

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

RIN 1018-A171

Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the San Diego Fairy Shrimp (*Branchinecta sandiegonensis*)**AGENCY:** Fish and Wildlife Service, Interior.**ACTION:** Proposed rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), propose to designate new critical habitat units pursuant to the Endangered Species Act of 1973, as amended (Act), for the San Diego fairy shrimp (*Branchinecta sandiegonensis*). The San Diego fairy shrimp is listed as an endangered species under the Act. A total of approximately 2,468 hectares (6,098 acres) of land within Orange and San Diego counties, California, are within the boundaries of proposed critical habitat.

Critical habitat receives protection from destruction or adverse modification through consultation under section 7 of the Act with regard to actions carried out, funded, or authorized by a Federal agency. Section 4 of the Act requires us to consider economic and other relevant impacts when specifying any particular area as critical habitat.

We are soliciting data and comments from the public on all aspects of this proposal, including data on economic and other impacts of the designation, and our approaches for handling any future habitat conservation plans and Department of Defense installations. We may revise this proposal prior to final designation to incorporate or address new information received during the comment period.

The drafting and review of this proposed rule revealed a number of difficult and complex issues regarding which public comment would be particularly helpful, especially given the strict court-ordered deadline pursuant to which this proposal is being published. Therefore, in addition to the general comments requested above, we are requesting public comment either in support of or opposition to a number of specific issues associated with this proposal to assist in development of a final rule.

DATES: We will accept comments until June 23, 2003. Public hearing requests must be received by June 6, 2003.

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

(1) You may submit written comments and information to the Field Supervisor, Carlsbad Fish and Wildlife Office, U.S. Fish and Wildlife Service, 6010 Hidden Valley Road, Carlsbad, CA 92009.

(2) You may also send comments by electronic mail (e-mail) to FW1SDFS@r1.fws.gov. See the Public Comments Solicited section below for file format and other information about electronic filing.

(3) You may hand-deliver comments to our Carlsbad Fish and Wildlife Office, U.S. Fish and Wildlife Service, 6010 Hidden Valley Road, Carlsbad, CA 92009.

Comments and materials received will be available for public inspection, by appointment, during normal business hours at the above address.

FOR FURTHER INFORMATION CONTACT: Field Supervisor, Carlsbad Fish and Wildlife Office, at the above address (telephone 760/431-9440; facsimile 760/431-9618).

SUPPLEMENTARY INFORMATION:**Background**

The San Diego fairy shrimp (*Branchinecta sandiegonensis*) is a small aquatic crustacean in the order, Anostraca, restricted to vernal pools in coastal southern California and south to northwestern Baja California, Mexico. Vernal pools contain water in the winter months which drains and evaporates giving way to a vernal display of wildflowers. The San Diego fairy shrimp is a habitat specialist found in smaller, shallow vernal pools and ephemeral (lasting a short time) basins that range in depth from approximately 5 to 30 centimeters (cm) (2 to 12 inches (in)) (Simovich and Fugate 1992; Hathaway and Simovich 1996). Water chemistry is also an important factor in determining fairy shrimp distribution (Belk 1977; Gonzales *et al.* 1996). This species does not occur in riverine or marine waters. All known localities are below 701 meters (m) (2,300 feet (ft)) and are within 64 kilometers (km) (40 miles (mi)) of the Pacific Ocean.

San Diego fairy shrimp is one of several *Branchinecta* species that occur in southern California (Simovich and Fugate 1992). Other species of *Branchinecta* in southern California include the nonlisted versatile fairy shrimp (*B. lindahli*) and the federally threatened vernal pool fairy shrimp (*B. lynchi*). Male San Diego fairy shrimp are distinguished from males of other species of *Branchinecta* by differences

found at the distal (located far from the point of attachment) tip of the second antennae. Females are distinguishable from females of other species of *Branchinecta* by the shape and length of the brood sac, the length of the ovary, and by the presence of paired dorsolateral (located on the sides, toward the back) spines on five of the abdominal segments (Fugate 1993).

Mature individuals lack a carapace (hard outer covering of the head and thorax) and have a delicate elongate body, large stalked compound eyes, and 11 pairs of swimming legs. They swim or glide gracefully upside down by means of complex wavelike beating movements of the legs that pass from front to back. Adult male San Diego fairy shrimp range in size from 9 to 16 millimeters (mm) (0.35 to 0.63 in.); adult females are 8 to 14 mm (0.31 to 0.55 in.) long. The second pair of antennae in males are greatly enlarged and specialized for clasping the females during copulation, while the second pair of antennae in the females are cylindrical and elongate. The females carry their eggs in an oval or elongate ventral brood sac (Eriksen and Belk 1999). Fairy shrimp are presumed to feed on algae, bacteria, protozoa, rotifers, and bits of organic matter (Pennak 1989; Eng *et al.* 1990; Parsick 2002).

Adult San Diego fairy shrimp are usually observed from January to March; however, in years with early or late rainfall, the hatching period may be extended. The species hatches and matures within 7 to 14 days, depending on water temperature (Hathaway and Simovich 1996; Simovich and Hathaway 1997). San Diego fairy shrimp may no longer be visible after about a month, but animals will continue to hatch if subsequent rains result in additional water or refilling of the vernal pools (Branchiopod Research Group 1996). The eggs are either dropped to the pool bottom or remain in the brood sac until the female dies and sinks. The "resting eggs," or "cysts," are capable of withstanding temperature extremes and prolonged drying. When the pools refill in the same or subsequent rainy seasons, some but not all of the eggs may hatch. Fairy shrimp egg banks in the soil may be composed of the eggs from several years of breeding (Donald 1983; Simovich and Hathaway 1997). Simovich and Hathaway (1997) found that vernal pools and ephemeral wetlands that support anostracans, small aquatic crustaceans like the San Diego fairy shrimp, and occur in areas with variable weather conditions or filling periods, may hatch only a fraction of the total

cyst (organisms in a resting stage) bank in any given year. Thus, the San Diego fairy shrimp is adapted to highly variable environments.

San Diego fairy shrimp require functioning vernal pools for their conservation (Belk 1998). Both the pool basin and the surrounding watershed are essential for a functioning vernal pool system (Hanes and Stromberg 1998). Loss of upland vegetation, increased overland flow due to urban runoff, and alteration of the micro-topography can all alter the narrow physiological parameters that the San Diego fairy shrimp requires for survival.

The maintenance of genetic variability is crucial to the survival of a species with declining populations and a limited range, such as the San Diego fairy shrimp (Gilpin and Soule 1986; Lesica and Allendorf 1995). Vernal pool complexes throughout the range of the San Diego fairy shrimp are critical for the conservation of this species. Likewise, the pools within a multi-pool complex are also important for the local population of San Diego fairy shrimp to remain viable. Vernal pool complexes identified as necessary in the Recovery Plan for Vernal Pools in Southern California must be secured in a configuration that maintains habitat function and viability. There are several reasons for this. Each vernal pool complex is unique in soil type, species composition, and hydrology (Service 1998). This high degree of variability in habitat combined with the unpredictability of winter rains (pool filling events) has given rise to a genetic structure between pool complexes (Davies 1996; Davies *et al.* 1997). This means that San Diego fairy shrimp living in one pool complex may not be adapted to a pool complex elsewhere in the species range. This research also revealed that within pool complexes there was a low degree of genetic variability. The genetic structure and low genetic variability suggests that there is a low degree of gene exchange between different pool complexes. This research indicates that pool complexes throughout the range contain unique genetic traits necessary for the conservation of San Diego fairy shrimp.

The life cycle of the San Diego fairy shrimp is such that in any single breeding event there may be individuals present from multiple generations. This has the effect of dampening the effects of genetic drift and inbreeding that are normally associated with a small population size. In particular this makes the preservation of existing vernal pools a high priority for critical habitat designation because of the cyst banks that are present in natural pools (Belk

1998). Creation of vernal pools has not been successfully implemented as a viable measure to compensate for impacts to vernal pools. Restoration of vernal pools has been successfully completed; however, restoration must be carefully pursued. Restored pools may lack the multi-generational cyst bank. In the event that soils are transported from existing vernal pools to a restoration site, soils may be mixed, compacted, or otherwise mistreated so that the cyst bank can no longer function (Hathaway *et al.* 1996). Thus, restored pools may not exhibit the necessary genetic dynamics of natural pools and may not contribute as significantly as natural vernal pools.

Vernal pools have a discontinuous occurrence in several regions of California (Keeler-Wolf *et al.* 1995), from as far north as the Modoc Plateau in Modoc County, south through San Diego County to the international border with Mexico. Vernal pools form in regions with Mediterranean climates, where shallow depressions fill with water during fall and winter rains and then evaporate in the spring (Collie and Lathrop 1976; Holland 1976, 1988; Holland and Jain 1977, 1988; Thorne 1984; Zedler 1987; Simovich and Hathaway 1997). The presence of the surrounding watershed is a vital component of a vernal pool ecosystem. The term "watershed" is commonly associated with riverine drainages, however, in the context of this discussion the term "watershed" refers to the land surrounding a single vernal pool or vernal pool complex that contributes to the hydrology of the vernal pools. These watersheds can vary in size from a few hundred meters to much larger areas around the vernal pools.

In years of high precipitation, overbank flooding from intermittent streams may augment the amount of water in some vernal pools (Hanes *et al.* 1990). Vernal pool studies conducted in the Sacramento Valley indicate that the contribution of subsurface or overland flows is significant only in years of high precipitation when pools are already saturated (Hanes and Stromberg 1996). Downward percolation of water in vernal pool basins is prevented by the presence of an impervious subsurface layer, such as a claypan, hardpan, or volcanic stratum (Holland 1976, 1988). The integrity of both the vernal pool and the surrounding watershed is crucial to the long term survival and conservation of the San Diego fairy shrimp.

Researchers have found that vernal pools located in San Diego County are associated with five soil series types: Huerfueño, Olivenhain, Placentia,

Redding, and Stockpen (Bauder and McMillan 1998). These soil types have a nearly impermeable surface or subsurface soil layer with a flat or gently sloping topography (Service 1998). Due to local topography and geology, the pools are usually clustered into pool complexes (Bauder 1986; Holland and Jain 1977). Pools within a complex are typically separated by distances on the order of meters, and may form dense, interconnected mosaics of small pools or a more sparse scattering of larger pools.

