land bounded by the following UTM NAD27 coordinates (E, N): 373700, 3738900; 373800, 3738900; 373800, 3737500; 373700, 3737500; 373700, 3737600; 373500, 3737600;

373500, 3737800; 373200, 3737800; 373200, 3738100; 373100, 3738100; 373100, 3738200; 373000, 3738200; 373000, 3738300; 373100, 3738300; 373100, 3738400; 373300, 3738400; 373300, 3738300; 373500, 3738300; 373500, 3738500; 373600, 3738500; 373600, 3738600; 373500, 3738600; 373500, 3738800; 373700, 3738800; 373700, 3738900.

Land bounded by the following UTM NAD27 coordinates (E, N): 369000, 3738600; 369300, 3738600; 369300, 3738400; 369400, 3738400; 369400, 3738500; 369600, 3738500; 369600, 3738200; 369300, 3738200; 369300, 3738000; 369200, 3738000; 369200, 3737900; 369100, 3737900; 369100, 3738000; 369000, 3738000; 369000, 3738100; 368900, 3738100; 368900, 3738400; 369000, 3738400; 369000, 3738600.

Land bounded by the following UTM NAD27 coordinates (E, N): 376300, 3732400; 376800, 3732400; 376800, 3732100; 376700, 3732100; 376700, 3732000; 376800, 3732000; 376800, 3731900; 376900, 3731900; 376900, 3731800; 376500, 3731800; 376500, 3731900; 376300, 3731900; 376300, 3732000; 376100, 3732000; 376100, 3732200; 376200, 3732200; 376200, 3732300; 376300, 3732300; 376300, 3732400.



Map Unit 9: East Los Angeles County—Matrix NCCP Subregion of Orange County, Los Angeles, Orange and Riverside Counties, California. From USGS 1:100,000 quadrangle maps Long Beach (1981), Los Angeles (1983) and Santa Ana (1985), California, land

bounded by the following UTM NAD27 coordinates (E, N): 400700, 3766400; 400700, 3766500; 400600, 3766500; 400600, 3766900; 400500, 3766900; 400500, 3767000; 400800, 3767000; 400800, 3767300; 400700, 3767300; 400700, 3767400; 400800, 3767400; 400800,

3767800; 400900, 3767800; 400900, 3767900; 401500, 3767900; 401500, 3767700; 401300, 3767700; 401300, 3767300; 401200, 3767300; 401200, 3767100; 401300, 3767100; 401300, 3767000; 401200, 3767000; 401200, 3766900; 401100, 3766900; 401100, 3766700; 401300,

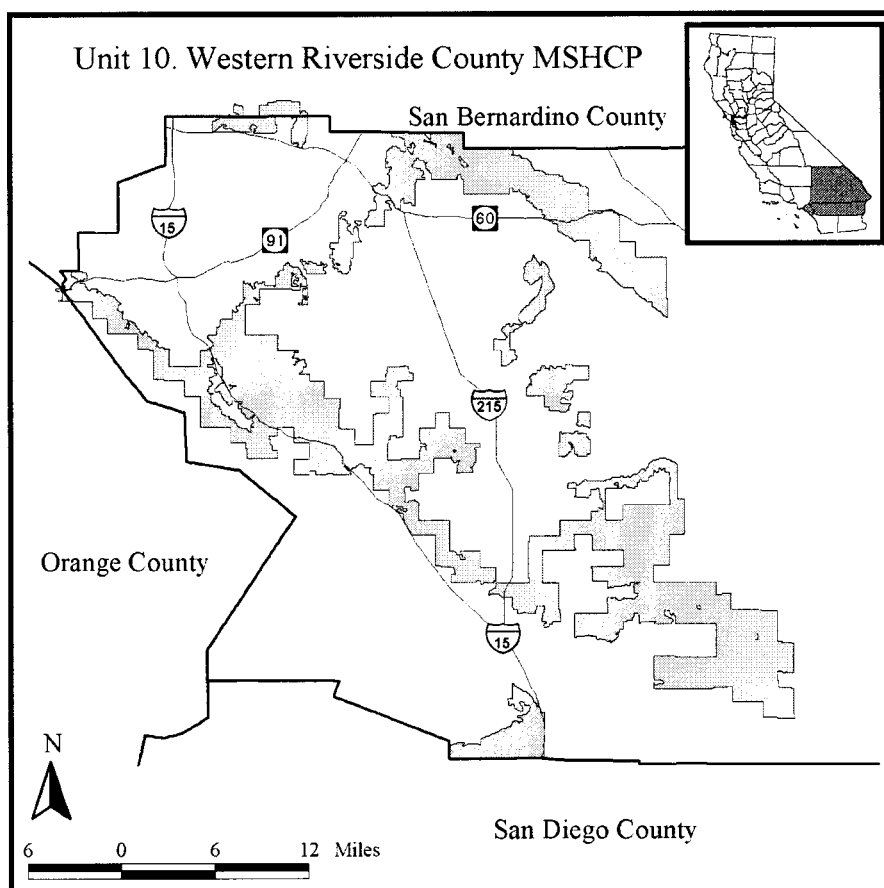
405600, 3763400; 405700, 3763400; 405700, 3763300; 405900, 3763300; 405900, 3763200; 406000, 3763200; 406000, 3763300; 406100, 3763300; 406100, 3763400; 406500, 3763400; 406500, 3763500; 406400, 3763500; 406400, 3763900; 406300, 3763900; 406300, 3764000; 406100, 3764000; 406100, 3764100; 405900, 3764100; 405900, 3764200; 405800, 3764200; 405800, 3764300; 405700, 3764300; 405700, 3764500; 406000, 3764500; 406000, 3764400; 406100, 3764400; 406100, 3764500; 406700, 3764500; 406700, 3764400; 406800, 3764400; 406800, 3764300; 406700, 3764100; 406800, 3764100; 406800, 3763600; 406900, 3763600; 406900, 3763700; 407900, 3763700; 407900, 3763400; 407800, 3763400; 407800, 3763300; 407900, 3763300; 407900, 3763200; 408200, 3763200; 408200, 3763100; 408300, 3763100; 408300, 3763000; 408400, 3763000; 408400, 3762400; 408300, 3762400; 408300, 3762300; 408200, 3762300; 408200, 3762100; 407800, 3762100; 407800, 3762000; 407600, 3762000; 407600, 3761900; 407800, 3761900; 408100, 3761800; 408100, 3761700; 408200, 3761700; 408200, 3761800; 408300, 3761800; 408300, 3761600; 408400, 3761600; 408400, 3761500; 408300, 3761500; 408300, 3760300; 408200, 3760300; 408200, 3759600; 409900, 3759600; 409900, 3759700; 411100, 3759700; 411100, 3759600; 412100, 3759600; 412100, 3759700; 412300, 3759700; 412300, 3759800; 414500, 3759800; 414500, 3759700; 414800, 3759700; 414800, 3759600; 415100, 3759600; 415100, 3759500; 415200, 3759500; 415200, 3759100; 415400, 3759100; 415400, 3759000; 415500, 3759000; 415500, 3758900; 415600, 3758900; 415600, 3758400; 415700, 3758400; 415700, 3758600; 415800, 3758600; 415800, 3758700; 416100, 3758700; 416100, 3758800; 416600, 3758800; 416600, 3758700; 416800, 3758700; 416800, 3758900; 417000, 3758900; 417000, 3758800; 417400, 3758800; 417400, 3758700; 417500, 3758700; 417500, 3758600; 417700, 3758600; 417700, 3758500; 417800, 3758500; 417800, 3758400; 418000, 3758400; 418000, 3758500; 418100, 3758500; 418100, 3758600; 418300, 3758600; 418300, 3758500; 418400, 3758500; 418400, 3758500; 418400, 3758900; 418300, 3758900; 418300, 3759000; 418500, 3759000; 418500, 3759200; 418400, 3759200; 418400, 3759500; 418800, 3759500; 418800, 3759400; 418900, 3759400; 418900, 3759300; 419400, 3759300; 419400, 3759200; 419500, 3759200; 419500, 3759100; 419700, 3759100; 419700, 3759000; 419800, 3759000;

419800, 3758800; 419900, 3758800; 419900, 3758900; 420000, 3758900; 420000, 3759000; 419900, 3759000; 419900, 3759100; 419800, 3759100; 419800, 3759600; 420000, 3759600; 420000, 3759400; 420200, 3759400; 420200, 3759300; 420300, 3759300; 420300, 3759200; 420600, 3759200; 420600, 3759300; 420900, 3759300; 420900, 3759200; 421100, 3759200; 421100, 3757900; 424400, 3757900; 424400, 3759500; 425900, 3759500; 425900, 3759600; 428400, 3759600; 428400, 3759200; 428900, 3759200; 428900, 3759300; 429000, 3759300; 429000, 3759400; 429100, 3759400; 429100, 3759500; 429300, 3759500; 429300, 3759200; 429200, 3758700; 429300, 3758700; 429300, 3758000; 429000, 3758000; 429000, 3757900; 428500, 3757900; 428500, 3758000; 428400, 3758000; excluding land bounded by 410200, 3758600; 410200, 3758700; 410100, 3758700; 410100, 3758800; 409900, 3758800; 409900, 3758600; 410200, 3758600; land bounded by 428400, 3758000; 428400, 3758200; 428300, 3758200; 428300, 3758300; 428200, 3758300; 428200, 3758100; 428300, 3758100; 428300, 3758000; 428400, 3758000; land bounded by 428100, 3751900; 428100, 3752000; 428000, 3752000; 428000, 3752100; 427900, 3752100; 427900, 3751900; 428100, 3751900; land bounded by 409400, 3758700; 409400, 3758600; 409500, 3758600; 409500, 3758700; 409400, 3758700; land bounded by 415500, 3758200; 415500, 3758100; 415300, 3758100; 415300, 3757900; 415200, 3757900; 415200, 3757700; 415600, 3757700; 415600, 3757600; 415900, 3757600; 415900, 3757500; 416000, 3757500; 416000, 3757600; 416200, 3757600; 416200, 3757700; 416800, 3757700; 416800, 3757800; 416700, 3757800; 416700, 3758100; 416500, 3758100; 416500, 3758000; 416300, 3758000; 416300, 3757900; 416000, 3757900; 416000, 3757800; 415900, 3757800; 415900, 3757700; 415800, 3757700; 415800, 3757800; 415700, 3757800; 415700, 3758000; 415600, 3758000; 415600, 3758200; 415500, 3758200; land bounded by 418300, 3755400; 418300, 3755100; 418500, 3755100; 418500, 3755400; 418300, 3755400; land bounded by 425300, 3754700; 425300, 3754500; 425200, 3754500; 425200, 3754400; 425500, 3754400; 425500, 3754300; 425600, 3754300; 425600, 3754000; 425700, 3754000; 425700, 3753900; 425800, 3753900; 425800, 3753800; 425900, 3753800; 425900, 3754300; 426000, 3754300; 426000, 3754400; 425900, 3754400; 425900, 3754600; 426000, 3754600; 426000, 3754700; 425300, 3754700; land

bounded by 424000, 3752600; 424000, 3752500; 424100, 3752500; 424100, 3752400; 424300, 3752400; 424300, 3752300; 424500, 3752300; 424500, 3752400; 424600, 3752400; 424600, 3752500; 424400, 3752500; 424400, 3752600; 424000, 3752600; land bounded by 427100, 3751000; 427100, 3750900; 427300, 3750900; 427300, 3751000; 427100, 3751000; land bounded by 432300, 3750600; 432300, 3750500; 431900, 3750500; 431900, 3750400; 432000, 3750400; 432000, 3750200; 432300, 3750200; 432300, 3750300; 432400, 3750300; 432400, 3750600; 432300, 3750600; land bounded by 431300, 3750100; 431300, 3750000; 431100, 3750000; 431100, 3749500; 431200, 3749500; 431200, 3749200; 431300, 3749200; 431300, 3749400; 431400, 3749400; 431400, 3749600; 431500, 3749600; 431500, 3749700; 431600, 3749700; 431600, 3749800; 431800, 3749800; 431800, 3749900; 431900, 3749900; 431900, 3750000; 431400, 3750000; 431400, 3750100; 431300, 3750100.

Land bounded by the following UTM NAD27 coordinates (E, N): 409700, 3752300; 411500, 3752300; 411500, 3752100; 411900, 3752100; 411900, 3752000; 412100, 3752000; 412100, 3751900; 412200, 3751900; 412200, 3752000; 412400, 3752000; 412400, 3751900; 412500, 3751900; 412500, 3752000; 412700, 3752000; 412700, 3751900; 412900, 3751900; 412900, 3751000; 412700, 3751000; 412700, 3751100; 412400, 3751100; 412400, 3751200; 412300, 3751200; 412300, 3751300; 412100, 3751300; 412100, 3751200; 411900, 3751200; 411900, 3751300; 411700, 3751300; 411700, 3751400; 411100, 3751400; 411100, 3751300; 410700, 3751300; 410700, 3751200; 410400, 3751200; 410400, 3751000; 410300, 3751000; 410300, 3750800; 409700, 3750800; 409700, 3750900; 409200, 3750900; 409200, 3751000; 409100, 3751000; 409100, 3751200; 409000, 3751200; 409000, 3751500; 409100, 3751500; 409100, 3751700; 409700, 3751700; 409700, 3752300.

Land bounded by the following UTM NAD27 coordinates (E, N): 416800, 3750500; 417400, 3750500; 417400, 3750400; 417500, 3750400; 417500, 3750300; 417600, 3750300; 417600, 3750100; 417400, 3750100; 417400, 3750200; 417300, 3750200; 417300, 3749900; 417000, 3749900; 417000, 3750100; 416800, 3750100; 416800, 3750200; 416700, 3750200; 416700, 3750300; 416800, 3750300; 416800, 3750500.



Map Unit 10: Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), Riverside County, California. From USGS 1:100,000 quadrangle maps Santa Ana (1985) and San Bernardino (1982), California, beginning at the Riverside/San Bernardino County line at UTM NAD27 x coordinate 484300; land bounded by the following UTM NAD27 coordinates (E, N): 484300, 3762200; 484400, 3762200; 484400, 3762000; 484300, 3762000; 484300, 3761900; 484200, 3761900; 484200, 3761800; 484600, 3761800; 484600, 3761700; 484900, 3761700; 484900, 3761800; 485100, 3761800; 485100, 3761600; 485200, 3761600; 485200, 3761500; 485300, 3761500; 485300, 3761400; 485800, 3761400; 485800, 3761300; 485900, 3761300; 485900, 3761200; 486000, 3761200; 486000, 3761100; 486100, 3761100; 486100, 3761000; 486200, 3761000; 486200, 3760800; 486300, 3760800; 486300, 3760600; 486400, 3760600; 486400, 3760400; 486500, 3760400; 486500, 3760200; 487000, 3760200; 487000, 3760100; 487400, 3760100; 487400, 3760000; 487600, 3759900; 487700, 3759900; 487700, 3759800; 488000, 3759800; 488000, 3759700; 489100, 3759700; 489100, 3759600; 489400, 3759600; 489500, 3759400; 489500, 3759400; 489500, 3759100; 489600, 3759100; 489600, 3759000; 489800, 3759000; 489800, 3758900; 490200, 3758900; 490200, 3758800; 491200, 3758800; 491200, 3758600; 491400, 3758600; 491400, 3758500; 491900, 3758500; 491900, 3758400; 492100, 3758400; 492100, 3757800; 492000, 3757800; 492000, 3757600; 492100, 3757600; 492100, 3756000; 494600, 3756000; 494600, 3755900; 494700, 3755800;

494900, 3755800; 494900, 3755700; 495100, 3755700; 495100, 3755600; 495200, 3755600; 495200, 3755500; 495300, 3755500; 495300, 3752800; 496900, 3752800; 496900, 3751200; 500000, 3751200; 500000, 3751100; 500100, 3751100; 500100, 3746800; 500200, 3746800; 500200, 3744900; 500000, 3744900; 500000, 3745000; 499800, 3745000; 499800, 3745100; 499700, 3745100; 499700, 3745200; 499600, 3745200; 499600, 3745300; 499500, 3745300; 499500, 3745400; 499400, 3745400; 499400, 3745500; 499200, 3745500; 499200, 3745600; 499100, 3745600; 499100, 3745700; 499000, 3745700; 499000, 3745800; 498900, 3745800; 498900, 3745900; 498700, 3745900; 498700, 3746000; 498600, 3746000; 498600, 3746500; 498000, 3746500; 498000, 3746600; 497900, 3746600; 497900, 3746700; 497800, 3746700; 497800, 3746800; 497600, 3746800; 497600, 3746900; 497500, 3746900; 497500, 3747000; 497400, 3747000; 497400, 3747100; 497300, 3747100; 497300, 3747200; 497100, 3747200; 497100, 3747300; 497000, 3747300; 497000, 3747400; 496900, 3747400; 496900, 3747600; 496800, 3747600; 496800, 3747700; 496700, 3747700; 496700, 3747900; 496600, 3747900; 496600, 3748000; 495500, 3748100; 495400, 3748100; 495400, 3748200; 495300, 3748200; 495300, 3748300; 495200, 3748300; 495200, 3748400; 495100, 3748400; 495100, 3748500; 495000, 3748500; 494900, 3748500; 494900, 3748700; 494800, 3748700; 494800, 3748800; 494700, 3748800; 494700, 3748900; 494600, 3748900; 494600, 3749000; 494500, 3749000; 494500, 3749100; 494400, 3749100; 494400, 3749200; 494300, 3749200; 494300, 3749300; 494200,

3749300; 494200, 3749400; 494100, 3749400; 494100, 3749500; 494000, 3749500; 494000, 3749600; 493500, 3749600; 493500, 3749700; 493100, 3749700; 493100, 3749800; 492900, 3749800; 492900, 3749900; 493100, 3749900; 493100, 3750000; 493300, 3750000; 493300, 3750200; 493400, 3750200; 493400, 3750500; 493300, 3750500; 493300, 3750600; 493100, 3750600; 493100, 3750700; 493000, 3750700; 493000, 3750800; 492800, 3750800; 492800, 3750900; 492900, 3750900; 492900, 3751200; 492800, 3751200; 492800, 3751100; 492700, 3751100; 492700, 3750900; 492600, 3750900; 492600, 3750800; 492400, 3750800; 492400, 3750900; 492300, 3750900; 492300, 3751000; 492200, 3751000; 492200, 3751100; 492100, 3751100; 492100, 3751200; 492200, 3751200; 492200, 3752900; 490800, 3752900; 490800, 3752800; 490600, 3752800; 490600, 3752900; 490500, 3752900; 490500, 3753000; 490400, 3753000; 490400, 3753100; 490200, 3753100; 490200, 3753200; 490100, 3753200; 490100, 3753300; 489900, 3753300; 489900, 3753400; 489700, 3753400; 489700, 3753500; 489500, 3753500; 489500, 3753600; 489400, 3753600; 489400, 3753700; 489200, 3753700; 489200, 3753800; 489000, 3753800; 489000, 3753900; 488900, 3753900; 488900, 3754600; 488600, 3754600; 488600, 3754700; 488400, 3754700; 488400, 3754800; 488300, 3754800; 488300, 3755000; 488200, 3755000; 488200, 3754900; 488000, 3754900; 488000, 3755000; 487800, 3755000; 487800, 3755100; 487500, 3755100; 487500, 3755200; 487400, 3755200; 487400, 3755300; 487500, 3755300; 487500, 3755400; 487600, 3755400; 487600, 3755500; 487500, 3755500; 487500, 3755600; 487300, 3755600;

487300, 3756100; 486800, 3756100; 486800, 3756200; 486700, 3756200; 486700, 3756300; 486500, 3756300; 486500, 3756400; 486400, 3756400; 486400, 3756500; 486500, 3756500; 486500, 3756600; 486400, 3756600; 486400, 3756700; 486300, 3756700; 486300, 3756800; 486000, 3756800; 486000, 3757000; 485800, 3757000; 485800, 3757100; 485700, 3757100; 485700, 3757300; 485800, 3757300; 485800, 3757400; 485700, 3757400; 485700, 3757700; 485300, 3757700; 485300, 3757800; 485200, 3757800; 485200, 3757900; 485100, 3757900; 485100, 3758000; 485000, 3758000; 485000, 3758200; 484900, 3758200; 484900, 3758000; 484300, 3758000; 484300, 3758400; 484000, 3758400; 484000, 3757700; 479200, 3757700; 479200, 3759300; 479000, 3759300; 479000, 3759400; 478900, 3759400; 478900, 3759800; 478800, 3759800; 478800, 3759700; 478600, 3759700; 478600, 3759500; 478500, 3759500; 478500, 3759400; 478600, 3759400; 478600, 3759300; 475900, 3759300; 475900, 3759900; 475800, 3759900; 475800, 3760000; 475700, 3760000; 475700, 3760100; 475600, 3760100; 475600, 3760200; 475500, 3760200; 475500, 3760300; 475400, 3760300; 475400, 3760400; 475300, 3760400; 475300, 3760800; 475200, 3760800; 475200, 3760900; 475400, 3760900; 475400, 3761000; 475100, 3761000; 475100, 3761200; 474700, 3761200; 474600, 3761300; 474600, 3761300; 474600, 3761500; 474300, 3761500; 474300, 3761400; 474400, 3761400; 474400, 3761200; 474100, 3761200; 474100, 3760900; 473900, 3760900; 473900, 3760800; 473800, 3760800; 473800, 3760700; 473900, 3760700; 473900, 3760500; 474400, 3760500; 474400, 3760400; 474800, 3760400; 474800, 3760200; 475000, 3760200; 475000, 3759900; 475100, 3759900; 475100, 3759800; 475000, 3759800; 475000, 3759700; 474900, 3759700; 474900, 3759500; 475200, 3759500; 475200, 3759300; 474300, 3759300; 474300, 3758900; 474200, 3758900; 474200, 3756500; 473900, 3756500; 473900, 3756600; 473800, 3756600; 473800, 3756900; 473500, 3756900; 473500, 3756800; 473000, 3756800; 472900, 3757300; 472900, 3757200; 472800, 3757200; 472800, 3757100; 472700, 3757100; 472700, 3756100; 472500, 3756100; 472200, 3756200; 472200, 3756300; 472100, 3756300; 472100, 3756500; 472000, 3756500; 472000, 3756800; 471900, 3756800; 471900, 3756900; 471800, 3756900; 471800, 3757100; 471300, 3757100; 471300, 3757000; 471100, 3757000; 471100, 3756900; 471300, 3756900; 471300, 3756800; 471500, 3756800; 471500, 3756700; 471600, 3756700; 471600, 3756600; 471500, 3756600; 471500, 3756400; 471600, 3756400; 471600, 3756300; 471700, 3756300; 471700, 3756100; 471000, 3756100; 471000, 3754400; 470000, 3754400; 470000, 3754500; 469900, 3754500; 469900, 3754400; 469400, 3754400; 469400, 3754300; 469200, 3754300; 469200, 3754500; 469000, 3754500; 469000, 3755100; 469100, 3755100; 469100, 3755200; 469200, 3755200; 469200, 3755300; 469300, 3755300; 469300, 3755500; 469400, 3755500; 469400, 3755900; 469300, 3755900; 469300, 3756000; 469500, 3756000; 470200, 3756100; 470200, 3756900; 470100, 3756900; 470100, 3757000; 469900, 3757000; 469900, 3757400; 470000, 3757400; 470000, 3757500; 470200, 3757500; 470200, 3757900; 470000, 3757900; 470000, 3758000; 469900, 3758000; 469900, 3758200; 469800, 3758200; 469800, 3758600; 470200, 3758600;

470200, 3758700; 470300, 3758700; 470300, 3758900; 470600, 3758900; 470600, 3758800; 470700, 3758800; 470700, 3758600; 470800, 3758600; 470800, 3758700; 471000, 3758700; 471000, 3758600; 471100, 3758600; 471100, 3758400; 471300, 3758400; 471300, 3758500; 471400, 3758500; 471400, 3758800; 471500, 3758800; 471500, 3759700; 471400, 3759700; 471400, 3759800; 471300, 3759800; 471300, 3759900; 471400, 3759900; 471400, 3760000; 471500, 3760000; 471500, 3760300; 471700, 3760300; 471700, 3760600; 471400, 3760600; 471400, 3760500; 471100, 3760500; 471100, 3760900; 471400, 3760900; 471400, 3761100; 471100, 3761100; 471100, 3761400; 471200, 3761400; 471200, 3762200; 471300, 3762200; 471300, 3762300; 471400, 3762300; 471400, 3762400; 471500, 3762400; 471500, 3762500; 471800, 3762500; 471800, 3762700; 472300, 3762700; 472300, 3762600; 472400, 3762600; 472400, 3762500; 472600, 3762500; 472700, 3762300; 472700, 3762200; 473000, 3762200; 473000, 3762100; 473200, 3762100; 473200, 3762800; 473100, 3762800; 473100, 3763500; 472800, 3763500; 472800, 3763600; 472600, 3763600; 472600, 3763700; 471800, 3763700; 471800, 3764100; 473500, 3764100; 473500, 3764000; 475200, 3764000; 475200, 3763900; 475300, 3763900; 475300, 3763800; 475400, 3763800; 475400, 3763700; 475500, 3763700; 475500, 3763600; 475600, 3763600; 475600, 3763500; 475700, 3763500; 475700, 3763400; 475800, 3763400; to the Riverside/San Bernardino County line at x coordinate 475800; returning to the point of beginning; excluding land bounded by 476300, 3762900; 476300, 3762600; 476400, 3762600; 476400, 3762900; 476300, 3762900; land bounded by 477800, 3762500; 477800, 3762900; 477600, 3762900; 477600, 3762700; 477500, 3762700; 477500, 3762600; 477600, 3762600; 477600, 3762500; 477800, 3762500; land bounded by 478100, 3762500; 478200, 3762500; 478200, 3762600; 478100, 3762600; 478100, 3762500; land bounded by 485800, 3757400; 486000, 3757400; 486000, 3757500; 485800, 3757500; 485800, 3757400; land bounded by 475400, 3763200; 475400, 3763300; 475200, 3763300; 475200, 3763400; 475100, 3763400; 475100, 3763200; 475400, 3763200; land bounded by 476100, 3763000; 476100, 3763100; 475900, 3763100; 475900, 3763200; 475400, 3763200; 475400, 3763100; 475800, 3763100; 475800, 3763000; 476100, 3763000; land bounded by 478100, 3762500; 477800, 3762500; 477800, 3762300; 478000, 3762300; 478000, 3761900; 478100, 3761900; 478100, 3762000; 478200, 3762000; 478200, 3762200; 478100, 3762200; 478100, 3762500; land bounded by 476100, 3763000; 476100, 3762900; 476300, 3762900; 476300, 3763000; 476100, 3763000; land bounded by 473900, 3763100; 473900, 3763000; 473800, 3763000; 473800, 3762900; 473700, 3762900; 473700, 3762800; 473800, 3762800; 473800, 3762500; 473600, 3762500; 473600, 3762600; 473400, 3762600; 473400, 3762400; 473500, 3762400; 473500, 3762200; 473600, 3762200; 473600, 3762100; 473700, 3762100; 473700, 3762000; 473800, 3762000; 473800, 3761900; 473900, 3761900; 473900, 3762100; 474000, 3762100; 474000, 3762500; 474100, 3762500; 474100, 3762600; 474200, 3762600; 474200, 3762800; 474100, 3762800; 474100, 3763000; 474000, 3763000; 474000, 3763100; 473900, 3763100; and land bounded by 478700, 3761600;

478700, 3761300; 478800, 3761300; 478800, 3761200; 478900, 3761200; 478900, 3760800; 479000, 3760800; 479000, 3760700; 479200, 3760700; 479200, 3760500; 479300, 3760500; 479300, 3760600; 479700, 3760600; 479600, 3760700; 479600, 3760900; 479500, 3760900; 479500, 3761000; 479200, 3761000; 479200, 3761300; 479000, 3761300; 479000, 3761400; 478900, 3761400; 478900, 3761600.

Land bounded by the following UTM NAD27 coordinates (E, N): 459900, 3767500; 461400, 3767500; 461400, 3767400; 462300, 3767400; 462300, 3766100; 462400, 3766100; 462500, 3766300; 462500, 3766400; 462900, 3766400; 462900, 3766300; 463000, 3766300; 463000, 3766200; 463100, 3766200; 463100, 3763900; 463000, 3763900; 462900, 3763700; 462900, 3763700; 462800, 3763100; 462800, 3763000; 462700, 3763000; 462700, 3762900; 462600, 3762900; 462500, 3762500; 462300, 3762500; 462300, 3762600; 462100, 3762600; 462100, 3762700; 462000, 3762700; 462000, 3762800; 462100, 3762800; 462100, 3762900; 462100, 3762900; 462100, 3763000; 462100, 3763000; 461800, 3763000; 461800, 3763100; 461700, 3763100; 461700, 3762900; 461600, 3762900; 461600, 3763000; 461500, 3763000; 461500, 3763100; 461400, 3763100; 461400, 3764600; 461600, 3764600; 461600, 3765000; 461700, 3765000; 461800, 3765100; 461800, 3765300; 461900, 3765300; 461900, 3765500; 462000, 3765500; 462000, 3765600; 461900, 3765600; 461900, 3765700; 461700, 3765700; 461600, 3765800; 461600, 3765600; 461500, 3765600; 461500, 3765900; 459800, 3765900; 459800, 3765000; 459900, 3765000; 459900, 3764200; 459800, 3764200; 459800, 3764100; 457500, 3764100; 457500, 3764200; 457600, 3764200; 457600, 3764300; 457700, 3764300; 457700, 3764400; 457600, 3764400; 457600, 3764500; 457700, 3764500; 457700, 3764600; 457900, 3764600; 457900, 3764800; 457800, 3764800; 457800, 3764900; 457500, 3764900; 457500, 3765000; 457400, 3765000; 457400, 3764900; 457300, 3764900; 457200, 3764700; 457200, 3764600; 457100, 3764600; 457100, 3764500; 457300, 3764500; 457300, 3764400; 457400, 3764400; 457400, 3764200; 456100, 3764200; 456100, 3764300; 455600, 3764300; 455600, 3764400; 455400, 3764400; 455400, 3764500; 455200, 3764500; 455200, 3764600; 454900, 3764600; 454900, 3764500; 454600, 3764500; 454600, 3764600; 454500, 3764800; 454700, 3764800; 454700, 3765000; 454300, 3765000; 454300, 3764800; 454100, 3764800; 454100, 3764700; 454000, 3764700; 454000, 3764600; 453900, 3764500; 453800, 3764500; 453800, 3764400; 453600, 3764400; 453600, 3764300; 453300, 3764300; 453300, 3765300; 453400, 3765300; 453700, 3765400; 453700, 3765500; 453800, 3765500; 453800, 3765600; 454100, 3765600; 454100, 3765700; 455000, 3765700; 455000, 3766000; 455200, 3766000; 455200, 3765900; 455400, 3765900; 455400, 3765800; 455900, 3765800; 455900, 3765900; 456000, 3765900; 456000, 3766100; 455800, 3766100; 455800, 3766200; 455600, 3766200; 455500, 3766300; 455500, 3766900; 455600, 3766900; 455600, 3767000; 455800, 3767000;

456000, 3767000; 456000, 3766900; 456400, 3766900; 456400, 3766800; 456500, 3766800; 456500, 3765700; 458200, 3765700; 458200, 3767000; 459000, 3767000; 459000, 3767300; 459600, 3767300; 459600, 3767400; 459900, 3767400; 459900, 3767500.