Vernal pool systems are often characterized by different landscape features including mima mound (miniature mounds) microtopography, varied pool basin size and depth, and vernal swales (low tract of marshy land). Vernal pool complexes that support one to many distinct vernal pools are often interconnected by a shared watershed. Chemistry, geophysics, and hydrology influenced by watershed characteristics determine the distribution of vernal pool species (Dehoney and Lavigne 1984; Eng *et al.*, 1990, Branchiopod Research Group 1996), therefore ecosystems on which the San Diego fairy shrimp and its vernal pool habitat depend are best described from a watershed perspective (see Recovery Criteria 1 and 2 in the Recovery Plan for Vernal Pools of Southern California, Service 1998). California's vernal pools begin to fill with the fall and winter rains. Before ponding occurs, there is a period during which the soil is wetted and the local water table may rise. Some pools in a complex have a substantial watershed that contributes to water input; others may fill almost entirely from rain falling directly into the pool (Hanes and Stromberg, 1998). Even in pools filled primarily by direct precipitation, subsurface inflows from surrounding soils can help dampen water level fluctuations during late winter and early spring (Hanes and Stromberg 1998).

Vernal pools exhibit four major phases—the wetting phase, when vernal pool soils become saturated; the aquatic phase, when a perched water table develops within the watershed and the vernal pool contains water; a waterlogged drying phase, when the vernal pool begins losing water as a result of evaporation and loss to the surrounding soils but soil moisture remains high; and the dry phase, when the vernal pool and underlying soils are completely dry (Keeley and Zedler 1998). Upland areas within vernal pool watersheds are also an important source of nutrients to vernal pool organisms. Vernal pool habitats derive most of their nutrients from detritus, which is

washed into the pool from adjacent uplands, and these nutrients provide the foundation for the vernal pool aquatic community food chain (Eriksen and Belk 1999).

San Diego County supports the largest number of remaining vernal pools occupied by the San Diego fairy shrimp. Scientists estimated that, historically, vernal pool soils covered 51,800 hectares (ha) (200 square miles (mi.²)) in San Diego County (Bauder and McMillan 1998). The majority of these pools were destroyed prior to 1990. On the basis of available information to us at the time the species was listed, we estimated that fewer than 81 ha (200 acres (ac)) of occupied vernal pool habitat remained. This calculation was based on the area of the specific vernal pool basins that contained San Diego fairy shrimp, and did not include the acreage of the surrounding watersheds. Keeler-Wolf *et al.* (1995) concluded that the greatest recent losses of vernal pool habitat in San Diego County have occurred in Mira Mesa, Rancho Penasquitos, and Kearny Mesa, which accounted for 73 percent of all the pools destroyed in the region during the 7-year period between 1979 and 1986. Other substantial losses have occurred in the Otay Mesa area, where over 40 percent of the vernal pools were destroyed between 1979 and 1990. Similar to San Diego County, vernal pool habitat was once extensive on the coastal plain of Los Angeles and Orange counties (Mattoni and Longcore 1997). Unfortunately, there has been a near-total loss of vernal pool habitat in these areas (Ferren and Pritchett 1988; Keeler-Wolf *et al.* 1995). It is estimated that 70 percent of existing vernal pools occurs on lands managed by the Department of Defense (Bauder and Weir 1991).

Urban and water development; flood control, highway, and utility projects; and conversion of wildlands to agricultural use have eliminated vernal pools and their watersheds in southern California (Jones and Stokes Associates 1987). Changes in hydrologic patterns, overgrazing, and off-road vehicle use also impact vernal pools. The flora and fauna in vernal pools or swales can change if the hydrologic regime is altered (Bauder 1986). Human activities that reduce the extent of the watershed or that alter runoff patterns (*i.e.*, amounts and seasonal distribution of water) may eliminate San Diego fairy shrimp, reduce their population sizes or reproductive success, or shift the location of sites inhabited by this species. The California Department of Fish and Game's Natural Diversity Data Base ranks the vernal pool habitat type in priority class G1-S1, which denotes

natural communities in the State of California that occur over fewer than 809 ha (2,000 ac) globally.

Previous Federal Action

The San Diego Biodiversity Project in Julian, California; Our Lady of the Lake University in San Antonio, Texas; and the Biodiversity Legal Foundation submitted a petition to us, dated March 16, 1992, to list the San Diego fairy shrimp as an endangered species pursuant to the Endangered Species Act of 1973, as amended (Act). We received the petition on March 24, 1992. On August 4, 1994, we published a proposed rule in the **Federal Register** (59 FR 39874) to list the San Diego fairy shrimp as an endangered species. The proposed rule was the first Federal action on the San Diego fairy shrimp, and also constituted the 12-month petition finding, as required by section 4(b)(3)(B) of the Act. On February 3, 1997, we published a final rule determining the San Diego fairy shrimp to be an endangered species (62 FR 4925). The Vernal Pool Recovery Plan, which included recovery planning for this species, was published in 1998.

At the time of listing, we concluded that designation of critical habitat for the San Diego fairy shrimp was not prudent because such designation would not benefit the species. We were also concerned that critical habitat designation would likely increase the degree of threat from vandalism or other human-induced impacts. We were aware of several instances of apparently intentional habitat destruction that had occurred during the listing process.

On October 14, 1998, the Southwest Center for Biological Diversity filed a lawsuit in the U.S. District Court for the Southern District of California challenging our decision not to designate critical habitat for the San Diego fairy shrimp. On September 16, 1999, the court ordered that "[O]n or before February 29, 2000, the Service shall submit for publication in the **Federal Register**, a proposal to withdraw the existing not prudent critical habitat determination together with a new proposed critical habitat determination for the San Diego fairy shrimp" (*Southwest Center for Biodiversity v. United States Department of the Interior et al.*, CV 98-1866) (S.D. Cal.).

After reviewing our not-prudent determination, we concluded that the threats to this species and its habitat from specific instances of habitat destruction did not outweigh the broader educational, potential regulatory, and other benefits that designation of critical habitat would

provide for this species. We determined that a designation of critical habitat would provide educational benefits by formally identifying those areas essential to the conservation of the species, and the areas likely to be the focus of our recovery efforts for the San Diego fairy shrimp. Therefore, we concluded that the benefits of designating critical habitat on lands essential to the conservation of the San Diego fairy shrimp would not increase incidences of vandalism above current levels for this species.

On March 8, 2000, we published our determination that critical habitat for the San Diego fairy shrimp was prudent and a concurrent proposed rule to designate critical habitat for the San Diego fairy shrimp on approximately 14,771 ha (36,501 ac) of land in Orange and San Diego counties, California (65 FR 12181). The public comment period was open for 60 days. On August 21, 2000, we published a notice of availability for the draft economic analysis and reopening of the comment period for the proposed critical habitat designation for the San Diego fairy shrimp (65 FR 50672). The second comment period closed on September 5, 2000. On October 23, 2000, we published a final rule designating approximately 1,629 ha (4,025 ac) of critical habitat for the San Diego fairy shrimp in Orange and San Diego counties, California (65 FR 63438).

On January 17, 2001, a lawsuit challenging the designation of critical habitat for the San Diego fairy shrimp and coastal California gnatcatcher was filed by multiple parties including Building Industry Association of Southern California, National Association of Home Builders, and Foothill/Eastern Transportation Corridor (*Building Industry Association of Southern California et al. v. Norton*, CV 01-7028). The lawsuit was filed in the U.S. District Court for the District of Columbia.

The U.S. District Court for the District of Columbia issued an order on July 3, 2001, transferring this lawsuit and another lawsuit challenging the designation of critical habitat for the coastal California gnatcatcher to the U.S. District Court for the Central District of California (*Rancho Mission Viejo L.L.C. v. Babbitt*, CV 01-8412).

On June 11, 2002, the U.S. District Court for the Central District of California granted the Service's request for a remand of the San Diego fairy shrimp critical habitat designation so that we may reconsider the economic impact associated with designating any particular area as critical habitat. The Court ordered us to complete a new

proposed rule on or before April 11, 2003. In a subsequent order the Court held that the critical habitat designated for the San Diego fairy shrimp on October 23, 2000 (65 FR 63438) should remain in place until such time as a new, final regulation becomes effective.

This proposal for critical habitat for the San Diego fairy shrimp differs from the current designation of critical habitat with respect to the mapping grid size and changes of locations of critical habitat due to new survey data. In the preparation of this proposed critical habitat we were able to reduce the minimum mapping unit from a 250 meter UTM grid to a 100 meter UTM grid. This allowed for the grid to more closely follow the watershed boundaries. Through new surveys for the San Diego fairy shrimp, the presence of San Diego fairy shrimp was confirmed in four additional vernal pool complexes in Orange County. The presence of the San Diego fairy shrimp was also reported from the Naval Radio Receiving Facility (NRRF) in Southern San Diego County and vernal pools in the City of San Marcos. However, NRRF is not proposed because of a completed and approved INRMP. Besides these additional confirmations, surveys at the Palomar Airport pools, an area previously designated as critical habitat, found the pools to be unoccupied by the San Diego fairy shrimp, thus they are no longer proposed as critical habitat. This proposal is consistent with the previous designation of critical habitat. Exclusions under 3(5)(A) and 4(b)(2) are similar to the exclusions in the existing critical habitat.

Critical Habitat

Section 3 defines critical habitat as— (i) the specific areas within the geographic area occupied by a species, at the time it is listed in accordance with the Act, on which are found those physical or biological features (I) essential to the conservation of the species and (II) that may require special management considerations or protection; and (ii) specific areas outside the geographic area occupied by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. “Conservation” means the use of all methods and procedures that are necessary to bring an endangered or a threatened species to the point at which listing under the Act is no longer necessary.

Critical habitat receives protection under section 7 of the Act through the prohibition against destruction or adverse modification of critical habitat with regard to actions carried out,

funded, or authorized by a Federal agency. Section 7 also requires conferences on Federal actions that are likely to result in the destruction or adverse modification of proposed critical habitat.

To be included in a critical habitat designation, habitat must be either a specific areas within the geographic area occupied by the species on which are found those physical or biological features essential to the conservation of the species (primary constituent elements, as defined at 50 CFR 424.12(b)) and which require special management considerations or protections, or be specific areas outside of the geographic area occupied by the species which are determined to be essential to the conservation of the species. Section 3(5)(C) of the Act states that not all areas that can be occupied by a species should be designated as critical habitat unless the Secretary determines that all such areas are essential to the conservation of the species. Our regulations (50 CFR 424.12(e)) also 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.”

Accordingly, we do not designate critical habitat in areas outside the geographic area occupied by the species unless the best available scientific and commercial data demonstrate that unoccupied areas are essential for the conservation needs of the species.

Section 4(b)(2) of the Act requires that we take into consideration the economic, and any other relevant impact, of specifying any particular area as critical habitat. We may exclude areas from critical habitat designation when the benefits of exclusion outweigh the benefits of including the areas within critical habitat, provided the exclusion will not result in extinction of the species.

Our Policy on Information Standards Under the Endangered Species Act, published in the **Federal Register** on July 1, 1994 (59 FR 34271), provides criteria, establishes procedures, and provides guidance to ensure that our decisions represent the best scientific and commercial data available. It requires our 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, biological assessments, or other unpublished materials.