Land bounded by the following UTM NAD27 coordinates (E, N): 466600, 3756000; 467000, 3756000; 467000, 3755900; 467100, 3755900; 467100, 3755700; 467000, 3755700; 467000, 3755500; 466600, 3755500; 466500, 3755300; 466500, 3755200; 466900, 3755200; 466900, 3755100; 467000, 3755100; 467000, 3755000; 467200, 3755000; 467200, 3754700; 467500, 3754700; 467400, 3754500; 467400, 3754400; 467200, 3754400; 467200, 3754000; 467300, 3754000; 467300, 3753900; 467500, 3753900; 467500, 3753700; 467600, 3753700; 467600, 3753600; 467800, 3753600; 467800, 3754200; 467900, 3754200; 467900, 3754400; 468100, 3754400; 468100, 3754300; 468200, 3754300; 468200, 3754200; 468300, 3754200; 468300, 3753300; 468400, 3753300; 468400, 3753000; 468500, 3753000; 468500, 3752900; 468600, 3752900; 468600, 3752800; 467800, 3752800; 467800, 3751100; 467500, 3751100; 467500, 3750700; 467600, 3750700; 467600, 3750300; 467400, 3750300; 467400, 3750100; 467500, 3750100; 467500, 3749800; 467300, 3749800; 467300, 3749600; 467200, 3749600; 467200, 3749500; 466600, 3749500; 466600, 3749700; 466500, 3749700; 466500, 3749800; 466400, 3749800; 466400, 3749700; 466200, 3749700; 466100, 3750000; 466100, 3750000; 466100, 3750100; 465900, 3750100; 465900, 3750000; 465800, 3750000; 465800, 3750100; 465700, 3750100; 465700, 3750400; 465800, 3750400; 465800, 3750500; 465700, 3750500; 465700, 3750700; 465600, 3750700; 465600, 3750900; 465800, 3750900; 465800, 3751000; 465700, 3751000; 465400, 3751100; 465400, 3751500; 465600, 3751500; 465600, 3752000; 465800, 3752000; 465800, 3752100; 465400, 3752100; 465400, 3752700; 466300, 3752700; 466300, 3753200; 466400, 3753200; 466400, 3753300; 466300, 3753300; 466300, 3755600; 466400, 3755600; 466400, 3755800; 466600, 3755800; 466600, 3756000; excluding land bounded by 466000, 3750600; 466000, 3750500; 466100, 3750500; 466100, 3750400; 466400, 3750400; 466400, 3750500; 466200, 3750500; 466200, 3750600; 466000, 3750600.

Land bounded by the following UTM NAD27 coordinates (E, N): 467900, 3755000; 468300, 3755000; 468300, 3754900; 468700, 3754900; 468700, 3754700; 468600, 3754700; 468500, 3754600; 468500, 3754600; 468500, 3754500; 468200, 3754500; 468200, 3754700; 468000, 3754700; 468000, 3754800; 467900, 3754800; 467900, 3755000.

Land bounded by the following UTM NAD27 coordinates (E, N): 486400, 3751400; 486500, 3751400; 486500, 3751200; 486600, 3751200; 486600, 3751100; 486700, 3751100; 486700, 3750900; 486800, 3750900; 486800, 3750700; 486900, 3750700; 486900, 3750600; 487000, 3750600; 487000, 3750400; 487100, 3750400; 487100, 3750300; 487200, 3750300; 487200, 3750700; 487400, 3750700; 487400, 3750600; 487600, 3750600; 487600, 3750500; 487700, 3750500; 487700, 3750400; 487800, 3750400; 487800, 3750300; 487900, 3750300; 487900, 3750100; 488000, 3750100; 488000, 3749900; 488100, 3749900; 488100, 3749600;

488000, 3749600; 488000, 3749300; 488100, 3749300; 488100, 3749100; 488200, 3749100; 488200, 3748900; 488300, 3748900; 488300, 3748700; 488400, 3748700; 488400, 3748500; 488500, 3748500; 488500, 3748100; 488600, 3748100; 488600, 3748000; 488500, 3748000; 488500, 3747800; 488400, 3747700; 488300, 3747700; 488300, 3747600; 488200, 3747600; 488200, 3747500; 488000, 3747500; 488000, 3747400; 487900, 3747400; 487900, 3747300; 487800, 3747200; 487700, 3747200; 487700, 3745900; 487600, 3745900; 487600, 3745800; 487500, 3745800; 487500, 3745700; 487400, 3745700; 487200, 3745600; 487200, 3745500; 487100, 3745500; 487100, 3745400; 487000, 3745400; 487000, 3745300; 486900, 3745300; 486900, 3745200; 486800, 3745200; 486800, 3745100; 486700, 3745100; 486700, 3745000; 486600, 3745000; 486600, 3744700; 486500, 3744700; 486500, 3744600; 486400, 3744500; 486300, 3744500; 485900, 3744300; 485900, 3744200; 485700, 3744200; 485700, 3744500; 485500, 3744500; 485500, 3744400; 485400, 3744400; 485400, 3744300; 485200, 3744300; 485200, 3744400; 485100, 3744400; 485100, 3744500; 485000, 3744500; 485000, 3744600; 484900, 3744600; 484900, 3745300; 485000, 3745300; 485000, 3745400; 485100, 3745400; 485200, 3745500; 485200, 3745500; 485200, 3745700; 485300, 3745700; 485300, 3745800; 485400, 3745800; 485400, 3745900; 485500, 3745900; 485500, 3746000; 485600, 3746000; 485600, 3746100; 485700, 3746100; 485700, 3746200; 485900, 3746200; 485900, 3746300; 486000, 3746300; 486000, 3746500; 486100, 3746500; 486100, 3746700; 486300, 3746700; 486300, 3746800; 486400, 3746800; 486400, 3746900; 486500, 3746900; 486500, 3747000; 486600, 3747000; 486600, 3747100; 486800, 3747200; 486900, 3747200; 486900, 3747500; 487000, 3747500; 487000, 3747700; 487100, 3747700; 487100, 3748000; 487200, 3748000; 487200, 3748400; 487300, 3748400; 487300, 3749200; 487200, 3749100; 487100, 3749100; 487100, 3749000; 487000, 3749000; 487000, 3748900; 486900, 3748900; 486900, 3748800; 486900, 3748800; 486700, 3748800; 486700, 3748700; 486600, 3748700; 486600, 3748600; 486600, 3748600; 486500, 3748600; 486500, 3748500; 486400, 3748400; 486200, 3748400; 486200, 3748300; 486000, 3748300; 486000, 3748500; 485900, 3748600; 485800, 3748600; 485800, 3748800; 485500, 3748800; 485500, 3748900; 485400, 3748900; 485400, 3749500; 485500, 3749500; 485500, 3750000; 485400, 3750200; 485600, 3750200; 485600, 3750500; 485700, 3750500; 485700, 3750600; 485800, 3750600; 485800, 3750700; 486000, 3750700; 486000, 3750800; 486200, 3750900; 486300, 3750900; 486300, 3751200; 486400, 3751200; 486400, 3751400.

Land bounded by the following UTM NAD27 coordinates (E, N): 462300, 3751000; 462600, 3751000; 462600, 3750800; 462900, 3750800; 462900, 3750600; 463000, 3750600; 463000, 3750500; 463200, 3750500; 463200, 3750600; 463100, 3750800; 463500, 3750800; 463500, 3750700; 463600, 3750700; 463600, 3750600; 464000, 3750600; 464000, 3750400; 464500, 3750400; 464500, 3750500; 464400, 3750700; 464600, 3750700; 464600, 3750600; 464700, 3750600; 464700, 3750400; 464800, 3750400;

464800, 3750500; 465100, 3750500; 465100, 3750300; 465000, 3750300; 464700, 3750200; 464700, 3749900; 464800, 3749900; 464800, 3749800; 464900, 3749800; 464900, 3749700; 465000, 3749700; 465000, 3749500; 463000, 3749500; 463000, 3749900; 462900, 3749900; 462900, 3750000; 462700, 3750000; 462700, 3750400; 462600, 3750400; 462600, 3750500; 462500, 3750700; 462400, 3750700; 462400, 3750800; 462300, 3751000.

Land bounded by the following UTM NAD27 coordinates (E, N): 467300, 3729000; 467300, 3728900; 467400, 3728900; 467400, 3728800; 467500, 3728800; 467500, 3728600; 465600, 3728600; 465600, 3728700; 465100, 3728700; 465100, 3728600; 463900, 3728600; 463900, 3729000; 463200, 3729000; 463200, 3730200; 463200, 3730200; 463200, 3731900; 461600, 3731900; 461600, 3733500; 459900, 3733500; 459900, 3732600; 459100, 3732600; 459100, 3732300; 459200, 3732300; 459200, 3731700; 459400, 3731700; 459400, 3731100; 459900, 3731100; 459900, 3730300; 456800, 3730300; 456800, 3731300; 456700, 3731300; 456700, 3731900; 455100, 3731900; 455100, 3733500; 452000, 3733500; 452000, 3736800; 450400, 3736800; 450400, 3738400; 448300, 3738400; 448300, 3738500; 447200, 3738500; 447200, 3741600; 446800, 3741600; 446800, 3741700; 445600, 3741700; 445600, 3743300; 442500, 3743300; 442500, 3744900; 440900, 3744900; 440900, 3746600; 439100, 3746600; 439100, 3746700; 437700, 3746700; 437700, 3746600; 437400, 3746600; 437400, 3746800; 437800, 3746800; 437800, 3747700; 437200, 3747700; 437200, 3747800; 437100, 3747800; 437900, 3747900; 438800, 3747900; 438800, 3748000; 438700, 3748000; 438700, 3748300; 438800, 3748300; 438800, 3748400; 439100, 3748400; 438900, 3748500; 439000, 3748500; 439000, 3748600; 439100, 3748600; 439100, 3748700; 439300, 3748700; 439300, 3748800; 439400, 3748800; 439400, 3748900; 439200, 3748900; 439200, 3749000; 439200, 3749100; 439100, 3749100; 439100, 3749200; 438900, 3749200; 438900, 3749300; 438800, 3749300; 438800, 3749200; 438700, 3749200; 438700, 3749500; 438800, 3749500; 438800, 3749800; 439900, 3749800; 439900, 3749700; 440300, 3749700; 440300, 3749500; 440400, 3749500; 440400, 3749000; 440000, 3749000; 440000, 3748900; 439600, 3748900; 439600, 3748800; 439700, 3748800; 439700, 3748600; 440100, 3748600; 440100, 3748500; 440200, 3748500; 440200, 3748200; 440300, 3748200; 440400, 3748100; 440400, 3747900; 440500, 3747900; 440500, 3747800; 440700, 3747800; 440700, 3747900; 440800, 3747900; 440800, 3748000; 441400, 3748000; 441400, 3747900; 441500, 3747900; 441500, 3747700; 441800, 3747700; 441800, 3747600; 441900, 3747600; 441900, 3747500; 442100, 3747500; 442100, 3747300; 442200, 3747300; 442200, 3747200; 442300, 3747200; 442300, 3747400; 442700, 3747400; 442700, 3747300; 442900, 3747300; 442900, 3747200; 443200, 3747200; 443200, 3747100; 443300, 3747100; 443300, 3746800; 443500, 3746800; 443500, 3746700; 443600, 3746700; 443600, 3746600; 443700, 3746600; 443700, 3746500; 443900, 3746500; 443900, 3746400; 443800, 3746400; 443800, 3746300; 443600, 3745900; 443500, 3745900; 443500, 3745800; 443600, 3745800; 443600, 3745700; 443700, 3745700;

3745700; 443700, 3745600; 443900, 3745600; 443900, 3745500; 444000, 3745500; 444000, 3745700; 444100, 3745700; 444100, 3745400; 444000, 3745400; 444000, 3744800; 444600, 3744800; 444600, 3744300; 444500, 3744300; 444500, 3744000; 444300, 3744000; 444300, 3743900; 444600, 3743900; 444600, 3743800; 444700, 3743800; 444700, 3744200; 444800, 3744200; 444800, 3744300; 444700, 3744300; 444900, 3744700; 444900, 3744700; 444900, 3744600; 445000, 3744500; 445200, 3744500; 445200, 3744400; 445300, 3744400; 445300, 3744200; 445400, 3744200; 445400, 3744100; 445500, 3744100; 445500, 3743900; 445600, 3743900; 445600, 3743800; 445800, 3743800; 445800, 3743500; 445900, 3743500; 445900, 3743400; 446000, 3743400; 446000, 3743300; 446100, 3743300; 3743200; 446200, 3743200; 446200, 3743400; 446300, 3743400; 446300, 3743600; 446400, 3743600; 446400, 3743500; 446500, 3743500; 446500, 3743400; 446600, 3743400; 446600, 3743300; 3743000; 446900, 3743000; 446900, 3742900; 447000, 3742900; 447000, 3742700; 447100, 3742700; 447100, 3742600; 447500, 3742600; 447500, 3742500; 447700, 3742500; 447700, 3742300; 447600, 3742300; 447600, 3742100; 447500, 3742100; 447500, 3742000; 447700, 3742000; 447700, 3741900; 447800, 3741900; 447800, 3741800; 448000, 3741800; 448000, 3741900; 448200, 3741800; 448400, 3741800; 448400, 3741700; 448900, 3741700; 448900, 3741600; 448800, 3741600; 448800, 3739900; 452000, 3739900; 452000, 3741600; 452700, 3741600; 452700, 3741700; 453000, 3741700; 453000, 3741800; 453200, 3741800; 453200, 3742000; 453400, 3742000; 453400, 3742100; 453300, 3742100; 453300, 3742400; 453200, 3742400; 453200, 3742500; 453100, 3742500; 453100, 3742600; 453000, 3742600; 453000, 3742700; 452900, 3742700; 452900, 3742800; 452800, 3742800; 452800, 3743200; 453100, 3743200; 453700, 3743200; 453700, 3744000; 454000, 3744000; 454000, 3744100; 454100, 3744100; 454100, 3744800; 455300, 3744800; 455300, 3745800; 455400, 3745800; 455400, 3745700; 455500, 3745700; 455500, 3745500; 455800, 3745500; 455800, 3745600; 455900, 3745600; 455900, 3745800; 455800, 3745800; 456000, 3746000; 455700, 3746200; 456000, 3746200; 456000, 3746300; 456100, 3746300; 456100, 3746500; 456400, 3746500; 456400, 3746900; 456600, 3746900; 456600, 3747100; 456400, 3747100; 456400, 3748800; 456600, 3748800; 456600, 3748600; 456700, 3748600; 456700, 3748500; 456800, 3748500; 456800, 3748600; 457000, 3748600; 457100, 3748400; 457100, 3748600; 457200, 3748600; 457200, 3748300; 457300, 3748300; 457300, 3748200; 457400, 3748200; 457400, 3747900; 457500, 3747900; 457500, 3748000; 457700, 3748000; 457700, 3748100; 457600, 3748100; 457600, 3748600; 457700, 3748600; 457700, 3748700; 458000, 3748700; 458000, 3748500; 458200, 3748500; 458200, 3748600; 458400, 3748700; 458700, 3748700; 458700, 3748300; 459600, 3748300; 459600, 3748200; 459700, 3748400; 459800, 3748400; 459800, 3749000; 459700, 3749000; 459700, 3749300; 460100, 3749300; 460100, 3749400; 460000, 3749400; 460000, 3749700; 460100, 3749700; 460100, 3749800; 460200, 3749800; 460200, 3749900; 460500, 3749900; 460500, 3750000; 460600, 3750000; 460600, 3750400; 460800, 3750400; 460800, 3750000; 461000, 3750000; 461100, 3750700; 461100, 3750700; 461100, 3750300; 461500, 3750300; 461500, 3750200; 462100, 3750200; 462100, 3750100; 462200, 3750100; 462200, 3750000; 462300, 3750000; 462300, 3750300; 462400, 3750300; 462400, 3749900; 462400, 3749900; 462400, 3749700; 462500, 3749700; 462500, 3749500; 462400, 3749500; 462400, 3749400; 462600, 3749400; 462600, 3749300; 462700, 3749300; 462700, 3749200; 462800, 3749200; 462800, 3749100; 462900, 3749100; 462900, 3749000; 463000, 3749000; 463000, 3748400; 463100, 3748400; 463100, 3747000; 463000, 3747000; 463000, 3747100; 462900, 3747100; 462900, 3747200; 462600, 3747200; 462600, 3748000; 462800, 3748000; 462800, 3747900; 462900, 3747900; 462900, 3748200; 462400, 3748200; 462400, 3748500; 462300, 3748500; 462300, 3747800; 461500, 3747800; 461500, 3747900; 458200, 3747900; 458200, 3746300; 456700, 3746300; 456700, 3743200; 460000, 3743200; 460000, 3741600; 462100, 3741600; 462100, 3741400; 4621

3747000; 462800, 3746800; 463100, 3746800; 463100, 3746300; 462100, 3746300; 462100, 3746500; 462500, 3746500; 462500, 3746800; 462600, 3746800; 462600, 3747100.