Section 4 of the Act requires that we designate critical habitat on the basis of what we know at the time of designation. 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, critical habitat designations do not signal that habitat outside the designation is unimportant or may not be required for recovery.

Areas that support newly discovered populations in the future, but are outside the critical habitat designation, will continue to be subject to conservation actions implemented under section 7(a)(1) of the Act and to the regulatory protections afforded by the section 7(a)(2) jeopardy standard and the section 9(a)(2) prohibitions, as determined on the basis of the best available information at the time of the action. Federally funded or permitted projects affecting listed species outside their designated critical habitat areas may still result in jeopardy findings in some cases. Similarly, critical habitat designations made on the basis of the best available information at the time of designation will not control the direction and substance of future recovery plans, habitat conservation plans, or other species conservation planning efforts if new information available to these planning efforts calls for a different outcome.

Relationship to Sections 3(5)(A) and 4(b)(2) of the Act

Section 3(5)(A) of the Act defines critical habitat as the specific areas within the geographic area occupied by the species on which are found those physical and biological features (I) essential to the conservation of the species and (II) which may require special management considerations and protection. As such, for an area to be designated as critical habitat for a species it must meet both provisions of the definition. In those cases where an area does not provide those physical and biological features essential to the conservation of the species, it has been our policy to not include these specific areas in designated critical habitat. Likewise, if we believe, based on an

analysis, that an area determined to be biologically essential has an adequate conservation management plan that covers the species and provides for adaptive management sufficient to conserve the species, then special management and protection are already being provided, and then those areas do not meet the second provision of the definition and are also not proposed as critical habitat.

Further, section 4(b)(2) of the Act states that critical habitat shall be designated, and revised, on the basis of the best available scientific data available after taking into consideration the economic impact, and any other relevant impact, of specifying any particular area as critical habitat. An area may be excluded from critical habitat if it is determined, following an analysis, that the benefits of such exclusion outweigh the benefits of specifying a particular area as critical habitat, unless the failure to designate such area as critical habitat will result in the extinction of the species. Consequently, we may exclude an area from designated critical habitat based on economic impacts, or other relevant impacts such as preservation of conservation partnerships and national security, if, we determine, the benefits of excluding an area from critical habitat outweigh the benefits from including the area in critical habitat, providing the action of excluding the area will not result in the extinction of the species.

In our critical habitat designations we have used both the provisions outlined in sections 3(5)(A) and 4(b)(2) of the Act to evaluate those specific areas that are proposed for designation as critical habitat and those areas which are subsequently finalized (*i.e.*, designated). On the basis of these provisions, it has been our policy to not include in proposed critical habitat, or exclude from designated critical habitat, those areas: (1) Not biologically essential to the conservation of a species, (2) covered by a legally operative individual (project-specific) or regional habitat conservation plans (HCPs) that cover the subject species, (3) covered by a completed and approved Integrated Natural Resource Management Plans (INRMPs) for specific Department of Defense (DoD) installations, or (4) covered by an adequate conservation management plan or agreement.

Relationship to Habitat Conservation Plans

Individual Habitat Conservation Plans

In general, we believe that lands essential to the conservation of San Diego fairy shrimp that are protected in

reserves established in individual HCPs and for which adaptive management and protections are in place do not require special management and protections because their value for conservation has been addressed by the existing protective measures and actions from the provisions of the HCP. Consequently, reserve areas defined in these individual HCPs do not meet the definition of critical habitat. Further, to the extent that these areas do meet the definition of critical habitat as defined in 3(5)(A)(i)(II), it is additionally appropriate to exclude these areas from critical habitat pursuant to the "other relevant impacts" provisions of section 4(b)(2). Therefore, individual HCPs that cover the San Diego fairy shrimp are not being proposed as critical habitat for the species.

Regional Habitat Conservation Plans

We have considered, but have not proposed as critical habitat those preserve, reserve, or other conservation lands within the boundaries of approved and legally operative regional HCPs that provide coverage for the San Diego fairy shrimp. On the basis of the Secretary of the Interior's authority under section 4(b)(2) of the Act we believe the benefits of excluding these lands outweigh the benefits of including them. Unlike individual HCPs significant portions of the lands to be conserved and managed under these regional plans when they are fully implemented, are not currently receiving special management or protections. Therefore, these lands meet the definition of critical habitat as outlined in section 3(5)(A) of the Act in that they are "essential to the conservation of the species" and "may require special management considerations or protection." This is because, in contrast to fully implemented individual HCPs, the assembly of reserve lands and establishment of protection and special management for reserve lands in these regional HCPs occurs over decades as the conservation program is put into place. Thus lands that are designated for inclusion in a reserve once the plan is fully implemented still may require special management or protection until such inclusion occurs. In addition, in many cases, vernal pools and their surrounding habitats are not within the boundaries of designated or targeted reserve lands in these regional plans, which typically have focused reserve lands and boundaries around the species that occupy the coastal sage scrub habitat community rather than the vernal pool ecosystem.

Development of an HCP is a prerequisite for the issuance of an incidental take permit pursuant to section 10(a)(1)(B) of the Act and represents a large investment in a conservation partnership. HCPs vary in size and complexity. They may provide incidental take coverage and conservation management for one, several, or many federally listed species. Additionally, there may be one or more than one applicant participating in the development and implementation of an HCP.

Large, regional HCPs expand upon the basic requirements set forth in section 10(a)(1)(B) of the Act because they reflect a voluntary, cooperative approach to large-scale habitat and species conservation planning. Many large, regional HCPs in southern California have been, or are being, developed to provide for the conservation of numerous federally listed and unlisted sensitive species and the habitats that provide for their respective biological needs. These HCPs are designed to proactively implement conservation actions to address projects that are proposed to occur within the planning area of the HCP; however, given the broad scope of these regional HCPs, not all projects envisioned to potentially occur within the planning area of a regional HCP may actually take place.

In the case of approved regional HCPs (*i.e.*, those sponsored by cities, counties or other local jurisdictions) that provide coverage for the San Diego fairy shrimp, a primary goal is to provide for the protection and management of habitat areas essential to the conservation of the species while accommodating economic development. The regional HCP development process provides an opportunity for more intensive data collection and analysis regarding the use of particular habitat areas by the San Diego fairy shrimp. 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 system of interlinked habitat blocks that provide for the biological needs of the species.

Approved HCPs and their accompanying implementation agreements outline appropriate management measures and protections for covered species for the purpose of protecting, restoring, and enhancing the value of habitat for the conservation of the San Diego fairy shrimp. These measures, which include explicit standards to avoid to the maximum extent practicable and minimize impacts to the species and its habitat

resulting from urban development for vernal pools, are designed to ensure the continued value of vernal pools that are both within and outside of the preserve boundaries as suitable habitat for the San Diego fairy shrimp. HCPs provide for active conservation actions that positively benefit the affected species, while the maximum requirement that results from critical habitat designation is that parties subject to a Federal nexus refrain from undertaking actions that adversely modify the designated area. Active conservation measures are of greater benefit to the species than mere avoidance of harm. These measures cannot be compelled under a critical habitat designation, but must be volunteered by the parties to the HCP.

Pursuant to the terms of implementation agreements signed by the Service and permit holders in connection with approved HCPs and their associated incidental take permits, once the protection and management required under the HCPs are in place and assuming the established HCPs are functioning properly, no additional mitigation in the form of land or financial compensation may be required of the permit holders and certain identified third parties except as provided under the terms of the individual HCP. Similar assurances will be extended to future permit holders in accordance with our Habitat Conservation Plan Assurance ("No Surprises") rule codified at 50 CFR 17.22(b)(5) and (6), and 17.32(b)(5) and (6).

In light of the intensive investigation and analysis, public comment, and internal section 7 consultations undertaken prior to approval of regional and other Habitat Conservation Plans, we are confident that individual HCPs identify, protect, and provide beneficial adaptive management for essential vernal pool habitat within the boundary of HCPs. Similarly, regional HCPs also identify and will, as the plans are implemented over the life of the permits, protect and provide beneficial adaptive management for essential vernal pool habitat within their boundaries. Therefore, we have considered, but have not proposed critical habitat for the San Diego fairy shrimp within these approved HCPs pursuant to Section 4(b)(2) of the Act. We are soliciting additional public review and comment on these conclusions.

We are proposing to exclude currently proposed HCPs that cover the San Diego fairy shrimp if, prior to publication of a final rule designating critical habitat for the San Diego fairy shrimp, the plans are completed, approved, and legally

operative. We will evaluate the exclusion of these lands on the basis of the best scientific and commercial data available, and after taking into consideration the economic and any other relevant impact of designating critical habitat. Following is our preliminary analysis of the benefits of including lands within approved HCPs versus excluding such lands from critical habitat designation.

(1) Benefits of Inclusion

Critical habitat designation is anticipated to provide little additional benefit to the San Diego fairy shrimp within the boundaries of approved HCPs. The primary benefit of any critical habitat is that activities that require Federal funding, permitting, or authorization and which may affect critical habitat require consultation pursuant to section 7 of the Act to ensure the activity will not destroy or adversely modify designated critical habitat. Consultations would also include the associated vernal pool watershed that are designated as critical habitat. However, as a result of the United States Supreme Court decision in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*, 531 U.S. 159 (2001) (SWANCC), there may be limited opportunities to consult with the U.S. Army Corps of Engineers on activities that may affect vernal pools.

Currently approved and permitted HCPs are already designed to ensure the conservation of covered species within the plan area. Additionally, an HCP application must itself be consulted upon pursuant to section 7 of the Act. All HCPs address land use within the plan boundaries, and habitat issues as they relate to land use will have been addressed within the HCP through our consultation on the HCP.

Furthermore, regional HCPs typically provide greater conservation benefits to covered species than independent, project-by-project section 7 consultations because HCPs assure the long-term protection and special management needs for these species and their habitats, and the funding for such management and protections through the standards found in the 5-Point Policy for HCPs (65 FR 35242, June 1, 2000) and the HCP No Surprises regulation (63 FR 8859, February 23, 1998). These types of assurances are typically not provided by individual, project-by-project section 7 consultations because such consultations do not always commit the project proponent to long-term special management or protections; therefore, a consultation may not accord the lands it

covers the extensive benefit a regional HCP provides. It is also important to note that an HCP does not preclude the requirement for Federal agencies to consult under section 7 of the Act for projects that are proposed to occur within the plan area of HCPs, even if the proposed action is a covered activity.

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 continued economic development.

The educational benefits of critical habitat, including informing the public of areas that are important to the conservation of listed species, are essentially the same as those that would occur during the process of approving an HCP. Specifically, an HCP involves public participation through public notices and public comment periods, prior to being approved. For these reasons, we believe that designation of critical habitat typically provides little additional benefit in areas covered by approved HCPs.

(2) Benefits of Exclusion

We have determined that the benefits of excluding lands within approved HCPs from critical habitat designation may be more substantial. The benefits of excluding lands within HCPs from critical habitat designation include relieving landowners, communities and counties of any additional regulatory burden that may result from such designation. Many HCPs, particularly large, regional HCPs, take many years to develop and, upon completion, become regional conservation plans that are consistent with the recovery objectives for listed species that are covered within the plan area. Additionally, many of these HCPs provide conservation benefits to unlisted sensitive species. Imposing an additional regulatory review after an HCP is completed solely on the basis of critical habitat designation may jeopardize conservation efforts and partnerships in many areas, and could be viewed as a disincentive to those entities developing HCPs.

A related benefit of excluding lands within HCPs from critical habitat designation is the continued ability to seek new partnerships with future HCP participants including the State of California, counties, local jurisdictions, conservation organizations, and private landowners, that together can implement conservation actions that we would be unable to accomplish

otherwise. If lands within HCP plan areas are designated as critical habitat, it would likely have a chilling effect on our ability to establish new partnerships to develop HCPs, particularly large, regional HCPs that involve numerous participants and address landscape-level conservation of species and habitats. By considering excluding these lands, we preserve our current partnerships and, we believe, set the stage for additional conservation actions in the future.

In addition to the conservation benefits HCPs provide to covered species within the plan areas, many of these HCPs, particularly large, regional HCPs, also address landscape-level conservation of native habitats. The Natural Communities Conservation Planning Act of 1991 (NCCP) provides a framework for conserving listed and other sensitive species at a regional or ecosystem scale. The pilot program of the NCCP focuses on conservation of native coastal sage scrub communities throughout a 6,000-square-mile area in southern California that includes parts of Los Angeles, Orange, San Diego, Riverside, and San Bernardino counties. The NCCP program complements the objectives of regional HCP planning efforts. In southern California, several regional conservation planning efforts that incorporate the dual objectives of NCCP/HCP have already been approved.

In southwestern San Diego County, the Multiple Species Conservation Program (MSCP) effort encompasses more than 236,000 ha (582,000 ac) and reflects the potential participation of more than 12 local jurisdictions. The MSCP provides for the establishment over the permit term of approximately 69,573 ha (171,000 ac) of preserve areas to provide conservation benefits for 85 federally listed and sensitive species. Under the broad umbrella of the MSCP, each participating jurisdiction prepares a Subarea Plan that complements the goals of the MSCP. Each Subarea Plan is consulted on under section 7 of the Act to ensure the Subarea Plans are consistent with the aims of the MSCP.

The MSCP provides for avoidance of impacts to vernal pool habitat for the San Diego fairy shrimp both within and outside of existing and targeted reserve areas. In addition, the incidental take permits issued to the City and County of San Diego under the MSCP limits take of San Diego fairy shrimp to areas outside of jurisdictional waters of the United States, as that term was understood at the time the permits were issued prior to the SWANCC decision. In other words, take of San Diego fairy shrimp under the approved subarea plans is limited to situations where the

species occurs outside of its natural vernal pool habitat. The subarea plans also contemplated individualized review of projects impacting vernal pool habitat of the San Diego fairy shrimp under Section 404 of the Clean Water Act and Section 7 of the ESA to insure compliance with the Environmental Protection Agency Clean Water Act, 404(b)(1) guidelines and the Federal policy of "no net loss of wetland function and values"; however, that review may not occur because of the intervening SWANCC decision. Even without that additional Section 7 review, however, the commitment by the City and County to avoid impacts to vernal pool habitat both within and outside reserve areas to the maximum extent practicable remains in place. The plans also commit the jurisdictions to affirmatively monitor and adaptively manage vernal pool habitats and species. Those measures combined with the restrictive incidental take authorized under the City and County incidental take permits, will ensure the conservation of the San Diego fairy shrimp and its vernal pool habitat within the approved MSCP subarea plan areas.

The Central-Coastal NCCP/HCP in Orange County was developed in cooperation with numerous State and local jurisdictions, agencies, and participating landowners including the cities of Anaheim, Costa Mesa, Irvine, Orange, and San Juan Capistrano; Southern California Edison, the Transportation Corridor Agencies, The Irvine Company, California Department of Parks and Recreation, Metropolitan Water District of Southern California, and the County of Orange. Approved in 1996, the Central-Coastal NCCP/HCP provides for the establishment of approximately 15,677 ha (38,738 ac) of reserve lands for 39 Federal or State listed and unlisted and sensitive species.

There are three known locations of vernal pools occupied by San Diego fairy shrimp within the Central-Coastal NCCP/HCP boundaries: Fairview Regional Park, Newport-Banning Ranch, and the North Ranch Policy Plan Area. The vernal pool complex at Fairview Regional park occurs within a city that is not a participating jurisdiction under the Central-Coastal NCCP/HCP. The Newport Banning Ranch is designated as an "existing use" habitat area in the Central-Coastal NCCP/HCP and is not covered for the take of any federally listed species, including the San Diego fairy shrimp. San Diego fairy shrimp known from the North Ranch Policy Plan area occur in a non-degraded, natural vernal pool. There is currently a

Nature Conservancy conservation easement over the portion of the North Ranch Policy Plan area containing vernal pool habitat and a management endowment for the easement, but a conservation management plan has not yet been completed for the area. Under the Central-Coastal NCCP/HCP, SDFS occurring within these three vernal pool areas are not covered by the plan.

Several regional NCCP/HCP efforts are currently under way in southern California that have not yet been completed but which, upon approval, should provide conservation benefits to the San Diego fairy shrimp.

The Multiple Habitat Conservation Program (MHCP) in northwestern San Diego County encompasses approximately 45,300 ha (175 mi.²) within the study area, including vernal pool habitat. Currently, seven cities are participating in the development of the MHCP.

The proposed Southern Subregion NCCP/HCP in Orange County encompasses approximately 51,800 ha (200 mi.²) in its planning area, including vernal pool habitat for the San Diego fairy shrimp. Jurisdictions and private landowners within the study area include the cities of Rancho Santa Margarita, Mission Viejo, San Juan Capistrano, San Clemente, and Rancho Mission Viejo.

In general, we find that the benefits of critical habitat designation on lands within approved HCPs that cover those species are small, while the benefits of excluding such lands from designation of critical habitat are substantial. After weighing the small benefits of including these lands against the much greater benefits derived from exclusion, including encouragement for the pursuit of additional conservation partnerships, we have considered, but have not proposed critical habitat on reserve, preserve, or other lands targeted for conservation within the boundaries of approved HCPs that include the San Diego fairy shrimp as a covered species.

In the event that future HCPs covering the San Diego fairy shrimp 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 species. 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 San Diego fairy shrimp and appropriate management for those lands. The take minimization and mitigation measures provided under these HCPs are expected to protect the

essential lands that are proposed as critical habitat in this rule. If an HCP that addresses the San Diego fairy shrimp as a covered species is ultimately approved, the Service can reassess the critical habitat boundaries in light of the HCP. The Service would seek to undertake this review when the HCP is approved, but funding constraints may influence the timing of such a review.

Relationship to Department of Defense Lands

Marine Corps Air Station, Miramar and Naval Radio Receiving Facility

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 already provide 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 (adaptive management) as necessary. If all of these criteria are met, then the lands covered under the plan would not meet the second provision of the definition of critical habitat pursuant to section 3(5)(A)(i)(II) and consequently not proposed as critical habitat for the covered species.

Marine Corps Air Station, Miramar (MCAS, Miramar) has completed a final INRMP in May 2000 that provides for sufficient conservation management and protection for the San Diego fairy shrimp. We have reviewed this plan and have determined that it addresses and meets the three criteria discussed above. Therefore, lands on MCAS, Miramar that are biologically essential to the San Diego fairy shrimp do not meet the second provision of the definition of critical habitat pursuant to section 3(5)(A)(i)(II) as they have currently have special management and protection. Consequently, these lands essential to the San Diego fairy shrimp have not been included in the proposed designation of critical habitat for the species. Further, to the extent that the areas biologically essential to the San Diego fairy shrimp on MCAS, Miramar may meet the definition of critical habitat as defined in 3(5)(A)(i)(II), it is additionally appropriate to exclude these areas from critical habitat pursuant to the "other relevant impacts" provisions of section 4(b)(2) as discussed below.

Similar to MCAS, Miramar, the U.S. Navy's Naval Radio Receiving Facility (NRRF) in Coronado also has a completed and approved final INRMP that provides for the conservation of the San Diego fairy shrimp. Therefore, lands on NRRF that are biologically essential to the San Diego fairy shrimp do not meet the second provision of the definition of critical habitat pursuant to section 3(5)(A)(i)(II) as they have currently have special management and protection. Consequently, these lands essential to the San Diego fairy shrimp have not been included in the proposed designation of critical habitat for the species. Further, to the extent that the areas biologically essential to the San Diego fairy shrimp on NRRF may meet the definition of critical habitat as defined in 3(5)(A)(i)(II), it is additionally appropriate to exclude these areas from critical habitat pursuant to the "other relevant impacts" provisions of section 4(b)(2) as discussed below.

The primary benefit of proposing critical habitat is to identify lands essential to the conservation of the species which, if critical habitat was designated, would require consultation with us to ensure activities would not adversely modify critical habitat or jeopardize the continued existence of the species. As previously discussed MCAS, Miramar and NRRF have completed final INRMPs that provide for sufficient conservation management and protection for the San Diego fairy shrimp. Therefore, we do not believe

that designation of areas on MCAS, Miramar and on NRRF as critical habitat will appreciably benefit the San Diego fairy shrimp beyond the protection already afforded the species under the Act and the completed INRMPs. Exclusion of these lands would not result in the extinction of the species.

However, even if the lands on MCAS, Miramar and NRRF did require special management and thus meet the definition of critical habitat, there would be appreciable benefits to excluding these areas from critical habitat pursuant to section 4(b)(2). If critical habitat were to be designated, these facilities would be compelled to consult under section 7 of the Act on any activity that may affect designated critical habitat. Given the INRMPs, the additional burden of consulting could unnecessarily impair their ability to conduct activities. Similarly, including these areas in the proposed critical habitat rule would require these facilities to conference with us on any activities that might adversely modify or destroy proposed critical habitat. This could result in unnecessary delays and disruption of base's activities and potentially impair our Nation's military readiness. In light of our country's national security interest, we have considered, but have not proposed critical habitat on MCAS, Miramar or NRRF.

Marine Corps Base, Camp Pendleton

Critical habitat is being proposed for the San Diego fairy shrimp on Department of Defense (DoD) lands including lands that are not mission-essential training areas on Marine Corps Base, Camp Pendleton (Camp Pendleton); and on lands leased to the State of California by Camp Pendleton. Areas proposed as critical habitat for the San Diego fairy shrimp on Camp Pendleton meet the definition of critical habitat pursuant to section 3(5)(A) in that they are "essential to the conservation of the species" and "may require special management or protections."