Land bounded by the following UTM
NAD27 coordinates (E, N): 483800, 3744300; 483900, 3744300; 483900, 3744200; 484000, 3744200; 484000, 3744000; 484200, 3744000; 484200, 3744100; 484300, 3744100; 484300, 3744300; 484500, 3744300; 484500, 3744200; 484900, 3744200; 484900, 3744100; 485000, 3744100; 485000, 3744200; 485300, 3744200; 485300, 3744100; 485200, 3744100; 485200, 3744000; 485000, 3744000; 485000, 3743900; 484900, 3743900; 484900, 3743800; 484700, 3743800; 484700, 3743700; 484500, 3743700; 484500, 3743600; 484400, 3743600; 484400, 3743400; 484000, 3743400; 484000, 3741600; 484500, 3741600; 484500, 3741000; 484600, 3741000; 484600, 3740900; 484700, 3740900; 484700, 3740700; 484600, 3740700; 484600, 3740500; 484300, 3740500; 484300, 3740400; 484200, 3740400; 484200, 3740300; 484100, 3740300; 484100, 3740200; 484000, 3740200; 484000, 3740100; 483900, 3740100; 483900, 3740000; 483700, 3740000; 483700, 3739900; 483100, 3739900; 483100, 3741500; 482300, 3741500; 482300, 3742700; 482800, 3742700; 482800, 3742600; 483500, 3742600; 483500, 3742800; 483700, 3742800; 483700, 3742900; 483600, 3742900; 483600, 3743000; 483500, 3743000; 483400, 3743100; 483400, 3743300; 483300, 3743300; 483300, 3743400; 483200, 3743400; 483200, 3743500; 483100, 3743500; 483100, 3743800; 483200, 3743800; 483200, 3743900; 483300, 3743900; 483300, 3744000; 483500, 3744000; 483500, 3744100; 483600, 3744100; 483600, 3744200; 483800, 3744200; 483800, 3744300.

Land bounded by the following UTM
NAD27 coordinates (E, N): 486100, 3738000; 486100, 3738500; 486000, 3738500; 486000, 3738800; 486100, 3738800; 486100, 3739000; 486300, 3739000; 486300, 3739100; 486500, 3739100; 486500, 3739000; 486600, 3739000; 486600, 3739100; 486800, 3739100; 486800, 3739400; 487100, 3739400; 487100, 3739700; 487200, 3739700; 487200, 3739900; 487600, 3739900; 487600, 3739700; 487700, 3739700; 487700, 3739600; 488000, 3739600; 488000, 3739500; 488100, 3739500; 488100, 3739900; 488300, 3739900; 488300, 3739800; 488400, 3739800; 488400, 3739700; 488500, 3739700; 488500, 3739600; 488700, 3739600; 488700, 3739700; 488800, 3739700; 488800, 3739800; 489300, 3739800; 489300, 3739600; 489600, 3739600; 489600, 3739500; 489700, 3739500; 489700, 3740000; 490400, 3740000; 490400, 3739900; 492100, 3739900; 492100, 3738400; 490500, 3738400; 490500, 3738200; 490400, 3738200; 490400, 3738100; 490300, 3738100; 490300, 3738000; 489800, 3738000; 489800, 3737500; 489700, 3737500; 489700, 3737400; 489600, 3737400; 489600, 3737200; 489500, 3737200; 489500, 3737100; 489900, 3737100; 489900, 3737200; 490000, 3737200; 490000, 3737300; 490500, 3737300; 490500, 3736700; 490400, 3736700; 490400, 3736600; 490300, 3736600; 490300, 3736400; 490200, 3736400; 490200, 3736300; 489900, 3736300; 489900, 3736400; 489700, 3736400; 489700, 3736500; 489500, 3736500; 489500, 3736600; 489300, 3736600; 489300, 3736400; 489200, 3736400; 489200, 3736000; 489300, 3736000; 489300, 3735900; 490200, 3735900; 490200, 3735700; 490100, 3735700; 490100, 3735600; 490000, 3735600; 490000, 3735500; 490000, 3735400; 490000, 3735300; 490000, 3735200; 490000, 3735100; 490000, 3735000; 490000, 3734900; 490000, 3734800; 490000, 3734700; 490000, 3734600; 490000, 3734500; 490000, 3734400; 490000, 3734300; 490000, 3734200; 490000, 3734100; 490000, 3734000; 490000, 3733900; 490000, 3733800; 490000, 3733700; 490000, 3733600; 490000, 3733500; 490000, 3733400; 490000, 3733300; 490000, 3733200; 490000, 3733100; 490000, 3733000; 490000, 3732900; 490000, 3732800; 490000, 3732700; 490000, 3732600; 490000, 3732500; 490000, 3732400; 490000, 3732300; 490000, 3732200; 490000, 3732100; 490000, 3732000; 490000, 3731900; 490000, 3731800; 490000, 3731700; 490000, 3731600; 490000, 3731500; 490000, 3731400; 490000, 3731300; 490000, 3731200; 490000, 3731100; 490000, 3731000; 490000, 3730900; 490000, 3730800; 490000, 3730700; 490000, 3730600; 490000, 3730500; 490000, 3730400; 490000, 3730300; 490000, 3730200; 490000, 3730100; 490000, 3730000; 490000, 3729900; 490000, 37

3735600; 490000, 3735300; 489900, 3735300; 489900, 3735200; 489800, 3735200; 489800, 3735100; 489100, 3735100; 489100, 3735200; 488000, 3735200; 488000, 3735600; 487500, 3735600; 487500, 3736800; 485700, 3736800; 485700, 3737700; 485800, 3737700; 485800, 3737800; 485900, 3737800; 485900, 3738000; 486100, 3738000; excluding land bounded by 486100, 3738000; 486100, 3737900; 486200, 3737900; 486200, 3738000; 486100, 3738000.

Land bounded by the following UTM

NAD27 coordinates (E, N): 491000, 3735100; 492200, 3735100; 492200, 3733400; 492000, 3733400; 492000, 3733500; 491800, 3733500; 491800, 3733600; 491500, 3733600; 491500, 3733700; 491300, 3733700; 491300, 3733600; 490900, 3733600; 490900, 3733700; 490800, 3733700; 490800, 3733900; 490900, 3733900; 490900, 3734000; 491000, 3734000; 491000, 3734100; 490900, 3734100; 490900, 3734800; 491000, 3734800; 491000, 3735100.

Land bounded by the following UTM

NAD27 coordinates (E, N): 490700, 3733100; 491000, 3733100; 491000, 3732800; 491300, 3732800; 491300, 3732900; 491500, 3732900; 491500, 3732800; 491800, 3732800; 491800, 3732500; 492000, 3732500; 492000, 3732200; 492200, 3732200; 492200, 3730700; 491900, 3730700; 491900, 3730400; 490900, 3730400; 490900, 3730600; 490700, 3730600; 490700, 3730700; 490600, 3730700; 490600, 3731400; 490500, 3731400; 490500, 3731600; 490400, 3731600; 490400, 3731700; 490300, 3731700; 490300, 3731900; 490000, 3731900; 490000, 3731800; 490100, 3731800; 490100, 3731700; 490200, 3731700; 490200, 3731600; 490300, 3731600; 490300, 3731400; 490400, 3731400; 490400, 3731200; 490300, 3731200; 490300, 3731000; 490200, 3731000; 490200, 3730900; 490100, 3730900; 490100, 3730800; 490000, 3730800; 490000, 3730700; 489800, 3730700; 489800, 3730500; 489700, 3730500; 489700, 3730400; 489000, 3730400; 489000, 3732000; 489100, 3732000; 489100, 3733000; 489300, 3733000; 489300, 3732800; 489500, 3732800; 489500, 3732900; 489600, 3732900; 489600, 3732800; 489700, 3732800; 489700, 3732900; 490300, 3732900; 490300, 3732800; 490500, 3732800; 490500, 3732900; 490600, 3732900; 490600, 3733000; 490700, 3733000; 490700, 3733100.

Land bounded by the following UTM

NAD27 coordinates (E, N): 497100, 3717300; 496900, 3717300; 496900, 3717400; 496700, 3717400; 496700, 3717300; 496300, 3717300; 496300, 3717000; 496000, 3717000; 496000, 3717100; 495800, 3717100; 495800, 3717000; 495400, 3717000; 495400, 3716900; 494600, 3716900; 494600, 3716800; 494300, 3716800; 494300, 3716900; 494200, 3716900; 494200, 3716800; 494100, 3716800; 494100, 3716700; 494000, 3716700; 494000, 3717500; 492400, 3717500; 492400, 3718800; 492300, 3718800; 492300, 3719000; 495600, 3719000; 495600, 3720700; 492400, 3720700; 492400, 3722200; 492300, 3722200; 492300, 3722300; 490600, 3722300; 490600, 3720900; 490700, 3720900; 490700, 3720700; 487300, 3720700; 487300, 3717300; 489000, 3717300; 489000, 3714600; 489100, 3714600; 489100, 3714100; 489200, 3714100; 489200, 3713300; 488300, 3713300; 488300, 3713000; 488000, 3713000; 488000, 3712800; 487800, 3712800; 487800, 3712700; 487400, 3712700; 487400, 3713100; 487700, 3713100; 487700, 3713300; 487200, 3713300; 487200, 3713700; 487300, 3713700; 487300,

3714200; 487400, 3714200; 487400, 3714600; 487500, 3714600; 487500, 3714900; 486700, 3714900; 486700, 3714500; 486600, 3714500; 486600, 3714100; 485800, 3714100; 485800, 3714200; 485100, 3714200; 485100, 3714100; 484700, 3714100; 484700, 3714500; 484300, 3714500; 484300, 3714800; 484200, 3714800; 484200, 3714900; 484100, 3714900; 484100, 3715000; 484200, 3715000; 484200, 3715800; 483100, 3715800; 483100, 3715900; 483000, 3715900; 483000, 3716000; 482900, 3716000; 482900, 3716100; 482800, 3716100; 482800, 3716200; 481900, 3716200; 481900, 3716100; 481700, 3716100; 481700, 3716300; 481800, 3716300; 481800, 3716500; 482000, 3716500; 482000, 3716600; 482100, 3716600; 482100, 3716700; 482300, 3716700; 482300, 3716800; 482500, 3716800; 482500, 3717300; 485900, 3717300; 485900, 3717800; 485800, 3717800; 485800, 3721600; 485900, 3721600; 485900, 3722200; 489100, 3722200; 489100, 3723800; 492300, 3723800; 492300, 3724700; 493000, 3724700; 493000, 3725100; 493200, 3725100; 493200, 3725000; 493400, 3725000; 493400, 3724900; 493500, 3724900; 493500, 3725800; 493400, 3725800; 493400, 3726000; 493200, 3726000; 493200, 3726700; 493100, 3726700; 493100, 3727100; 492800, 3727100; 492800, 3727000; 492300, 3727000; 492300, 3726400; 492100, 3726400; 492100, 3726100; 491800, 3726100; 491800, 3726200; 490600, 3726200; 490600, 3726300; 490700, 3726300; 490700, 3727100; 489900, 3727100; 489900, 3727600; 490000, 3727600; 490000, 3727700; 490700, 3727700; 490700, 3727600; 490800, 3727600; 490800, 3727500; 490900, 3727500; 490900, 3727400; 491000, 3727500; 491100, 3727500; 491100, 3726000; 491300, 3726000; 491300, 3727700; 491400, 3727700; 491400, 3727800; 491600, 3727800; 491600, 3728000; 491900, 3728000; 491900, 3727900; 493800, 3727900; 493800, 3728000; 494100, 3728000; 494100, 3728100; 494300, 3728100; 494300, 3728200; 494400, 3728200; 494400, 3728300; 495300, 3728300; 495300, 3728400; 495600, 3728400; 495600, 3728300; 496000, 3728300; 496000, 3728400; 496200, 3728400; 496200, 3728300; 496400, 3728300; 496400, 3728400; 496500, 3728400; 496500, 3728500; 496700, 3728500; 496700, 3728600; 497100, 3728600; 497100, 3728700; 497200, 3728700; 497200, 3728800; 497300, 3728800; 497300, 3728900; 497400, 3728900; 497400, 3729100; 497800, 3729100; 497800, 3728900; 497900, 3728900; 497900, 3729200; 498000, 3729200; 498000, 3729300; 498100, 3729300; 498100, 3729400; 498200, 3729400; 498200, 3729700; 498300, 3729700; 498300, 3729800; 498500, 3729800; 498500, 3729900; 498600, 3729900; 498600, 3730000; 498900, 3730000; 498900, 3730100; 499200, 3730100; 499200, 3730200; 499700, 3730200; 499700, 3730300; 499800, 3730300; 499800, 3730200; 500100, 3730200; 500300, 3730200; 500300, 3730100; 500300, 3730000; 500500, 3730000; 500500, 3729900; 500700, 3729900; 500700, 3729800; 500900, 3729800; 500900, 3729700; 501100, 3729700; 501100, 3729600; 501200, 3729600; 501200, 3726000; 501900, 3726000; 501900, 3722300; 500300, 3722300; 500300, 3719100; 498700, 3719100; 498700, 3717400; 505100, 3717400; 505100, 3716100; 505800, 3716100; 505800, 3716200; 506700, 3716200; 506700, 3714500; 509800, 3714500; 509800, 3714400; 511500, 3714400; 511500, 3711200; 512000, 3711200; 512000, 3711100; 512900, 3711100; 512900,

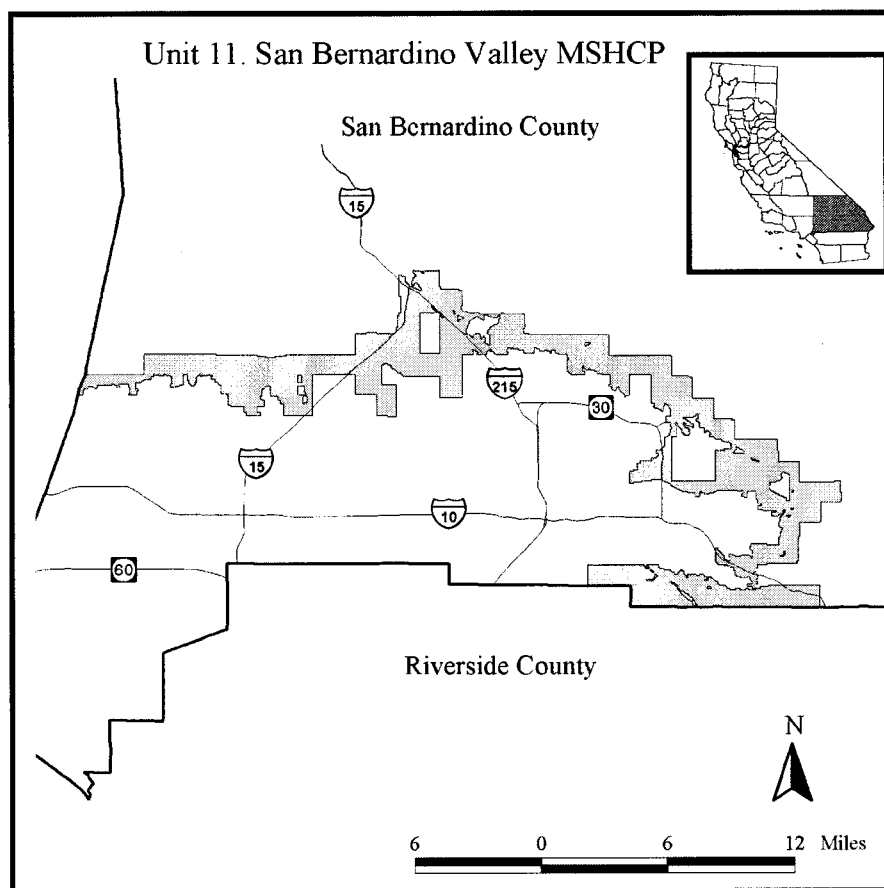
3711000; 513200, 3711000; 513200, 3709700; 513100, 3709700; 513100, 3709500; 513200, 3709500; 513200, 3708000; 512000, 3708000; 512000, 3708100; 511500, 3708100; 511500, 3707100; 511600, 3707100; 511600, 3706400; 512900, 3706400; 512900, 3706300; 513200, 3706300; 513200, 3703600; 513300, 3703600; 513300, 3703200; 511500, 3703200; 511500, 3703300; 510000, 3703300; 510000, 3704900; 506800, 3704900; 506800, 3706500; 506200, 3706500; 506200, 3706400; 504800, 3706400; 504800, 3706300; 498700, 3706300; 498700, 3706900; 498800, 3706900; 498800, 3706700; 499100, 3706700; 499100, 3706800; 499700, 3706800; 499700, 3707000; 499600, 3707000; 499600, 3707100; 499400, 3707100; 499400, 3707200; 498800, 3707200; 498800, 3707300; 498700, 3707300; 498700, 3709700; 500900, 3709700; 500900, 3709600; 505100, 3709600; 505100, 3713000; 500900, 3713000; 500900, 3713900; 500800, 3713900; 500800, 3714000; 500700, 3714000; 500700, 3714100; 500600, 3714100; 500600, 3713900; 500500, 3713900; 500400, 3714000; 500400, 3714100; 500300, 3714100; 500300, 3714400; 500100, 3714400; 500100, 3714500; 499800, 3714500; 499800, 3714400; 499900, 3714400; 499900, 3714300; 499800, 3714300; 499800, 3714000; 499900, 3714000; 499900, 3713900; 500000, 3713900; 500000, 3713800; 500200, 3713800; 500200, 3713700; 500400, 3713700; 500400, 3713600; 500600, 3713600; 500600, 3713500; 500700, 3713500; 500700, 3713300; 500600, 3713300; 500600, 3713200; 500500, 3713200; 500500, 3713000; 498800, 3713000; 498800, 3713200; 498900, 3713200; 498900, 3713300; 498200, 3713300; 498200, 3713200; 497400, 3713200; 497400, 3713100; 497200, 3713100; 497200, 3713900; 497100, 3713900; 497100, 3714100; 496700, 3714100; 496700, 3713800; 496600, 3713800; 496600, 3713700; 496500, 3713700; 496500, 3713400; 496000, 3713400; 496000, 3713300; 495600, 3713300; 495600, 3712500; 495200, 3712500; 495200, 3712200; 495100, 3712200; 495100, 3712000; 495000, 3712000; 495000, 3712100; 494800, 3712100; 494800, 3712000; 494900, 3712000; 494900, 3711900; 495100, 3711900; 495100, 3711700; 495000, 3711700; 495000, 3711600; 494900, 3711600; 494900, 3711500; 494800, 3711500; 494800, 3711400; 494700, 3711400; 494700, 3711300; 494500, 3711300; 494500, 3711200; 494400, 3711200; 494400, 3711100; 494200, 3711100; 494200, 3711300; 494100, 3711300; 494100, 3711200; 493900, 3711200; 493900, 3711300; 493800, 3711300; 493800, 3711400; 493400, 3711400; 493400, 3711500; 493100, 3711500; 493100, 3711400; 492900, 3711400; 492900, 3711500; 492800, 3711500; 492800, 3711700; 492400, 3711700; 492400, 3711800; 492300, 3711800; 492300, 3711700; 492200, 3711700; 492200, 3711800; 492100, 3711800; 492100, 3711900; 492000, 3711900; 492000, 3711800; 491600, 3711800; 491600, 3711700; 490800, 3711700; 490800, 3711600; 490600, 3711600; 490600, 3714100; 494000, 3714100; 494000, 3715200; 493900, 3715200; 493900, 3715700; 494000, 3715700; 494000, 3715800; 494300, 3715800; 494300, 3715700; 494400, 3715700; 494400, 3715800; 494500, 3715800; 494500, 3715700; 494600, 3715700; 494600, 3715800; 494800, 3715800; 494800, 3715600; 495000, 3715600; 495000, 3715500; 495400, 3715500; 495400, 3715600; 495600, 3715600; 495600, 3715800; 495700, 3715800; 495700, 3715700; 496500, 3715700; 496500,

3715600; 496700, 3715600; 496700, 3715700; 496800, 3715700; 496800, 3715900; 497000, 3715900; 497000, 3716100; 497100, 3716100; 497100, 3716200; 496800, 3716200; 496800, 3716300; 496600, 3716300; 496600, 3716400; 496700, 3716400; 496700, 3716800; 496600, 3716800; 496600, 3717000; 496700, 3717000; 496700, 3717200; 497000, 3717200; 497000, 3717100; 497100, 3717100; 497100, 3717300; excluding land bounded by 498800, 3728900; 498800, 3729000; 498700, 3729000; 498700, 3728900; 498800, 3728900; land bounded by 497100, 3717300; 497300, 3717300; 497300, 3717400; 497100, 3717400; 497100, 3717300; land bounded by 498800, 3728900; 498800, 3728700; 498700, 3728700; 498700, 3728400; 498300, 3728400; 498300, 3728300; 498200, 3728300; 498200, 3727900; 498100, 3727900; 498000, 3727800; 497500, 3727800; 497500, 3728000; 497300, 3728000; 497300, 3727800; 497200, 3727800; 497200, 3727700; 497000, 3727700; 497000, 3727400; 497100, 3727400; 497100, 3727300; 497100, 3727300; 496800, 3727300; 496800, 3727100; 496500, 3727100; 496500, 3727200; 496200, 3727200; 496200, 3727300; 496100, 3727300; 496100, 3727200; 496000, 3727200; 496000, 3727300; 495900, 3727300; 495900, 3727400; 495600, 3727400; 495600, 3727300; 495500, 3727300; 495500, 3727200; 495400, 3727200; 495400, 3727100; 493800, 3727100; 493800, 3727100; 493800, 3723800; 495500, 3723800; 495500, 3725400; 500400, 3725400; 500400, 3725900; 500300, 3725900; 500300, 3727900; 500400, 3727900; 500400, 3728300; 500300, 3728300; 500300, 3728800; 499900, 3728800; 499900, 3729200; 499700, 3729200; 499700, 3729000; 499400, 3729000; 499400, 3729200; 499300, 3729200; 499300, 3729100; 499200, 3729100; 499200, 3728800; 499100, 3728800; 499100, 3728700; 499000, 3728700; 499000, 3728800; 498900, 3728800; 498900, 3728900; 498800, 3728900; land bounded by 494800, 3727700; 494800, 3727600; 494700, 3727600; 494700, 3727500; 494800, 3727500; 494800, 3727400; 495000, 3727400; 495000, 3727200; 495100, 3727200; 495100, 3727700; 494800, 3727700; land bounded by 503100, 3714900; 503100, 3714700; 503200, 3714700; 503200, 3714600; 503500, 3714600; 503500, 3714900; 503100, 3714900; and land bounded by 509200, 3712000; 509200, 3711400; 509500, 3711400; 509500, 3712000; 509200, 3712000.

Land bounded by the following UTM NAD27 coordinates (E, N): 484200, 3706900; 484300, 3706900; 484300, 3706800; 484400, 3706800; 484400, 3706700; 484500, 3706700; 484500, 3706600; 484600, 3706600; 484600, 3706500; 484700, 3706500; 484700, 3706400; 484900, 3706400; 484900, 3706300; 485100, 3706300; 485100, 3706200; 485200, 3706200; 485200, 3706100; 485300, 3706100; 485300, 3706000; 485700, 3706000; 485700, 3705900; 485800, 3705900; 485800, 3705800; 485900, 3705800; 485900, 3705700; 486000, 3705700; 486000, 3705600; 486100, 3705600; 486100, 3705500; 486200, 3705500; 486200, 3705400; 486300, 3705400; 486300, 3705200; 486400, 3705200; 486400, 3704900; 486600, 3704900; 486600, 3704800; 486700, 3704800; 486700, 3704500; 486900, 3704500; 486900, 3704400; 487000, 3704400; 487000, 3704200; 487100, 3704200; 487100, 3703900; 487200, 3703900; 487200, 3703500; 487300, 3703500; 487300, 3703400; 487500, 3703900; 487500, 3702100; 487400, 3702100; 487400, 3699200; 487300, 3699200; 487300, 3699100.

Beginning at the Riverside/San Diego County line at UTM NAD27 x coordinate 477700; land bounded by the following UTM NAD27 coordinates (E, N): 477700, 3700500; 478000, 3700500; 478000, 3700600; 478400, 3700600; 478400, 3700700; 479200, 3700700; 479200, 3700600; 479100, 3700600; 479100, 3700500; 479000, 3700500; 479000, 3700400; 479300, 3700400; 479300, 3700500; 479500, 3700500; 479500, 3700600; 480700, 3700600; 480700, 3700500; 480900, 3700500; 480900, 3701100; 481000, 3701100; 481000, 3701200; 481200, 3701200; 481200, 3701300; 481400, 3701300; 481400, 3701400; 481700, 3701400; 481700, 3701500; 481900, 3701500; 481900, 3701600; 482100, 3701600; 482100, 3701700; 482400, 3701700; 482400, 3701800; 482600, 3701800; 482600, 3701900; 482800, 3701900; 482800, 3702000; 483000, 3702000; 483000, 3702100; 483300, 3702100; 483300, 3702200; 483500, 3702200; 483500, 3702300; 483700, 3702300; 483700, 3702400; 484000, 3702400; 484000, 3702500; 484100, 3702500; 484100, 3702800; 484200, 3702800; 484200, 3702900; 484300, 3702900; 484300, 3703000; 484700, 3703000; 484700, 3702900; 484800, 3702900; 484800, 3702800; 485000, 3702800; 485000,

3702900; 485200, 3702900; 485200, 3703000; 485300, 3703000; 485300, 3703100; 485200, 3703100; 485200, 3703200; 485100, 3703200; 485100, 3703300; 484700, 3703300; 484700, 3703500; 485200, 3703500; 485200, 3703600; 485600, 3703600; 485600, 3703700; 485700, 3703700; 485700, 3703800; 485800, 3703800; 485800, 3704000; 485900, 3704000; 485900, 3704300; 486000, 3704300; 486000, 3704500; 485900, 3704500; 485900, 3704600; 485400, 3704600; 485400, 3704900; 485200, 3704900; 485200, 3705000; 485000, 3705000; 485000, 3704900; 484900, 3704900; 484900, 3704800; 485000, 3704800; 485000, 3704600; 485100, 3704600; 485100, 3704500; 485200, 3704500; 485200, 3704300; 485300, 3704300; 485300, 3704100; 485200, 3704100; 485200, 3703900; 485000, 3703900; 485000, 3704000; 484900, 3704000; 484900, 3704100; 484600, 3704100; 484600, 3704200; 484500, 3704200; 484500, 3704300; 484400, 3704300; 484400, 3704600; 484300, 3704600; 484300, 3704700; 484100, 3704700; 484100, 3704600; 483800, 3704600; 483800, 3705000; 483700, 3705000; 483700, 3705300; 484200, 3705300; 484200, 3706900; 484300, 3706900; 484300, 3706800; 484400, 3706800; 484400, 3706700; 484500, 3706700; 484500, 3706600; 484600, 3706600; 484600, 3706500; 484700, 3706500; 484700, 3706400; 484900, 3706400; 484900, 3706300; 485100, 3706300; 485100, 3706200; 485200, 3706200; 485200, 3706100; 485300, 3706100; 485300, 3706000; 485700, 3706000; 485700, 3705900; 485800, 3705900; 485800, 3705800; 485900, 3705800; 485900, 3705700; 486000, 3705700; 486000, 3705600; 486100, 3705600; 486100, 3705500; 486200, 3705500; 486200, 3705400; 486300, 3705400; 486300, 3705200; 486400, 3705200; 486400, 3704900; 486600, 3704900; 486600, 3704800; 486700, 3704800; 486700, 3704400; 486800, 3704400; 486800, 3704500; 486900, 3704500; 486900, 3704400; 487000, 3704400; 487000, 3704200; 487100, 3704200; 487200, 3703900; 487200, 3703900; 487200, 3703800; 487300, 3703800; 487300, 3703900; 487500, 3703900; 487500, 3702100; 487400, 3702100; 487400, 3699200; 487300, 3699200; to the Riverside/San Diego County line at x coordinate 487300; and returning to the point of beginning.