Under 4(b)(2) of the Act, we have considered, but have not proposed critical habitat on mission-essential training areas on Camp Pendleton. Camp Pendleton operates an amphibious training base that promotes the combat readiness of military forces and is the only West Coast Marine Corps facility where amphibious operations can be combined with air, sea, and ground assault training activities year-round. Currently, the Marine Corps has no alternative installation available for the types of training that occur on Camp Pendleton.

The Marine Corps consults with us under section 7 of the Act for activities that may affect federally threatened or endangered species on Camp Pendleton. On March 30, 2000, at the request of the Marine Corps, we initiated a formal consultation regarding Marine Corps activities on upland areas of Camp Pendleton. The consultation covers approximately 60,703 ha (150,000 ac) of land within the upland areas of Camp Pendleton, including combat readiness operations, air operations, vehicle operations, facility maintenance and operations, fire management, recreation activities, and housing. The upland consultation that addresses vernal pool habitat, the San Diego fairy shrimp, and other species is not yet completed. We are currently working cooperatively with Camp Pendleton to facilitate the completion of this upland consultation.

In order to continue its critical training mission pending completion of the consultation, the Marine Corps has implemented measures the Corps believes will avoid jeopardy to the continued existence of the San Diego fairy shrimp and other listed species within the uplands area and comply with section 7(d) of the Act. In particular, the Marine Corps is implementing a set of "programmatic instructions" to avoid adverse effects to the San Diego fairy shrimp.

The primary benefit of proposing critical habitat is to identify lands essential to the conservation of the species which, if critical habitat was designated, would require consultation with us to ensure activities would not adversely modify critical habitat or jeopardize the continued existence of the species. We are already in formal consultation with the Marine Corps on their upland activities to ensure current and proposed actions will not jeopardize the species' continued existence. Therefore, we do not believe that designation of mission-essential training areas on Camp Pendleton as critical habitat will appreciably benefit the San Diego fairy shrimp beyond the protection already afforded the species under the Act. Exclusion of these lands will not result in the extinction of the species.

In contrast to the absence of an appreciable benefit resulting from designation of Camp Pendleton training areas, there are substantial benefits to excluding these areas from critical habitat. If critical habitat were to be designated within the training areas, the Marine Corps would be compelled to consult under section 7 of the Act on any activity that may affect designated critical habitat. The additional burden of consulting on activities within

mission-essential training could delay and impair the ability of the Marine Corps to conduct training activities, thus, limiting Camp Pendleton's utility as a military training installation. Similarly, including these areas in the proposed critical habitat rule would require the Marine Corps to conference with us on any activities that might adversely modify or destroy proposed critical habitat. This would result in similar delays and disruption of base's military training mission and impairment of our Nation's military readiness.

In light of our country's national security interest in ensuring Camp Pendleton's ability to maintain a high level of readiness and fighting capabilities, and the disruption to the Marine Corps' training mission, we have considered, but have not proposed critical habitat on lands identified as mission-essential training areas.

We are soliciting public review and comment on our decision to consider, but not propose critical habitat for the San Diego fairy shrimp on mission-essential training areas of Camp Pendleton, based on section 4(b)(2) of the Act. Maps delineating habitat for the San Diego fairy shrimp, overlaid with mission-essential training areas on Camp Pendleton, are available for public review and comment at the Carlsbad Fish and Wildlife Office (*see ADDRESSES* section) or on the Internet at <http://carlsbad.fws.gov>. Additionally, maps showing lands essential to the conservation of the San Diego fairy shrimp, but not included in proposed critical habitat based and the provisions of section 3(5)(A)(i)(II), are available for viewing at the Carlsbad Fish and Wildlife Office (*see Addresses* section). These maps are provided to allow the public to adequately comment on these exclusions.

Methods

In determining areas that are essential to conserve the San Diego fairy shrimp, we used the best scientific and commercial data available. This included data from research and survey observations published in peer-reviewed articles, recovery criteria outlined in the Recovery Plan for Vernal Pools of Southern California (Recovery Plan) (Service 1998), regional Geographic Information System (GIS) vegetation and species coverages (including vegetation layers for Orange and San Diego counties), data collected on Camp Pendleton and MCAS, Miramar, data collected from reports submitted by biologists holding section 10(a)(1)(A) recovery permits, and comments received on the March 8,

2000, proposed rule to designate critical habitat for the San Diego fairy shrimp (65 FR 12181) and the August 21, 2000, draft economic analysis (65 FR 50672). In an effort to map areas essential to the conservation of the species, we used data on known San Diego fairy shrimp locations and those vernal pools and vernal pool complexes that we identified in the Recovery Plan as essential for the stabilization and reclassification of the species.

Primary Constituent Elements

In accordance with sections 3(5)(A)(i) and 4(b)(2) 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. We consider those physical and biological features (primary constituent elements) that are essential to the conservation of the species, and that may require special management considerations or protection. These include, but are not limited to: Space for individual and population growth, and for normal behavior; food, water, or other nutritional or physiological requirements; cover or shelter; sites for breeding and reproduction; and habitats that are protected from disturbance or are representative of the historic geographical and ecological distributions of a species.

The primary constituent elements for the San Diego fairy shrimp are those habitat components that are essential for the primary biological needs of foraging, sheltering, reproduction, cyst (egg) dormancy, dispersal, and genetic exchange. The primary constituent elements are found in those areas that support vernal pools or other ephemeral depressional wetlands. Primary constituent elements include the vernal pool basins and associated watersheds, and include, but are not limited to: small to large vernal pools with shallow to moderate depths that hold water for sufficient lengths of time necessary for San Diego fairy shrimp incubation and reproduction, but not necessarily every year; associated watershed(s) and hydrology for vernal pool basins and their related vernal pool complexes; ephemeral depressional wetlands, flat or gently sloping topography, and any soil type with a clay component and/or an impermeable surface or subsurface layer known to support vernal pool habitat. The associated watersheds are essential in maintaining the hydrology of vernal pools necessary to support San Diego fairy shrimp.

The first constituent element necessary for vernal pools to form are

soils with an underlying claypan or hardpan layer that restricts water drainage. These soils include, but are not limited to: Huerfueño, Olivenhain, Placentia, Redding, and Stockpen (Bauder and McMillan 1998). The second primary constituent element is the possibility that a cyst bank exists in the soil. Dormant fairy shrimp cysts are viable for several years (Donald 1983; Belk 1998). In some cases vernal pool areas that appear degraded still maintain a viable source of fairy shrimp cysts. These cyst banks are similar to the seed banks of flowering plants. These areas are indicated by historical records of vernal pools, the presence of plants or animals associated with ephemeral wetlands, or the occasional pooling of water. The third constituent element relates to the topography of areas supporting the San Diego fairy shrimp. Vernal pool topography is such that the vernal pool fills directly from rain fall or in other cases the topography is such that the pool forms through the subsurface or overland waterflow from the surrounding watershed. The topography does not need to facilitate pooling water every year.

The long-term conservation of vernal pools that are essential for the recovery of the San Diego fairy shrimp include the protection and management of their associated watersheds. Primary constituent elements are found in all the areas proposed as critical habitat.

Criteria Used To Identify Critical Habitat

The long-term conservation of the San Diego fairy shrimp depends upon the protection and management of vernal pools within each management area as described in the Recovery Plan for Vernal Pools in Southern California. Eight distinct management areas were identified in the Recovery Plan based on plant and animal distribution, soil types, and climatic variables. Further, the management area for the conservation of the San Diego fairy shrimp includes vernal pools and complexes that are known to be or are likely occupied by this species and are needed to retain local genetic differentiation, reduce the risk of losing individual species or pool types, buffer environmental variation, and provide for the opportunity for re-establishment of populations (Service 1998). We evaluated those areas based on the hydrology, watershed and topographic features. On the basis of this evaluation of vernal pools identified as essential for the recovery of the San Diego fairy shrimp, we overlaid a 100 m (330 ft) Universal Transverse Mercator (UTM) (North American Datum 1927 (NAD 27))

grid on top of those essential vernal pool complexes and their associated essential watersheds. In those cases where occupied vernal pools were not identified in the Recovery Plan, we relied on recent scientific data to update the map coverage for Orange County where essential vernal pools have been identified since the publication of the recovery plan.

Secondly, after determining those specific areas that are biologically essential to the San Diego fairy shrimp, we evaluated the areas relative to approved and legally operative individual and regional HCPs, completed and approved INRMPs for DoD lands, and other adequate conservation management plans or agreements. This comparison was conducted to ascertain the extent to which these conservation measures precluded the need to designate critical habitat on those lands based on the management provisions and protections afforded the San Diego fairy shrimp and its habitat. As previously discussed, we are not proposing as critical habitat, pursuant to sections 3(5)(A) and 4(B)(2), on lands covered by: (1) A legally operative and fully implemented HCP that covers the San Diego fairy shrimp, (2) a completed and approved INRMP that adequately address the San Diego fairy shrimp and its habitat, and (3) other appropriate conservation management plans or agreements. Consequently, lands within the boundaries of fully implemented HCPs, and Miramar are not proposed as critical habitat for the San Diego fairy shrimp based on the provisions of section 3(5)(A)(i)(II). Maps showing lands essential to the conservation of the San Diego fairy shrimp, but not included in proposed critical habitat based on the basis of Section 3(5)(A)(i)(II) are available for viewing at the Carlsbad Fish and Wildlife Office (*see ADDRESSES*). We have also considered but are not proposing as critical habitat lands within the Central-Coastal Orange County Subregional NCCP/HCP boundaries with the exception of the three vernal pool areas identified under Regional HCPs, lands within approved subareas under the MSCP, and certain military lands on Camp Pendleton based on our evaluation under section 4(b)(2) of the relatively greater benefits that would result from exclusion of these lands from proposed critical habitat. Miramar and NRRF have also been considered and excluded from proposed critical habitat based on sections 3(5)(A) and 4(b)(2). Maps showing the all essential areas considered, but not proposed, are available for public

review and comment at the Carlsbad Fish and Wildlife Office (*see ADDRESSES* section) or on the Internet at <http://carlsbad.fws.gov>. Additionally, these maps are provided to allow the public to adequately comment on these exclusions.

In defining critical habitat boundaries, we made an effort to avoid mapping developed areas that are unlikely to contribute to San Diego fairy shrimp conservation. However, the minimum mapping unit that we used did not allow us to avoid mapping of all developed areas unlikely to contain the primary constituent elements essential for conservation of the San Diego fairy shrimp. Existing features and structures within the boundaries of the mapped units, such as buildings, roads, aqueducts, railroads, airports, other paved areas, lawns, landscaped areas, and other urban areas, will not contain one or more of the primary constituent elements. 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. The complexes of vernal pools and their associated watersheds within the proposed critical habitat area are within the geographical area occupied by San Diego fairy shrimp.

In summary, in determining areas that are essential to conserve San Diego fairy shrimp, we used the best scientific information available to us. 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 proposed critical habitat by county and land ownership is shown in Table 1. Critical habitat includes San Diego fairy shrimp habitat throughout the species' range in the United States (*i.e.*, Orange and San Diego counties, California). Areas proposed for critical habitat are under Federal, State, local, and private ownership. Areas proposed for critical habitat exclude some of the essential areas for this species; the exclusions are summarized in Table 2. Some of the areas proposed as critical habitat are within HCPs. Table 3 shows the total area that each of these plans cover and the preserve area for each. Only the San Diego MSCP represents a completed plan that covers the San Diego fairy shrimp. Areas proposed as critical habitat are divided into five Critical Habitat Units which are based on the recovery units in the Recovery Plan (Service 1998). The units are generally based on geographical location of the vernal pools, soil types, associated

watersheds, and local variation of inland valley). A brief description of each unit and the reasons for designating it as critical habitat are presented below.

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

Orange	N/A	30 ha (74 ac)	117 ha (289 ac)	147 ha (363 ac).
San Diego	530 ha (1,309 ac)	228 ha (564 ac)	1,563 ha (3,862 ac)	2,321 ha (5,735 ac).
Total	530 ha (1,309 ac)	258 ha (638 ac)	1,680 ha (4,151 ac)	2,468 ha (6,098 ac).

¹ Includes Department of Defense and U.S. Fish and Wildlife Service lands.

TABLE 2.—APPROXIMATE PROPOSED CRITICAL HABITAT AREA (HA (AC)), ESSENTIAL AREA, AND EXCLUDED AREA

Area considered essential	8,100 ha (20,015 ac).
Area not included under 3(5)(A) (MCAS Miramar, NRRF, individual HCPs*)	1,036 ha (2,561 ac).
Area excluded under 4(b)(2) (Camp Pendleton and preserve lands under the San Diego MSCP)	4,596 ha (11,356 ac).
Proposed Critical Habitat	2,468 ha (6,098 ac).

* Acreage for individual HCPs are not available.

TABLE 3.—NCCP/HCPs WITHIN THE GENERAL AREA WHICH CONTAIN THE PROPOSED CRITICAL HABITAT

NCCP/HCP	Planning area	Preserve area
San Diego MSCP	236,000 ha (582,000 ac)	69,573 ha (171,000 ac).
Central/Coastal Orange County NCCP/HCP	84,463 ha (208,713 ac)	15,677 ha (38,738 ac).
Proposed MSCP North County Subarea	142,854 ha (353,000 ac)	Information not available.
Proposed Northwestern San Diego MHCP	45,288 ha (111,908 ac)	8,064 ha (19,928 ac).
Proposed Southern Subregion NCCP/HCP Orange County (pending) ..	51,800 ha (128,000 ac)	5,666 ha (14,000 ac).

Areas proposed as critical habitat do not include all of the vernal pools where the San Diego fairy shrimp are found. All of the vernal pools included in the critical habitat were surveyed and are considered to be occupied by the San Diego fairy shrimp. Vernal pools can be measured by different methods: (1) Area of pool basins, (2) soil types, or (3) the associated watersheds. These differences make estimating the historical and current extent of vernal pool habitat in Southern California difficult. In delineating areas essential for the conservation of the San Diego fairy shrimp, we used the area of the associated vernal pool watersheds. Depending on the topography of the area and the adjacent land use, the size of the associated vernal pool watersheds vary between pool complexes.

The five Critical Habitat Units are based on the Management Areas outlined in the Recovery Plan for Vernal Pools of Southern California (Service 1998). The units represent those vernal pools, their associated watersheds, and include populations of the San Diego fairy shrimp throughout its range. The critical habitat units occur on the various soil types and vegetation classes associated with vernal pools. Each contains the primary constituent elements for the San Diego fairy shrimp. We are proposing 2,468 ha (6,098 ac) as critical habitat for this species. Some of the pools within proposed critical habitat are in a degraded state and will

benefit from restoration and enhancement work, which will contribute to recovery of the San Diego fairy shrimp.

Unit 1: Orange County

Unit 1 encompasses approximately 147 ha (363 ac) in Orange County within the Los Angeles Basin/Orange Management Area as outlined in the Recovery Plan. The majority of vernal pools in this management area were extirpated prior to 1950 and only a small number of vernal pools remain in Los Angeles and Orange counties (Service 1998). This unit represents the northern extent of this species' currently known distribution in southern California and includes vernal pools that have been identified as essential to the recovery of the San Diego fairy shrimp in order to stabilizing populations and habitat loss. The vernal pools that are proposed as critical habitat are relatively isolated and are the only known remaining vernal pools in Orange County that support the San Diego fairy shrimp. The pools in this unit include examples of the historic distribution of coastal terrace vernal pools at Fairview Regional Park and Newport-Banning Ranch, vernal pool-like ephemeral ponds formed by landslides and fault activity on Rancho Mission Viejo, and the only known rock pool in southern California. This rock pool is located in the North Ranch Policy Plan Area. As discussed in the

Recovery Plan (Service, 1998), preservation of vernal pools must be on a geographical scale for individual species and habitats. For species like the San Diego fairy shrimp with declining populations and limited distribution, maintenance of genetic variability is crucial for its survival. The high degree of variability in habitat combined with the unpredictability of winter rains has resulted in genetic structure between pool complexes. Moreover, there is a low degree of genetic variability within pool complexes. Thus, to conserve the genetic structure and variability of this species, vernal pools supporting San Diego fairy shrimp need to be conserved throughout the range of this species, including the northern end of the distribution. This northernmost unit is essential to the conservation of the San Diego fairy shrimp because it maintains the ecological distribution and genetic variability of this species on a broad geographical scale. The restricted distribution and isolation of the vernal pools also suggest that they may contain genetic diversity important for the long-term survival of the San Diego fairy shrimp.

Unit 2: San Diego: North Coastal Mesa

Unit 2 encompasses approximately 357 ha (882 ac) in San Diego County within the North Coastal Mesa Management Area, as outlined in the Recovery Plan. This unit includes a small portion of Camp Pendleton

(nontraining areas) and an area within the City of Carlsbad. The area proposed on Camp Pendleton includes lands leased by the Marine Corps to the California Department of Parks and Recreation and private interests; Cockleburrr preserve; and nontraining lands around the Wire Mountain housing area. These pools represent some of the best examples of coastal pools still remaining in San Diego County. The other vernal pools on Camp Pendleton that occur within mission-essential training areas have been excluded from proposed critical habitat under section 4(b)(2) of the Act, but are considered essential for the recovery of the San Diego fairy shrimp. Within the jurisdiction of the City of Carlsbad, the vernal pool complex located in the vicinity of Palomar Airport is currently designated as critical habitat. However, based on recent surveys, we have determined that this vernal pool complex is not essential for the San Diego fairy shrimp. The pool complex at Poinsettia Lane train station, in the City of Carlsbad, is proposed as critical habitat. The Poinsettia Lane pools represent the most coastal location where the San Diego fairy shrimp and the endangered Riverside fairy shrimp co-occur. The Recovery Plan identifies these vernal pools as essential for recovery of the San Diego fairy shrimp because of their role in stabilizing populations and preventing habitat loss. As discussed in the Recovery Plan (Service 1998), vernal pools must be conserved on a geographical scale and these examples represent coastal terrace vernal pools found in northern San Diego County. Given the rarity of San Diego fairy shrimp and the limited amount of remaining vernal pool habitat, this unit is essential to the conservation of this species because of need to conserve vernal pools throughout the range of the species in order to meet the overall recovery of this species, and its role in maintaining the genetic diversity and population stability of the San Diego fairy shrimp.

Unit 3: San Diego: Inland Valley

Unit 3 encompasses 1,225 ha (3,027 ac) in San Diego County within the San Diego Inland Valley Management Area, as outlined in the Recovery Plan. Lands proposed as critical habitat for the San Diego fairy shrimp contain vernal pool complexes within the jurisdiction of the City of San Marcos and the community of Ramona. In the community of Ramona, one of the complexes is within the boundaries of Ramona Airport. These vernal pool complexes are generally isolated from maritime influence (greater than 10 km (6 mi)

from the coast) and are representative of vernal pools associated with alluvial or volcanic type soils. The vernal pools in San Marcos are associated with native grassland and a unique association of multiple species of *Brodiaea*. The Recovery Plan specifically identifies these vernal pools as essential for recovery of the San Diego fairy shrimp because of their role in stabilizing populations and preventing habitat loss. Protection of these areas will help meet the Recovery Plan goal of reclassifying this species in a future downlisting/delisting action. This unit includes vernal pools within the easternmost edge of the geographical distribution of the species. Conservation of vernal pools in this unit will help maintain the diversity of vernal pool habitats and their unique geological substrates, and will retain the genetic diversity of these geographically distinct populations.

Unit 4: San Diego: Central Coastal Mesa

Unit 4 encompasses 73 ha (181 ac) in San Diego County within the San Diego Central Coastal Mesa Management Area, as outlined in the Recovery Plan. Lands considered for this critical habitat unit contain vernal pool complexes within the jurisdiction of the City of San Diego, State of California, Service, Navy, and private lands. The Recovery Plan specifically identifies these vernal pools as essential for the recovery of the San Diego fairy shrimp because of their role in stabilizing populations and preventing habitat loss. These vernal pool complexes are associated with coastal terraces and mesas found south of the San Dieguito River to San Diego Bay. While many of the vernal pool complexes in this unit have been destroyed or fragmented, these complexes represent some of the best remaining vernal pools in San Diego County.

On MCAS, Miramar, vernal pools identified in the Recovery Plan are considered to be essential for the conservation of the San Diego fairy shrimp. MCAS, Miramar is successfully implementing its INRMP and the majority of these pools are considered to be of the highest quality and irreplaceable. These pools are encompassed within Level 1 Management Areas under the installation's INRMP. We have considered, but have not proposed critical habitat designation under 3(5)(A) of the Act for MCAS, Miramar based on the INRMP. Further, to the extent that these areas do meet the definition of critical habitat as defined in 3(5)(A)(i)(II), it is additionally appropriate to exclude these areas from critical habitat pursuant to the "other

relevant impacts" provisions of section 4(b)(2). Therefore, MCAS, Miramar lands are not being proposed as critical habitat for this species.