Map Unit 11: San Bernardino Valley MSHCP, San Bernardino County, California. From USGS 1:100,000 quadrangle map San Bernardino, California (1982), beginning at the San Bernardino/Riverside County line at UTM NAD27 x coordinate 479300, land bounded by the following UTM NAD27 coordinates (E, N): 479300, 3764100; 476000, 3764100; 476000, 3765700; 480300, 3765700; 480300, 3765600; 480400, 3765600; 480400, 3765500; 480500, 3765500; 480500, 3765400; 480700, 3765400; 480700, 3765500; 480600, 3765500; 480600, 3765600; 480500, 3765600; 480500, 3765700; 481400, 3765700; 481400, 3765500; 481500, 3765500; 481500, 3765400; 481800, 3765400; 481800, 3765300; 482300, 3765300; 482300, 3765200; 482400, 3765200; 482400, 3765100; 482600, 3765100; 482600, 3765000; 482900, 3765000; 482900, 3765100; 483000, 3765100; 483000, 3765200; 483100, 3765200; 483100, 3765300; 483200, 3765300; 483200, 3765200; 483300, 3765200; 483300, 3765300; 3765000; 483400, 3765000; 483400, 3764900; 483500, 3764900; 483500, 3764700; 483600, 3764700; 483600, 3765000; 483800, 3765000; 483800, 3764900; 483900, 3764900; 483900, 3765000; 484300, 3765000; 484300, 3764900; 484500, 3764900; 484500, 3765000; 484800, 3765000; 484800, 3764900; 484900, 3764900; 484900, 3764800; 485100, 3764800; 485100, 3764600; 484900, 3764600; 484900, 3764500; 485200, 3764500; 485200, 3764800; 485400, 3764800; 485400, 3764700; 485500, 3764700; 485500, 3764600; 485600, 3764600; 485600, 3764500; 485700, 3764500; 485700, 3764400; 485900, 3764400; 485900, 3764200; 486000, 3764200; 486000, 3764100; 486500, 3764100;

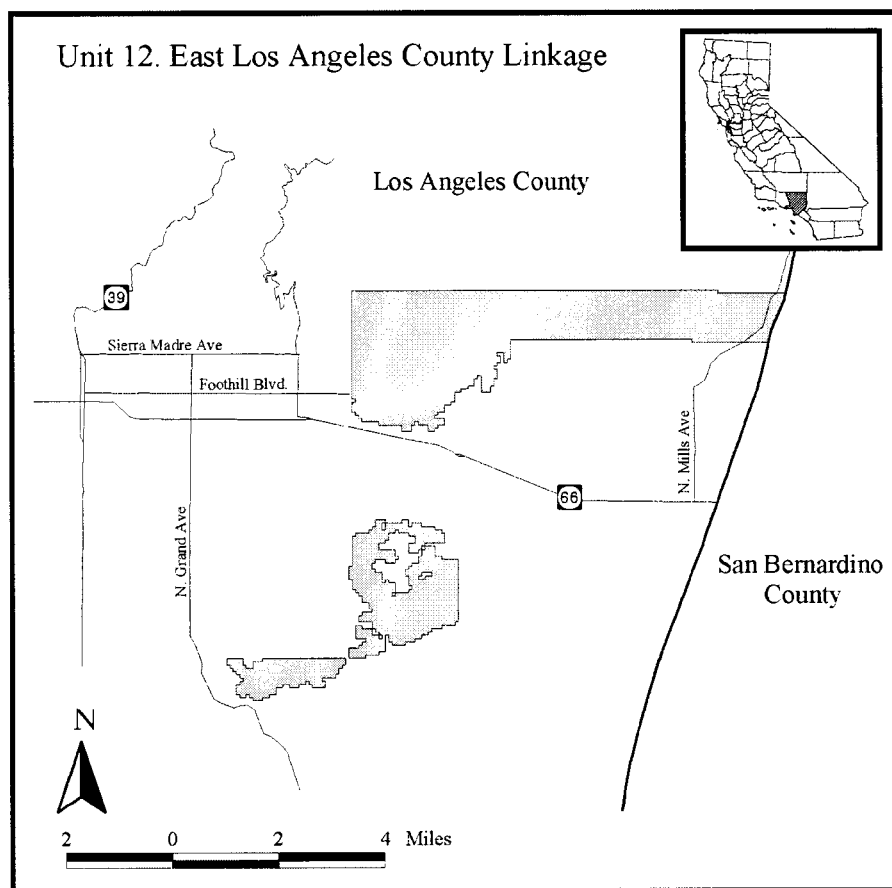
486500, 3764000; 486600, 3764000; 486600, 3763900; 486800, 3763900; 486800, 3763800; 487200, 3763800; 487200, 3763900; 487600, 3763900; 487600, 3763800; 488000, 3763800; 488000, 3763900; 488200, 3763900; 488200, 3763800; 488800, 3763800; 488800, 3763900; 489100, 3763900; 489100, 3764000; 489700, 3764000; 489700, 3764100; 493600, 3764100; to the San Bernardino/Riverside County line at UTM NAD27 x coordinate 493600; and returning to the point of beginning; excluding land bounded by 484300, 3762500; 484300, 3762700; 484200, 3762700; 484200, 3762900; 484100, 3762900; 484100, 3763000; 484000, 3763000; 484000, 3763200; 483800, 3763200; 483800, 3763300; 483700, 3763400; 483600, 3763400; 483600, 3763500; 483400, 3763500; 483400, 3763600; 483300, 3763600; 483300, 3763700; 483100, 3763700; 483100, 3763500; 483200, 3763500; 483200, 3763400; 483300, 3763400; 483300, 3763300; 483400, 3763300; 483400, 3763200; 483500, 3763200; 483500, 3763100; 483600, 3763100; 483600, 3763000; 483800, 3763000; 483800, 3762900; 484000, 3762900; 484000, 3762700; 484100, 3762700; 484100, 3762600; 484200, 3762600; 484200, 3762500; 484300, 3762500; land bounded by 480900, 3765200; 480900, 3765300; 480800, 3765300; 480800, 3765200; 480900, 3765200; land bounded by 481100, 3764700; 481200, 3764700; 481200, 3764800; 481300, 3764800; 481300, 3764900; 481200, 3764900; 481200, 3765000; 481100, 3765000; 481100, 3764700; land bounded by 481000, 3764600; 480500, 3764600; 480500, 3764500; 481000, 3764500; 481000, 3764600; lands bounded by 482400, 3764300; 482400,

3764400; 482300, 3764400; 482300, 3764300; 482400, 3764300; land bounded by 480900, 3765200; 480900, 3765100; 481000, 3765100; 481000, 3765200; 480900, 3765200; land bounded by 481000, 3764600; 481100, 3764600; 481100, 3764700; 481000, 3764700; 481000, 3764600; land bounded by 482600, 3764200; 482600, 3764300; 482400, 3764300; 482400, 3764200; 482600, 3764200; land bounded by 482700, 3764100; 482700, 3764200; 482600, 3764200; 482600, 3764100; 482700, 3764100; land bounded by 483000, 3763800; 483000, 3763700; 483100, 3763700; 483100, 3763800; 483000, 3763800; land bounded by 482900, 3763900; 482900, 3764100; 482700, 3764100; 482700, 3764000; 482800, 3764000; 482800, 3763900; 482900, 3763900; land bounded by 482900, 3763900; 482900, 3763800; 483000, 3763800; 483000, 3763900; 482900, 3763900; and land bounded by 485100, 3764000; 485100, 3763900; 485400, 3763900; 485400, 3764000; 485100, 3764000.

Beginning at the San Bernardino/Los Angeles County line at y coordinate 3780400, land bounded by the following UTM NAD27 coordinates (E, N): 442200, 3780400; 442200, 3782000; 447700, 3782000; 447700, 3781900; 450800, 3781900; 450800, 3781800; 451500, 3781800; 451500, 3781700; 452200, 3781700; 452200, 3781800; 453000, 3781800; 453000, 3781900; 458300, 3781900; 458300, 3783500; 459100, 3783500; 459100, 3783600; 459900, 3783600; 459900, 3783500; 461300, 3783500; 461300, 3783600; 461400, 3783600; 461400, 3784000; 461500, 3784000; 461500, 3784900; 461600, 3784900; 461600, 3785100; 461700,

3785100; 461700, 3786400; 461600, 3786400; 461600, 3788000; 461800, 3788000; 461800, 3787900; 462100, 3787900; 462100, 3787500; 462200, 3787500; 462200, 3787400; 462300, 3787400; 462300, 3787300; 462400, 3787300; 462400, 3787100; 462700, 3787100; 462700, 3787000; 462900, 3787000; 462900, 3786900; 463100, 3786900; 463100, 3786800; 463300, 3786800; 463300, 3787000; 463200, 3787000; 463200, 3787100; 463100, 3787300; 463000, 3787300; 463000, 3787400; 462800, 3787400; 462800, 3787200; 462600, 3787200; 462600, 3787600; 462700, 3787600; 462700, 3787800; 462800, 3787800; 462800, 3787900; 462900, 3787900; 462900, 3788000; 462800, 3788000; 462800, 3788100; 462700, 3788100; 462700, 3788400; 462800, 3788400; 462800, 3788300; 463300, 3788300; 3788200; 463400, 3788200; 463400, 3788300; 464600, 3788300; 464600, 3788400; 464700, 3788400; 464700, 3787100; 464800, 3787100; 464800, 3786900; 466200, 3786900; 466200, 3786800; 466400, 3785600; 466300, 3785600; 466300, 3785400; 466400, 3785400; 466400, 3785200; 466800, 3785200; 466800, 3785100; 467700, 3785100; 467700, 3785000; 469400, 3785000; 469600, 3785100; 469600, 3785000; 471200, 3785000; 471200, 3783900; 471100, 3783900; 471100, 3783500; 471500, 3783500; 471500, 3783400; 477600, 3783400; 477600, 3781800; 482400, 3781800; 482400, 3780200; 483700, 3780200; 483700, 3780100; 484000, 3780100; 484000, 3778500; 485600, 3778500; 485600, 3776900; 487000, 3776900; 487000, 3776800; 487200, 3776800; 487200, 3775300; 490400, 3775300; 490400, 3774400; 490500, 3774400; 490500, 3773600; 492100, 3773600; 492100, 3772000; 494700, 3772000; 494700, 3772100; 495200, 3772100; 495200, 3771200; 495300, 3771200; 495300, 3770600; 495200, 3770600; 495200, 3770500; 493700, 3770500; 493700, 3769000; 493600, 3769000; 493600, 3768900; 492100, 3768900; 492100, 3767800; 492000, 3767800; 492000, 3766000; 491900, 3766000; 491900, 3765800; 489600, 3765800; 489600, 3765700; 488900, 3765700; 488900, 3765400; 488800, 3765400; 488800, 3765100; 488600, 3765100; 488600, 3765000; 488800, 3765000; 488800, 3764900; 488900, 3764900; 488900, 3764600; 488800, 3764600; 488800, 3764400; 488900, 3764400; 488900, 3764200; 488800, 3764200; 488800, 3763900; 488500, 3763900; 488500, 3764000; 488100, 3764000; 488100, 3764200; 488500, 3764200; 488500, 3764400; 488400, 3764400; 488400, 3764600; 488300, 3764600; 488300, 3764800; 488100, 3764800; 488100, 3764700; 487600, 3764700; 3764800; 487300, 3764800; 487300, 3764900; 487200, 3764900; 487200, 3765200; 487100, 3765200; 487100, 3765500; 486800, 3765500; 486800, 3765600; 486600, 3765600; 486600, 3765700; 485900, 3765700; 485900, 3765800; 485800, 3765800; 485800, 3765900; 485700, 3765900; 485700, 3767000; 485900, 3767000; 485900, 3766800; 486000, 3766800; 486000, 3766700; 486100, 3766700; 486100, 3766600; 486200, 3766600; 486200, 3766500; 486300, 3766500; 3766400; 486400, 3766400; 486400, 3766100; 486600, 3766100; 486600, 3766000; 486800, 3766000; 486800, 3766300; 486700, 3766300; 486700, 3766500; 487000, 3766500; 487000, 3766400; 487200, 3766400; 487200, 3766300; 487600, 3766300; 487600, 3766400; 488300, 3766400; 488300, 3766200; 488500, 3766200; 488500, 3766300; 488300, 3767100; 488400, 3767100; 488400, 3767300; 489600, 3767300; 490500, 3767300; 490500, 3767200; 490500, 3767800; 490600, 3767800; 490600, 3768200; 490700, 3768200; 490700, 3768400; 490800, 3768400; 490800, 3768500; 490600, 3768500; 490600, 3768600; 490500, 3768600; 3769000; 490600, 3769000; 490600, 3769400; 490700, 3769400; 490700, 3769500; 490800, 3769500; 490800, 3769600; 490500, 3769600; 490500, 3769400; 490000, 3769400; 490000, 3769700; 490300, 3769700; 490300, 3769800; 489300, 3769800; 489300, 3769900; 488900, 3769900; 488900, 3770200; 489200, 3770200; 489200, 3770300; 489100, 3770400; 488900, 3770400; 488900, 3770700; 488800, 3770700; 488800, 3771300; 488100, 3771300; 488100, 3770800; 487900, 3770800; 487900, 3770900; 487700, 3770900; 487700, 3771100; 487800, 3771100; 487800, 3771400; 487700, 3771400; 487700, 3771300; 487400, 3771300; 487400, 3771400; 485800, 3771400; 485800, 3771300; 485600, 3771300; 3771200; 485300, 377