Many of the vernal pools considered for this unit receive conservation protection by virtue of their land ownership and management. These pools represent the some of the best opportunities for long-term protection for the San Diego fairy shrimp. Many of these vernal pools are within the MSCP. We have considered, but have not proposed as critical habitat those vernal pools within approved HCPs (MSCP) where the San Diego fairy shrimp is a covered species. Vernal pools that are included in this critical habitat unit consist of four subunits that are federally owned. This unit includes pools that occur on Del Mar Mesa that are within the San Diego National Wildlife Refuge. This unit also includes land owned by the Department of Defense which meet the definition of critical habitat at Tierrasanta South and at Chollas Heights. This unit provides for the conservation of the San Diego fairy shrimp by protecting vernal pools essential for the future reclassification (downlisting/delisting actions) of this species. It includes vernal pools within the center of this species' geographical distribution, and retains the genetic diversity of these geographically distinct populations.

Unit 5: San Diego: Southern Coastal Mesa

Unit 5 encompasses 666 ha (1,645 ac) in San Diego County within the San Diego Southern Coastal Mesa Management Area, as outlined in the Recovery Plan. Essential habitat for the San Diego fairy shrimp occurs in vernal pool complexes within the jurisdiction of the Service, the Cities of San Diego and Chula Vista, County of San Diego, U.S. Immigration and Naturalization Service (INS), other DoD lands, and private lands within unit 5. These vernal pool complexes are associated with coastal mesas from the Sweetwater River south to the international border with Mexico. We have considered, but have not proposed as critical habitat those vernal pools within approved HCPs (MSCP) where the San Diego fairy shrimp is a covered species. We have considered, but have not proposed critical habitat designation under 3(5)(a) of the Act for NRRF based on their INRMP. The remaining lands identified as essential in the recovery plan are proposed as critical habitat. These vernal pool complexes occur on Federal lands and lands included in the Major Amendment areas of San Diego County. These pools represent the southern most

occurrences of the San Diego fairy shrimp. Due to rapid urbanization in the on both sides of the United States and Mexican border the preservation of these pools is essential for the survival of the San Diego fairy shrimp. The pools proposed for critical habitat in subunit A contain the endangered Otay mesa-mint (*Pogogyne nudiuscula*); subunit D also supports the endangered Riverside fairy shrimp (*Streptocephalus woottoni*); and subunit F include the endangered Orcutt's grass (*Orcuttia californica*) and represent vernal pools with high biological diversity. The Recovery Plan specifically identifies these vernal pools as essential for recovery of the San Diego fairy shrimp because of their role in stabilizing populations and habitat loss and in reclassifying these species in future downlisting/delisting actions. This southernmost unit is essential to the conservation of the San Diego fairy shrimp because it maintains the ecological distribution and genetic diversity of this species. Many of these vernal pools are within the MSCP, and as previously stated in this rule, we have considered, but have not proposed those vernal pools in reserve, preserve, or other lands targeted for conservation areas within approved HCPs, pursuant to section 4(b)(2) of the Act.

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, permit, or carry out do not destroy or adversely modify critical habitat. Destruction or adverse modification of critical habitat occurs when a Federal action directly or indirectly alters critical habitat to the extent that it appreciably diminishes the value of critical habitat for the conservation of the species. Individuals, organizations, States, local governments, and other non-Federal entities are affected by the designation of critical habitat only if their actions occur on Federal lands, require a Federal permit, license, or other authorization, or involve Federal funding.

In our regulations at 50 CFR 402.02, we define destruction or adverse modification as "a direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species. Such alterations include, but are not limited to: alterations adversely modifying any of those physical or biological features that were the basis for determining the habitat to be critical." However, in a March 15, 2001, decision of the United States Court of

Appeals for the Fifth Circuit (*Sierra Club v. U.S. Fish and Wildlife Service et al.*, F.3d 434), the Court found our definition of destruction or adverse modification to be invalid. In response to this decision, we are reviewing the regulatory definition of adverse modification in relation to the conservation of the species.

Section 7(a) of the Act requires Federal agencies, including the Service, to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened, and with respect to its critical habitat, if any is designated or proposed. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402. Section 7(a)(4) of the Act requires Federal agencies to confer with us on any action that is likely to jeopardize the continued existence of a proposed species or result in destruction or adverse modification of proposed critical habitat. Conference reports provide conservation recommendations to assist Federal agencies in eliminating conflicts that may be caused by their proposed actions. The conservation measures in a conference report are advisory.

We may issue a formal conference report, if requested by the Federal action agency. Formal conference reports include an opinion that is prepared according to 50 CFR 402.14, as if the species was listed or critical habitat designated. We may adopt the formal conference report as the biological opinion when the species is listed or critical habitat designated, if no substantial new information or changes in the action alter the content of the opinion (50 CFR 402.10(d)).

If a species is listed or critical habitat is designated, section 7(a)(2) of the Act requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of such a species or to destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency (action agency) must enter into consultation with us. Through this consultation, the Federal action agency would ensure that the permitted actions do not destroy or adversely modify critical habitat.

If 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 the likelihood of jeopardizing the continued existence of listed species, or resulting in the destruction or adverse modification of critical habitat.

Regulations at 50 CFR 402.16 require Federal agencies to reinstate consultation on previously reviewed actions under certain circumstances, including 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 reinitiating of consultation or conference with us on actions for which formal consultation has been completed, if those actions may affect designated critical habitat, or adversely modify or destroy proposed critical habitat.

Activities that, when carried out, funded, or authorized by a Federal agency, may affect critical habitat and require that a section 7 consultation be conducted include, but are not limited to:

(1) Any activity that results in discharge of dredged or fill material, excavation, or mechanized land clearing of ephemeral and/or vernal pool basins (e.g., road and fence construction and maintenance, right-of-way designation, airport improvement activities, and regulation of agricultural activities) that constitutes jurisdictional waters of the United States under the Clean Water Act;

(2) Any activity that alters the watershed, water quality, or water quantity to an extent that water quality becomes unsuitable to support San Diego fairy shrimp, or any activity that significantly affects the natural hydrologic function of the vernal pool system; and

(3) Activities that could lead to the introduction of exotic species into San Diego fairy shrimp habitat.

Activities that may destroy or adversely modify critical habitat include those that alter the primary constituent elements to an extent that the value of critical habitat for both the survival and recovery of the San Diego fairy shrimp is appreciably reduced. We note that such activities may also jeopardize the continued existence of the species.

We recognize that the proposed 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, we want to ensure that the public is aware that critical habitat designations do not signal that habitat outside the proposed designation is unimportant or may not be required for recovery. Areas outside the proposed critical habitat designation will continue to be subject to conservation actions that may be implemented under section 7(a)(1) of the Act and to the regulatory protections afforded by the section 7(a)(2) jeopardy standard and the prohibitions of section 9 of the Act. 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.

Section 4(b)(8) of the Act requires us to evaluate briefly and describe, in any proposed or final regulation that designates critical habitat, those activities involving a Federal action that may adversely modify such habitat or that may be affected by such designation. Activities that may destroy or adversely modify critical habitat would be those that alter the primary constituent elements to the extent that the value of critical habitat for the conservation of the San Diego fairy shrimp is appreciably reduced. We note that such activities may also jeopardize the continued existence of the species. Those activities that involve Federal action that may destroy or modify critical habitat are listed above in our discussion of Section 7(a)(2).

If you have questions regarding whether specific activities will constitute destruction or adverse modification of critical habitat, contact the Field Supervisor, Carlsbad Fish and Wildlife Office (see **ADDRESSES** section). Requests for copies of the regulations on listed wildlife and inquiries about prohibitions and permits may be addressed to the U.S. Fish and Wildlife Service, Branch of Endangered Species, 911 N.E. 11th Ave, Portland, Oregon 97232 (telephone 503/231-2063; facsimile 503/231-6243).

All lands proposed as critical habitat are within the geographical area occupied by the species and are necessary to preserve functioning vernal pool habitat for the San Diego fairy shrimp. 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 substantial additional regulatory protection will result from critical habitat designation, although there may be consultations that result from Federal actions within critical habitat in the watersheds associated with vernal pools.

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.

An analysis of the economic impacts of proposing critical habitat for the San Diego fairy shrimp is being prepared. We will announcing the availability of the draft economic analysis as soon as it is completed, at which time we will seek public review and comment at that time. Copies may be obtained from the Carlsbad Fish and Wildlife Office's Internet Web site at <http://carlsbad.fws.gov>, or by contacting the Carlsbad Fish and Wildlife Office directly (see **ADDRESSES** section)

Public Comments Solicited

It is our intent that any final action resulting from this proposal will be as accurate as possible. Therefore, we solicit comments or suggestions from the public, other concerned governmental agencies, the scientific community, industry, or any other interested party concerning this proposed rule. Based on public comment, the final rule could find areas not essential, appropriate for exclusion under either 3(5)(A) or 4(b)(2), or not appropriate for exclusion, in which case, they would be made part of the designation. We particularly seek comments concerning:

(1) The reasons why any habitat should or should not be determined to be critical habitat as provided by section 4 of the Act, including whether the benefits of designation will outweigh any threats to the species that would result from the designation;

(2) Specific information on the amount and distribution of San Diego fairy shrimp and vernal pool habitat, and what habitat is essential to the conservation of the species and why;

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

(4) Any foreseeable economic or other impacts resulting from the proposed designation of critical habitat, in particular, any impacts on small entities or families;

(5) Economic and other values associated with designating critical habitat for the San Diego fairy shrimp such as those derived from nonconsumptive uses (e.g., hiking, camping, birdwatching, enhanced watershed protection, improved air quality, increased soil retention, "existence values," and reductions in administrative costs);

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

(7) We have considered, but have not proposed the following areas as critical habitat: mission-essential training areas on Camp Pendleton, lands on MCAS Miramar, lands on the U.S. Navy's NRRF, and lands in the San Diego Multiple Species Conservation Program because we believe that: (1) Their value for conservation has been addressed by existing protective actions, or (2) they are appropriate for exclusion pursuant to the "other relevant factor" provisions of section 4(b)(2). We specifically solicit comment, however, on the inclusion or exclusion of such areas and (a) whether these areas are essential; (b) whether these areas warrant exclusion; and (c) the basis for not designating these areas as critical habitat (section 3(5)(A) or section 4(b)(2)).

(8) The benefits of including or excluding from this critical habitat designation lands within approved Habitat Conservation Plans.

(9) Are "associated watersheds" of these vernal pools essential for the conservation of the species? If so, does the term need to be defined and how should it be defined?

(10) The majority of area proposed as critical habitat consists of upland areas that contain "associated watersheds" which may be needed to preserve vernal pool hydrology. Does the extent of the upland areas around the complexes of vernal pools proposed to be designated as critical habitat comply with the regulatory requirement at 50 CFR 484.12(d)? Do these areas comprise "a small local area" within the meaning of the example found in that provision,

and if not, what weight should be given to that example in the final rule?

(11) Should all lands at Camp Pendleton be excluded from critical habitat in light of the INRMP process, the formal consultation under section 7 of the Act for upland species now underway, and possible future needs to utilize different areas for military training?