3779500; 445800, 3779600; 445700, 3779600; 445700, 3779700; 445600, 3779700; 445500, 3779900; 445500, 3780400; 445200, 3780400; 445200, 3779600; 444900, 3779600; 444900, 3779500; 444600, 3779500; 444200, 3779400; 444200, 3779400; 444200, 3779700; 444300, 3780200; 444200, 3780200; 444200, 3780300; 443900, 3780300; 443900, 3780400; 443700, 3780400; 443700, 3780300; 443300, 3780300; 443300, 3780400; 443200, 3780300; 443000, 3780300; 443000, 3780400; 442900, 3780400; 442900, 3780200; 442700, 3780200; 442700, 3780000; 442200, 3780000; 442200, 3779900; 442000, 3779900; 442000, 3779800; 441500, 3779800; 441500, 3779300; 441700, 3779300; 441700, 3779100; 441600, 3779100; 441600, 3778800; 441000, 3778800; 441000, 3778900; 441100, 3778900; 441100, 3779400; 441000, 3779400; 441000, 3779700; 440200, 3779700; 440200, 3779500; 440300, 3779500; 440300, 3779400; 440100, 3779400; 440100, 3779600; 439900, 3779600; 439900, 3779700; 439700, 3779700; 439700, 3779600; 438600, 3779600; 438600, 3779400; 438500, 3779400; 438500, 3779300; 438400, 3779300; 438400, 3779400; 438200, 3779400; 438200, 3779500; 437900, 3779500; 437900, 3779300; 437600, 3779300; 437600, 3779200; 437500, 3779200; 437500, 3778800; to the San Bernardino/Los Angeles County line at y coordinate 3778800; and returning to the point of beginning; excluding land bounded by 464200, 3785500; 464200, 3785600; 464100, 3785600; 464100, 3785500; 464200, 3785500; land bounded by 465800, 3785200; 465800, 3785000; 465900, 3785000; 465900, 3785200; 465800, 3785200; lands bounded by 465800, 3785200; 465800, 3785300; 465700, 3785300; 465700, 3785200; 465800, 3785200; land bounded by 464900, 3784800; 464900, 3784700; 465000, 3784800; 464900, 3784800; land bounded by 468500, 3782200; 468600, 3782200; 468600, 3782300; 468500, 3782300; 468500, 3782200; land bounded by 488500, 3773800; 488500, 3773900; 488400, 3773900; 488400, 3773800; 488500, 3773800; land bounded by 488800, 3773700; 488800, 3773600; 489000, 3773600; 489000, 3773700; 488800, 3773700; land bounded by 490800, 3769600; 490900, 3769600; 490900, 3769700; 491000, 3769700; 491000, 3769900; 490900, 3769900; 490900, 3769800; 490800, 3769800; 490800, 3769600; land bounded by 490900, 3766400; 491000, 3766400; 491000, 3766700; 490900, 3766700; 490900, 3766400; land bounded by 490900, 3766400; 490600, 3766400; 490600, 3766300; 490900, 3766300; 490900, 3766400; land bounded by 464300, 3785400; 464300, 3785500; 464200, 3785500; 464200, 3785400; 464300, 3785400; land bounded by 488800, 3773700; 488800, 3773800; 488500, 3773800; 488500, 3773700; 488800, 3773700; land bounded by 463400, 3788200; 463400, 3788100; 463500, 3788100; 463500, 3788200; 463400, 3788200; land bounded by 464400, 3785300; 464400, 3785400; 464300, 3785400; 464300, 3785300; 464400, 3785300; land bounded by 464800, 3784900; 464900, 3784900; land bounded by 464500, 3785200; 464500, 3785300; 464400, 3785300; 464400, 3785200; 464500, 3785200; land bounded by 464500, 3785200; 464500, 3785100; 463200, 3785100; 463200, 3782000; 464700, 3782000; 464700, 3784900; 464800, 3784900; 464800, 3785000; 464700, 3785000; 464700, 3785100; 464600, 3785100; 464600, 3785200; 464500, 3785200; land bounded by 466100, 3784900; 466100, 3784400; 466200, 3784400; 466200, 3784600; 466500, 3784600; 466500, 3784700; 466400, 3784700; 466400, 3784800; 466200, 3784800; 466200, 3784900; 466100, 3784900; lands bounded by 468100, 3784900; 468100, 3784500; 468000, 3784500; 468000, 3784600; 467800, 3784600; 467800, 3784700; 467600, 3784700; 467600, 3784800; 467400, 3784800; 467400, 3784700; 467300, 3784700; 467300, 3784600; 467100, 3784600; 467100, 3784500; 467000, 3784500; 467000, 3784300; 466900, 3784300; 466900, 3784100; 466800, 3784100; 466800, 3783900; 466700, 3783900; 466700, 3783500; 466800, 3783500; 466800, 3783400; 467000, 3783400; 467000, 3783300; 467200, 3783300; 467200, 3783200; 467300, 3783200; 467300, 3783400; 467400, 3783400; 467400, 3783500; 467700, 3783500; 467700, 3783400; 467800, 3783400; 467800, 3783100; 467900, 3783100; 467900, 3783200; 468000, 3783200; 468000, 3783300; 468100, 3783300; 468100, 3783200; 468200, 3783200; 468200, 3782900; 468100, 3782900; 468200, 3782800; 468200, 3782700; 468400, 3782700; 468400, 3782600; 468500, 3782600; 468500, 3783400; 468400, 3783400; 468400, 3783500; 468300, 3783500; 468300, 3783600; 468400, 3783600; 468400, 3783800; 468500, 3783800; 468500, 3784000; 468600, 3784000; 468600, 3784100; 468800, 3784100; 468800, 3784200; 469100, 3784200; 469100, 3784300; 469200, 3784300; 469200, 3784600; 469300, 3784600; 469300, 3784900; 469200, 3784900; 469200, 3784800; 469100, 3784800; 469100, 3784700; 468600, 3784700; 468600, 3784800; 468400, 3784800; 468400, 3784900; 468100, 3784900; land bounded by 475800, 3782800; 475800, 3782500; 475900, 3782500; 475900, 3782600; 476100, 3782600; 476100, 3782700; 476200, 3782700; 476200, 3782800; 475800, 3782800; land bounded by 453900, 3780300; 453900, 3779800; 454200, 3779800; 454200, 3780300; 453900, 3780300; land bounded by 453900, 3779500; 453900, 3778800; 454500, 3778800; 454500, 3779000; 454400, 3779000; 454400, 3779500; 453900, 3779500; land bounded by 454300, 3778700; 454300, 3778100; 454400, 3778100; 454400, 3778200; 454600, 3778200; 454600, 3778700; 454300, 3778700; land bounded by 484300, 3777300; 484300, 3777100; 484100, 3777100; 484100, 3777000; 483300, 3777000; 483300, 3776900; 483500, 3776900; 483500, 3776800; 483600, 3776800; 483600, 3776700; 483800, 3776700; 483800, 3776600; 483900, 3776600; 483900, 3776500; 484100, 3776500; 484100, 3776200; 484000, 3776200; 484000, 3776300; 483800, 3776300; 483500, 3776300; 483500, 3776400; 483500, 3776500; 483400, 3776500; 483400, 3776600; 483300, 3776600; 483300, 3776400; 483400, 3776400; 483700, 3776100; 483800, 3776100; 483800, 3776000; 483700, 3776000; 483700, 3775900; 483800, 3775900; 483800, 3775700; 483700, 3775700; 483700, 3775600; 483400, 3775600; 483400, 3775700; 483300, 3775700; 483300, 3775800; 483200, 3775800; 483200, 3776100; 483100, 3776100; 483100, 3776200; 483000, 3776200; 483000, 3776300; 482900, 3776300; 482900, 3776500; 482800, 3776500; 482800, 3776600; 482700, 3776600; 482700, 3776400; 482800, 3776400; 482800, 3775500; 482400, 3775500; 482400, 3772100; 485700, 3772100; 485700, 3774500; 485900, 3774500; 485900, 3774400; 486100, 3774400; 486100, 3774500; 486300, 3774500; 486300, 3774400; 486400, 3774400; 486400, 3774600; 486900, 3774600; 486900, 3775000; 486800, 3775000; 486800, 3775100; 486400, 3775100; 486400, 3775200; 486200, 3775200; 487500, 3775300; 487500, 3775300; 485700, 3775300; 485700, 3775400; 485600, 3775400; 485600, 3775500; 485300, 3775500; 485300, 3775700; 485400, 3775700; 485400, 3775800; 485300, 3775800; 485300, 3775900; 485200, 3775900; 485200, 3776000; 485100, 3776000; 485100, 3775900; 485000, 3775900; 485000, 3775800; 484900, 3775800; 484900, 3776200; 484500, 3776200; 484500, 3776600; 484400, 3776600; 484400, 3776700; 484300, 3776700; 484300, 3776900; 484400, 3776900; 484400, 3777300; 484300, 3777300; land bounded by 487300, 3774700; 487300, 3774500; 487200, 3774500; 487200, 3774300; 487100, 3774300; 487100, 3774200; 487900, 3774200; 487900, 3774400; 487800, 3774400; 487800, 3774500; 487600, 3774500; 487600, 3774600; 487500, 3774600; 487500, 3774700; 487300, 3774700; land bounded by 490800, 3772800; 490800, 3772700; 490700, 3772700; 490700, 3772400; 490800, 3772400; 490800, 3772300; 490700, 3772300; 490700, 3772200; 490600, 3772200; 490600, 3772100; 490300, 3772100; 490300, 3772000; 489800, 3772000; 489800, 3771900; 489900, 3771900; 489900, 3771800; 489800, 3771800; 489800, 3771500; 489900, 3771500; 490000, 3771400; 490000, 3771400; 490000, 3771300; 490100, 3771300; 490100, 3771200; 490300, 3771200; 490300, 3771100; 490500, 3771100; 490500, 3771000; 490700, 3771000; 490700, 3770900; 490900, 3770900; 490900, 3770800; 491100, 3770800; 491100, 3770600; 491300, 3770600; 491300, 3772600; 491200, 3772600; 491200, 3772700; 491000, 3772700; 491000, 3772800; 490800, 3772800; land bounded by 491500, 3771400; 491500, 3771200; 491600, 3771200; 491600, 3771400; 491500, 3771400; land bounded by 491400, 3770000; 491400, 3769900; 491600, 3769900; 491600, 3770000; 491400, 3770000; and land bounded by 491100, 3769500; 491100, 3769400; 491200, 3769400; 491200, 3769300; 491300, 3769300; 491300, 3769400; 491400, 3769400; 491400, 3769500; 491100, 3769500.



Map Unit 12: East Los Angeles County Linkage, Los Angeles County, California. From USGS 1:100,000 quadrangle Los Angeles, California (1983), beginning at the Los Angeles/San Bernardino County line at UTM NAD27 y coordinate 3778900; land bounded by the following UTM NAD27 coordinates (E, N): 434800, 3778900; 434800, 3779000; 429300, 3779000; 429300, 3778400; 429200, 3778400; 429200, 3778300; 429100, 3778300; 429100, 3778600; 428900, 3778600; 428900, 3778500; 429000, 3778500; 428900, 3778300; 428900, 3778200; 428800, 3778200; 428800, 3778100; 428900, 3778100; 428900, 3777800; 428800, 3777800; 428700, 3777400; 428400, 3777400; 428400, 3777900; 428300, 3777900; 428300, 3777800; 428200, 3777800; 428200, 3777600; 428000, 3777600; 428000, 3777500; 427800, 3777400; 427600, 3777400; 427600, 3777100; 427500, 3777100; 427500, 3777000; 427300, 3777000; 427300, 3776800; 427100, 3776800; 427100, 3776700; 427000, 3776600; 427300, 3776600; 427300, 3776400; 427100, 3776400; 427100, 3776300; 427000, 3776300; 427000, 3776200; 426800, 3776200; 426800, 3776400; 426500, 3776500; 426400, 3776500; 426400, 3776400; 426300, 3776400; 426300, 3776200; 426000, 3776200; 426000, 3776400; 425300, 3776400; 425300, 3776500; 424800, 3776500; 424800, 3776600; 424700, 3776600; 424700, 3776700; 424600, 3776700; 424600, 3776800; 424500, 3776800; 424500, 3777100; 424600, 3777100; 424600, 3777200; 424500, 3777200; 424500, 3780500; 424500, 3780500; 435600, 3780500;

435600, 3780400; 437600, 3780400; to the Los Angeles/San Bernardino County line at UTM NAD27 y coordinate 3780300; and returning to the point of beginning.

Lands bounded by the following UTM NAD27 coordinates (E, N): 426700, 3772700; 427000, 3772700; 427000, 3772400; 427200, 3772400; 427200, 3772300; 427700, 3772300; 427700, 3770400; 427600, 3770400; 427600, 3770300; 427200, 3770300; 427200, 3770200; 426900, 3770200; 426900, 3770100; 426800, 3770100; 426800, 3770000; 426600, 3770000; 426600, 3769900; 426400, 3769900; 426400, 3769800; 426100, 3769800; 426100, 3769700; 425700, 3769700; 425700, 3769800; 425600, 3769800; 425600, 3769800; 425100, 3770000; 425500, 3769500; 425300, 3769500; 425300, 3769400; 424900, 3769400; 424900, 3769300; 424400, 3769300; 424400, 3769600; 424700, 3769600; 424700, 3769700; 424800, 3769700; 424800, 3769800; 424900, 3769800; 424900, 3769900; 424600, 3769900; 424600, 3770300; 424800, 3770200; 425100, 3770200; 425100, 3770400; 424700, 3770400; 424700, 3770600; 424800, 3770600; 424800, 3770700; 425100, 3770700; 425100, 3770800; 425000, 3770800; 425000, 3771000; 424800, 3771000; 424800, 3771200; 424700, 3771200; 424700, 3771300; 424600, 3771300; 424600, 3771400; 424500, 3771400; 424500, 3771700; 424400, 3771700; 424400, 3772100; 424500, 3772100; 424500, 3773000; 424600, 3773000; 424600, 3773100; 425000, 3773100; 425000, 3773200; 425100, 3773200; 425100, 3773300; 425200, 3773300; 425200, 3773500; 425500, 3773500; 425500, 3773400; 426000, 3773400; 426000, 3773500; 426200,

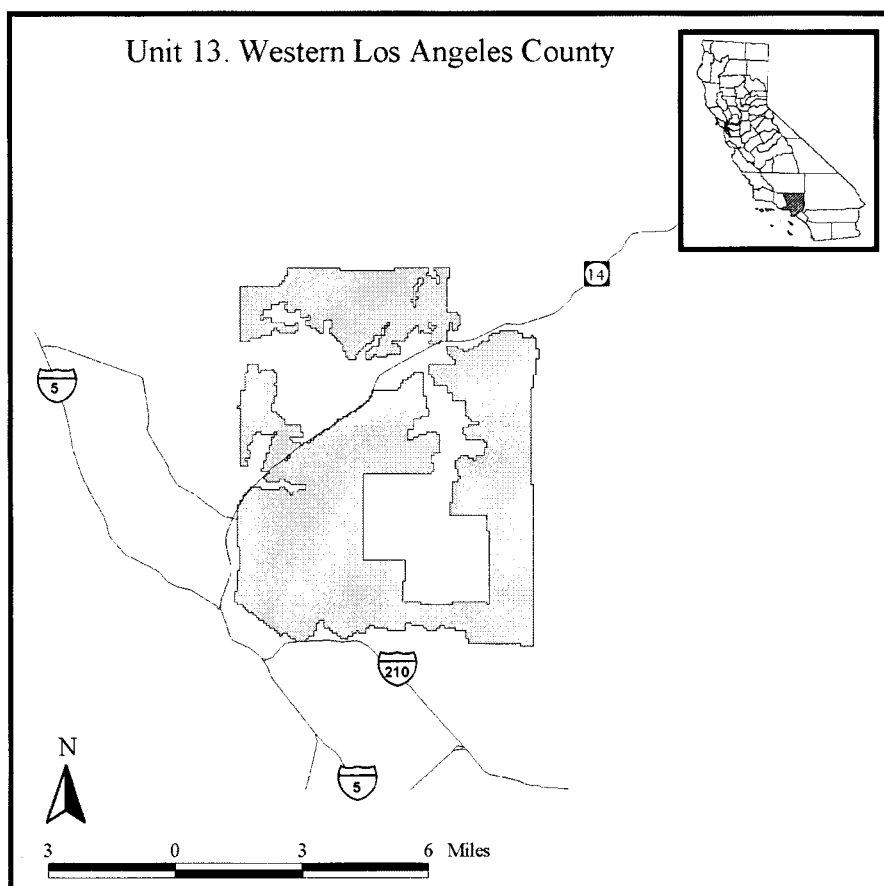
3773500; 426200, 3773300; 426300, 3773300; 426300, 3773400; 426600, 3773400; 426600, 3773300; 427000, 3773300; 427000, 3773200; 427200, 3773200; 427200, 3773100; 427300, 3773100; 427300, 3772800; 426700, 3772800; 426700, 3772700; excluding land bounded by 425800, 3771300; 425700, 3771300; 425700, 3771200; 425800, 3771200; 425800, 3771300; land bounded by 425300, 3770000; 425300, 3769900; 425400, 3769900; 425400, 3770000; 425300, 3770000; land bounded by 426600, 3772600; 426500, 3772600; 426500, 3772500; 426200, 3772500; 426200, 3772800; 426400, 3772800; 426400, 3773000; 426200, 3773000; 426200, 3773100; 425900, 3773100; 425900, 3773200; 425800, 3773200; 425800, 3773100; 425600, 3773100; 425600, 3772900; 425500, 3772900; 425500, 3772800; 425300, 3772800; 425300, 3772600; 425800, 3772600; 425800, 3772400; 425900, 3772400; 425900, 3772300; 425800, 3772300; 425800, 3772200; 425500, 3772200; 425500, 3772300; 425200, 3772200; 425100, 3772200; 425100, 3772000; 425200, 3772000; 425200, 3771900; 425400, 3771900; 425400, 3771600; 425500, 3771600; 425500, 3771700; 425600, 3771700; 425600, 3771600; 425800, 3771600; 425800, 3771300; 426200, 3771300; 426200, 3771400; 426300, 3771400; 426300, 3771500; 426200, 3771500; 426200, 3771800; 426100, 3771800; 426100, 3772000; 426200, 3772000; 426200, 3772100; 426300, 3772100; 426300, 3772200; 426500, 3772200; 426500, 3772400; 426600, 3772400; 426600, 3772600; land bounded by 425100, 3770200; 425100, 3770000; 425300, 3770000; 425300, 3770100; 425200, 3770100; 425200, 3770200; land

bounded by 425500, 3773400; 425400, 3773400; 425400, 3773200; 425500, 3773200; 425500, 3773400; land bounded by 426700, 3772700; 426600, 3772700; 426600, 3772600; 426700, 3772600; 426700, 3772700; and land bounded by 426600, 3771900; 426600, 3771800; 426500, 3771800; 426500, 3771700; 426700, 3771700; 426700, 3771800; 426900, 3771800; 426900, 3771900; 426600, 3771900.

Land bounded by the following UTM NAD27 coordinates (E, N): 420700, 3769300; 421200, 3769300; 421200, 3769100; 421300,

3769100; 421300, 3769000; 421500, 3769000; 421500, 3769200; 421800, 3769200; 421800, 3769300; 424300, 3769300; 424300, 3769100; 424200, 3769100; 424200, 3769000; 424100, 3769000; 424100, 3768800; 424000, 3768800; 424000, 3768700; 423600, 3768700; 423600, 3768600; 423700, 3768600; 423700, 3768400; 423300, 3768400; 423300, 3768500; 423200, 3768500; 423200, 3768600; 423100, 3768600; 423100, 3768500; 422900, 3768500; 422900, 3768400; 422600, 3768400; 422600, 3768500; 422400, 3768500; 422400, 3768400; 422200,

3768400; 422200, 3768200; 422000, 3768200; 422000, 3768100; 421800, 3768100; 421800, 3768000; 421500, 3768000; 421500, 3768100; 421400, 3768100; 421400, 3768200; 421300, 3768200; 421300, 3768100; 421100, 3768100; 421100, 3768200; 421000, 3768200; 421000, 3768500; 421100, 3768500; 421100, 3768600; 421200, 3768600; 421200, 3768700; 421100, 3768700; 421100, 3768800; 421000, 3768800; 421000, 3768900; 420900, 3768900; 420900, 3769000; 420800, 3769000; 420800, 3769100; 420700, 3769100; 420700, 3769300.



Map Unit 13: Western Los Angeles County, Los Angeles County, California. From USGS 1:100,000 quadrangle map Los Angeles, California (1983), land bounded by the following UTM NAD27 coordinates (E, N): 367500, 3810500; 367200, 3810500; 367200, 3810300; 367100, 3810300; 367100, 3810200; 366900, 3810200; 366900, 3810100; 366800, 3810100; 366800, 3810000; 366700, 3810000; 366700, 3809900; 366600, 3809900; 366600, 3809800; 366500, 3809800; 366500, 3809600; 366200, 3809600; 366200, 3809700; 366100, 3809700; 366100, 3809900; 366000, 3809900; 366000, 3810200; 365900, 3810200; 365900, 3810300; 365800, 3810300; 365800, 3810400; 365700, 3810400; 365700, 3810500; 365600, 3810500; 365600, 3810600; 365500, 3810600; 365500, 3810800; 365600, 3810800; 365600, 3811100; 365300, 3811100; 365300, 3810600; 365100, 3810600; 365100, 3810700; 365000, 3810700; 365000, 3810800; 364800, 3810800; 364800, 3810900; 364600, 3810900; 364600, 3811100; 364800, 3811100; 364800, 3811300;

364700, 3811300; 364700, 3811200; 364400, 3811200; 364400, 3811500; 364200, 3811500; 364200, 3811400; 363900, 3811400; 363900, 3811500; 363800, 3811500; 363800, 3811700; 363900, 3811700; 363900, 3811800; 363600, 3811800; 363600, 3811700; 363300, 3811700; 363300, 3811500; 363000, 3811500; 363000, 3811300; 362900, 3811300; 362900, 3811100; 363000, 3811100; 363000, 3811200; 363300, 3811200; 363300, 3811000; 363800, 3811000; 363800, 3810900; 364200, 3810900; 364200, 3811000; 364300, 3810700; 364200, 3810700; 364200, 3810600; 363600, 3810600; 363600, 3810700; 363500, 3810700; 363500, 3810800; 363400, 3810800; 363400, 3810700; 363300, 3810700; 363300, 3810500; 362900, 3810500; 362900, 3810400; 362500, 3810400; 362500, 3810300; 362100, 3812400; 363600, 3812400; 363600, 3812500; 363700, 3812500; 363700, 3812600; 363800, 3812600; 363800, 3812800; 363900, 3812800; 363900, 3813100; 365900, 3813000; 368000, 3813000; 368000,

3813100; 369300, 3813100; 369300, 3812900; 369200, 3812900; 369200, 3812800; 369400, 3812800; 369400, 3812700; 369600, 3812700; 369600, 3812500; 369700, 3812500; 369700, 3812800; 369600, 3812800; 369600, 3813000; 369500, 3813000; 369500, 3813100; 370100, 3813100; 370100, 3812700; 370000, 3812700; 370000, 3811400; 370400, 3811400; 370400, 3811300; 370500, 3811300; 370500, 3810900; 370400, 3810900; 370400, 3810700; 370200, 3810700; 370200, 3811000; 370100, 3811000; 370100, 3810700; 370000, 3810700; 370000, 3810300; 369700, 3810300; 369700, 3810200; 369300, 3810200; 369300, 3810300; 369400, 3810300; 369400, 3810600; 369100, 3810600; 369100, 3810700; 369000, 3810700; 369000, 3810600; 368900, 3810600; 368900, 3810900; 368800, 3810900; 368800, 3810800; 368700, 3810800; 368700, 3810700; 368600, 3810700; 368600, 3810600; 368500, 3810600; 368500, 3810400; 368400, 3810400; 368400, 3810300; 367900, 3810300; 367900, 3810200; 368100, 3810200; 368100, 3810100; 368200, 3810100;

368200, 3809800; 367700, 3809800; 367700, 3809700; 367300, 3809700; 367300, 3809800; 367200, 3809800; 367200, 3809700; 367100, 3809700; 367100, 3809600; 366900, 3809600; 366900, 3809900; 367000, 3809900; 367000, 3810000; 367100, 3810000; 367100, 3810100; 367400, 3810100; 367400, 3810400; 367500, 3810400; 367500, 3810500; excluding land bounded by 367700, 3810900; 367800, 3810900; 367800, 3811000; 367700, 3811000; 367700, 3810900; land bounded by 367600, 3810800; 367700, 3810900; 367600, 3810900; 367600, 3810800; land bounded by 367600, 3810800; 367500, 3810800; 367500, 3810500; 367600, 3810500; 367600, 3810800; lands bounded by 368900, 3812700; 368900, 3812500; 368800, 3812500; 368800, 3812400; 368700, 3812400; 368700, 3811900; 368600, 3811900; 368600, 3811800; 368700, 3811800; 368700, 3811600; 368800, 3811600; 368800, 3811900; 368900, 3811900; 368900, 3812000; 368800, 3812200; 368900, 3812200; 368900, 3812400; 369000, 3812400; 369000, 3812500; 369100, 3812500; 369100, 3812700; 368900, 3812700; and land bounded by 369300, 3811000; 369300, 3810800; 369400, 3810800; 369400, 3810700; 369500, 3810700; 369500, 3810800; 369600, 3810800; 369600, 3810900; 369400, 3810900; 369400, 3811000; 369300, 3811000.

Land bounded by the following UTM NAD27 coordinates (E, N): 363400, 3806700; 362900, 3806700; 362900, 3806800; 362700, 3806800; 362700, 3806700; 362600, 3806700; 362600, 3806400; 362500, 3806400; 362500, 3806300; 362400, 3806300; 362400, 3806100; 362500, 3806100; 362500, 3805800; 362300, 3805800; 362300, 3805700; 362400, 3805700; 362400, 3805500; 362100, 3805500; 362100, 3807700; 362000, 3807700; 362000, 3807800; 362100, 3807800; 362100, 3808400; 362300, 3808400; 362300, 3809100; 362400, 3809100; 362400, 3809400; 362800, 3809400; 362800, 3809100; 362900, 3809100; 362900, 3809200; 363400, 3809200; 363400, 3809100; 363500, 3809100; 363500, 3808700; 363400, 3808700; 363400, 3808600; 363500, 3808600; 363500, 3808200; 363400, 3808200; 363400, 3807900; 363300, 3807900; 363300, 3807600; 363500, 3807600; 363500, 3807500; 363600, 3807500; 363600, 3807400; 363700, 3807400; 363700, 3807300; 363800, 3807300; 363800, 3807100; 364400, 3807100; 364400, 3806800; 364500, 3806800; 364500, 3806600; 364000, 3806600; 364000, 3806500; 364100, 3806500; 364100, 3806400; 364400, 3806400; 364400, 3806300; 364500, 3806300; 364500, 3806400; 364800, 3806400; 364800, 3806500; 364900, 3806500; 364900, 3806600; 365000, 3806600; 365000, 3806700; 365200, 3806700; 365200, 3806800; 365300, 3806800; 365300, 3806900; 365500, 3806900; 365500, 3807000; 365600, 3807000; 365600, 3807100; 365700, 3807100; 365700, 3807200; 365800, 3807200; 365800, 3807300; 366000, 3807300; 366000, 3807400; 366200, 3807400; 366200, 3807500; 366300, 3807500; 366300, 3807600; 366500, 3807600; 366500, 3807700; 366600, 3807700; 366600, 3807800; 366800, 3807800; 366800, 3807900; 366900, 3807900; 366900, 3808000; 367000, 3808000;

367000, 3808200; 367100, 3808200; 367100, 3808400; 368100, 3808400; 368100, 3808500; 368200, 3808500; 368200, 3808700; 368300, 3808700; 368300, 3808800; 368500, 3808800; 368500, 3808900; 368600, 3808900; 368600, 3809000; 368700, 3809000; 368700, 3809100; 369100, 3809100; 369100, 3808200; 369200, 3808200; 369200, 3807700; 369300, 3807700; 369300, 3807400; 369000, 3807400; 369000, 3807300; 368700, 3807300; 368700, 3806900; 368500, 3806900; 368700, 3806500; 368700, 3806500; 368700, 3806600; 368900, 3806600; 368900, 3806700; 369200, 3806700; 369200, 3806800; 369600, 3806800; 369600, 3806700; 369700, 3806700; 3806000; 369500, 3805900; 369400, 3805900; 369400, 3805600; 369500, 3805600; 369500, 3805300; 369400, 3805300; 369400, 3805200; 366800, 3805200; 366800, 3801900; 368400, 3801900; 368400, 3801100; 368300, 3801100; 368300, 3800300; 369000, 3800300; 369000, 3800200; 370200, 3800200; 370200, 3800300; 371500, 3800300; 371500, 3800200; 371600, 3800200; 371600, 3803000; 371500, 3803000; 371500, 3803600; 370100, 3803600; 370100, 3804100; 370200, 3804100; 370200, 3804900; 370400, 3804900; 370400, 3805000; 370500, 3805000; 370500, 3805100; 370400, 3805100; 370400, 3805400; 370300, 3805400; 370300, 3805700; 370400, 3805700; 370400, 3805800; 370500, 3805800; 370500, 3805900; 370800, 3805900; 370800, 3805800; 371000, 3805800; 371000, 3805700; 371100, 3805700; 371100, 3805900; 371400, 3805900; 371400, 3806200; 371500, 3806200; 371500, 3806400; 371400, 3806400; 371400, 3806500; 370700, 3806500; 370700, 3806700; 370600, 3806700; 3807000; 370800, 3807000; 370800, 3807100; 371200, 3807100; 371200, 3807200; 370900, 3807200; 370900, 3807300; 370800, 3807300; 370800, 3807400; 370700, 3807400; 370700, 3808000; 370200, 3808000; 370200, 3808300; 370000, 3808300; 370000, 3808600; 369500, 3808600; 369500, 3808900; 369400, 3808900; 369400, 3809000; 369300, 3809000; 369300, 3809400; 370300, 3809400; 370300, 3809600; 370200, 3809600; 370200, 3809700; 370100, 3809700; 370100, 3809800; 370000, 3809800; 370000, 3810100; 370400, 3810100; 370400, 3810000; 370600, 3810000; 370600, 3809900; 370800, 3809900; 370800, 3810000; 371000, 3810000; 371000, 3810100; 371200, 3810100; 371200, 3810200; 371300, 3810200; 371300, 3810300; 371600, 3810300; 371600, 3810500; 371700, 3810500; 371700, 3810600; 372000, 3810600; 372000, 3810700; 372700, 3810700; 372700, 3810600; 372900, 3810600; 372900, 3810400; 373200, 3810400; 373200, 3810500; 373300, 3810500; 373300, 3810400; 373400, 3810400; 373400, 3810000; 373500, 3810000; 373500, 3809600; 373400, 3809600; 373300, 3809000; 373300, 3809000; 373300, 3808500; 373200, 3808500; 373200, 3804800; 373300, 3804800; 373300, 3798600; 372800, 3798600; 372800, 3798700; 370800, 3798700; 370800, 3798900; 370700, 3798900; 370700, 3799200; 370300, 3799300; 369900, 3799300; 369900, 3799400; 369700, 3799400; 369700, 3799300; 369600, 3799300; 369200, 3799200; 369200, 3799300;

369100, 3799300; 369100, 3799400; 368600, 3799400; 368600, 3799500; 368400, 3799500; 368400, 3799200; 367700, 3799200; 367700, 3799300; 367200, 3799300; 367200, 3799400; 367000, 3799400; 367000, 3799300; 366900, 3799300; 366900, 3799100; 366600, 3799100; 366600, 3799200; 366500, 3799200; 366400, 3799100; 366400, 3799000; 366200, 3799000; 366200, 3798900; 365900, 3798900; 365900, 3799000; 365800, 3799000; 365800, 3799100; 365600, 3799100; 365600, 3799200; 365500, 3799200; 365500, 3799300; 365300, 3799300; 365300, 3799600; 365100, 3799600; 365100, 3799500; 365000, 3799500; 365000, 3799200; 364900, 3799200; 364900, 3799000; 364700, 3799000; 364700, 3798900; 364600, 3798900; 364600, 3798800; 364200, 3798800; 364200, 3798900; 364000, 3798900; 364000, 3799000; 363900, 3799000; 363900, 3799100; 363700, 3799100; 363700, 3799000; 363600, 3799000; 363600, 3799100; 363500, 3799100; 363500, 3799200; 363400, 3799200; 363400, 3799300; 363200, 3799300; 363200, 3799400; 363100, 3799400; 363100, 3799500; 363000, 3799500; 363000, 3799600; 362800, 3799600; 362800, 3799700; 362700, 3799700; 362700, 3799800; 362600, 3799800; 362600, 3799900; 362400, 3799900; 362400, 3800000; 362300, 3800000; 362300, 3800100; 362200, 3800100; 362200, 3800200; 362000, 3800200; 362000, 3800300; 361900, 3800300; 361900, 3800700; 362000, 3800700; 362000, 3801500; 362100, 3801500; 362100, 3802400; 362000, 3802400; 362000, 3804000; 362100, 3804000; 362100, 3804200; 362200, 3804200; 362200, 3804400; 362300, 3804400; 362300, 3804500; 362400, 3804500; 362400, 3804600; 362500, 3804600; 362500, 3804700; 362900, 3804700; 362900, 3804600; 363600, 3804600; 363600, 3804700; 363800, 3804700; 363800, 3804600; 363900, 3804600; 363900, 3804500; 364000, 3804500; 364000, 3804400; 364100, 3804400; 364100, 3804500; 364300, 3804500; 364300, 3804600; 364600, 3804600; 364600, 3804800; 364000, 3804800; 364000, 3804900; 363800, 3804900; 363800, 3805000; 363600, 3805000; 363600, 3804900; 363100, 3804900; 363100, 3805000; 3805000; 363000, 3805000; 363000, 3805100; 363100, 3805100; 363100, 3805200; 363200, 3805200; 363200, 3805300; 362900, 3805300; 362900, 3805400; 363000, 3805400; 363000, 3805700; 363100, 3805700; 363100, 3806000; 363200, 3806000; 363200, 3806300; 363300, 3806300; 363300, 3806600; 363400, 3806600; 363400, 3806700; excluding land bounded by 363400, 3806700; 363500, 3806700; 363500, 3806800; 363400, 3806800; 363400, 3806700; 3805800; 363900, 3805800; 363900, 3805900; 363900, 3805800; and land bounded by 363900, 3805800; 363800, 3805800; 363800, 3805700; 363900, 3805700; 363900, 3805800.

Dated: October 16, 2000.

Kenneth L. Smith,

Acting Assistant Secretary for Fish and Wildlife and Parks.

[FR Doc. 00-26969 Filed 10-17-00; 2:36 pm]

BILLING CODE 4310-55-P