If you wish to comment, you may submit your comments and materials concerning this proposal by any one of several methods: (1) You may mail comments to the Field Supervisor at the address provided in the **ADDRESSES** section above; (2) You may also comment via the internet to FW1SDFS@r1.fws.gov. Please submit internet comments as an ASCII file and avoid the use of special characters or any form of encryption. Please also include "Attn: RIN-1018-AI71" in your e-mail subject header and your name and return address in your internet message. If you do not receive a confirmation from the system that we have received your internet message, contact us directly by calling our Carlsbad Fish and Wildlife Office at phone number 760-431-9440. Please note that the internet address "FW1SDFS@r1.fws.gov" will be closed out at the termination of the public comment period; or (3) You may hand-deliver comments to our Carlsbad Fish and Wildlife Office (see **ADDRESSES** section above).

Our practice is to make comments, including names and home addresses of respondents, available for public review during regular business hours. Individual respondents may request that we withhold their home address from the rulemaking record, which we will honor to the extent allowable by law. There also may be circumstances in which we would withhold from the rulemaking record a respondent's identity, as allowable by law. If you wish us to withhold your name and/or address, you must state this prominently at the beginning of your comment. However, we will not consider anonymous comments. We will make all submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, available for public inspection in their entirety. Comments and materials received will be available for public inspection, by appointment, during normal business hours at the above address.

Peer Review

In accordance with our policy published on July 1, 1994 (59 FR

34270), we will solicit the expert opinions of at least three appropriate and independent specialists regarding this proposed rule. The purpose of such review is to ensure listing decisions are based on scientifically sound data, assumptions, and analyses. We will send these peer reviewers copies of this proposed rule immediately following publication in the **Federal Register**. We will invite these peer reviewers to comment, during the public comment period, on the specific assumptions and conclusions regarding the proposed designation of critical habitat.

We will consider all comments and information received during the 60-day comment period on this proposed rule as we prepare our final rulemaking. Accordingly, the final determination may differ from this proposal.

Public Hearings

The Endangered Species Act provides for one or more public hearings on this proposal, if requested. Requests must be received within 45 days of the date of publication of the proposal in the **Federal Register**. Such requests must be made in writing and be addressed to the Field Supervisor (see **ADDRESSES** section). We will schedule public hearings on this proposal, if any are requested, and announce the dates, times, and places of those hearings in the **Federal Register** and local newspapers at least 15 days prior to the first hearing.

Clarity of the Rule

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

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

Required Determinations

Regulatory Planning and Review

In accordance with Executive Order 12866, this document is a significant rule and was reviewed by the Office of Management and Budget (OMB). The Service is preparing a draft economic analysis of this proposed action. The Service will use this analysis to meet the requirement of section 4(b)(2) of the Act to determine the economic consequences of designating the specific areas as critical habitat and excluding any area from critical habitat if it is determined that the benefits of such exclusion outweigh the benefits of specifying such areas as part of the critical habitat, unless failure to designate such area as critical habitat will lead to the extinction of the San Diego fairy shrimp. This analysis will be made available for public review and comment. Copies may be obtained from the Carlsbad Fish and Wildlife Office's Internet website at <http://carlsbad.fws.gov> or by contacting the Carlsbad Fish and Wildlife Office directly (see **ADDRESSES** section).

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

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

According to the Small Business Administration, small entities include small organizations, such as independent nonprofit organizations, and small governmental jurisdictions, including school boards and city and

town governments that serve fewer than 50,000 residents, as well as small businesses (<http://www.sba.gov/size/>). Small businesses include manufacturing and mining concerns with fewer than 500 employees, wholesale trade entities with fewer than 100 employees, retail and service businesses with less than \$5 million in annual sales, general and heavy construction businesses with less than \$27.5 million in annual business, special trade contractors doing less than \$11.5 million in annual business, and agricultural businesses with annual sales less than \$750,000. To determine if potential economic impacts to these small entities are significant, we consider the types of activities that might trigger regulatory impacts under this rule as well as the types of project modifications that may result. In general, the term "significant economic impact" is meant to apply to a typical small business firm's business operations.

To determine if the rule would affect a substantial number of small entities, we consider the number of small entities affected within particular types of economic activities (e.g., housing development, grazing, oil and gas production, timber harvesting, etc.). We apply the "substantial number" test individually to each industry to determine if certification is appropriate. SBREFA does not explicitly define either "substantial number" or "significant economic impact." Consequently, to assess whether a "substantial number" of small entities is affected by this designation, this analysis considers the relative number of small entities likely to be impacted in the area. Similarly, this analysis considers the relative cost of compliance on the revenues/profit margins of small entities in determining whether or not entities incur a "significant economic impact." Only small entities that are expected to be directly affected by the designation are considered in this portion of the analysis.

Designation of critical habitat only affects activities conducted, funded, or permitted by Federal agencies; non-Federal activities are not affected by the designation if they lack a Federal nexus. In areas where the species is present, Federal agencies funding, permitting, or implementing activities are already required to avoid jeopardizing the continued existence of the San Diego fairy shrimp through consultation with us under section 7 of the Act. If this critical habitat designation is finalized, Federal agencies must also ensure that their activities do not destroy or adversely modify designated critical

habitat through consultation with us. However, we do not believe this will result in any significant additional regulatory burden on Federal agencies or their applicants where the species may be present, because consultation would already be required because of the presence of a listed species.

In unoccupied areas, or areas of uncertain occupancy, designation of critical habitat could trigger additional review of Federal activities under section 7 of the Act, and may result in additional requirements on Federal activities to avoid destroying or adversely modifying critical habitat. Therefore, for the purposes of this review and certification under the Regulatory Flexibility Act, we are assuming that any future consultations in the areas designated as critical habitat that are considered unoccupied, such as the watersheds associated with occupied vernal pools, would result from the critical habitat designation. Should a federally funded, permitted, or implemented project be proposed that may affect designated critical habitat, we will work with the Federal action agency and any applicant, through section 7 consultation, to identify ways to implement the proposed project while minimizing or avoiding any adverse effect to the species or critical habitat. In our experience, the vast majority of such projects can be successfully implemented with at most minor changes that avoid significant economic impacts to project proponents.

On non-Federal lands, activities that do not require Federal involvement would not be affected by the critical habitat designation. Activities of an economic nature that are likely to occur on non-Federal lands in the area encompassed by this proposed designation are primarily commercial or residential development. None of the developments recently approved by the local jurisdictions in these areas have any Federal involvement, and we are not aware of a substantial number of future activities on any of the proposed units that would require Federal permitting or authorization; therefore, we conclude that the proposed rule would not affect a substantial number of small entities.

In general, two different mechanisms in section 7 consultations could result in project modifications. First, if we conclude, in a biological opinion, that a proposed action is likely to jeopardize the continued existence of a species or adversely modify its critical habitat, we can offer "reasonable and prudent alternatives." Reasonable and prudent alternatives are alternative actions that

can be implemented in a manner consistent with the scope of the Federal agency's legal authority and jurisdiction, are economically and technologically feasible, and would avoid jeopardizing the continued existence of listed species or resulting in adverse modification of critical habitat. A Federal agency and an applicant may elect to implement a reasonable and prudent alternative associated with a biological opinion that has found jeopardy or adverse modification of critical habitat. An agency or applicant could alternatively choose to seek an exemption from the requirements of the Act or proceed without implementing the reasonable and prudent alternative. However, unless it could obtain an exemption, the Federal agency or applicant would be at risk of violating section 7(a)(2) of the Act if it chose to proceed without implementing the reasonable and prudent alternatives.

Second, if we find that a proposed action is not likely to jeopardize the continued existence of a listed animal species, we may identify reasonable and prudent measures designed to minimize the amount or extent of take and require the Federal agency or applicant to implement such measures through nondiscretionary terms and conditions. However, the Act does not require terms and conditions to minimize adverse effect to critical habitat. We may also identify discretionary conservation recommendations designed to minimize or avoid the adverse effects of a proposed action on listed species or critical habitat, help implement recovery plans, or develop information that could contribute to the recovery of the species.

Based on our experience with section 7 consultations for all listed species, virtually all projects—including those that, in their initial proposed form, would result in jeopardy or adverse modification determinations in section 7 consultations—can be implemented successfully with, at most, the adoption of reasonable and prudent alternatives. These measures, by definition, must be economically feasible and within the scope of authority of the Federal agency involved in the consultation. The kinds of actions that may be included in future reasonable and prudent alternatives include avoidance, conservation set-asides, management of competing non-native species, restoration of degraded habitat, construction of protective fencing, and regular monitoring. These measures are not likely to result in a significant economic impact to project proponents.

As required under section 4(b)(2) of the Act, we will conduct an analysis of

the potential economic impacts of this proposed critical habitat designation, and will make that analysis available for public review and comment before finalizing this designation. However, court deadlines require us to publish this proposed rule before the economic analysis can be completed.

In summary, we have concluded that this proposed rule would not result in a significant economic effect on a substantial number of small entities. This rule would result in project modifications only when proposed Federal activities would destroy or adversely modify critical habitat. Even if a small entity is affected, we do not expect it to result in a significant economic impact, as the measures included in reasonable and prudent alternatives must be economically feasible and consistent with the proposed action. The kinds of measures we anticipate we would recommend can usually be implemented at low cost. Therefore, we are certifying that the proposed designation of critical habitat for the San Diego fairy shrimp will not have a significant economic impact on a substantial number of small entities, and an initial regulatory flexibility analysis is not required.

This discussion is based upon the information regarding potential economic impact that is available to us at this time. This assessment of economic effect may be modified prior to final rulemaking based upon development and review of the draft economic analysis prepared pursuant to section 4(b)(2) of the ESA and E.O. 12866.

Small Business Regulatory Enforcement Fairness Act (5 U.S.C. 802(2))

In the draft economic analysis, we will determine whether designation of critical habitat will 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, 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.

Executive Order 13211

On May 18, 2001, the President issued an Executive Order (E.O. 13211) on regulations that significantly affect energy supply, distribution, and use. Executive Order 13211 requires agencies to prepare Statements of Energy Effects when undertaking certain actions. Although this proposed rule to designate critical habitat for the San

Diego fairy shrimp is a significant regulatory action under Executive Order 12866, it is not expected to significantly affect energy supplies, distribution, or use. Therefore, this action is not a significant energy action and no Statement of Energy Effects is required.

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

The Service will use the economic analysis to evaluate consistency with the Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.).

Takings

In accordance with Executive Order 12630 ("Government Actions and Interference with Constitutionally Protected Private Property Rights"), we have analyzed the potential takings implications of proposing to designate approximately 2,468 ha (6,098 ac) of lands in Orange and San Diego counties, California, as critical habitat for the San Diego fairy shrimp in a takings implications assessment. This preliminary assessment concludes that this proposed rule does not pose significant takings implications.

Federalism

In accordance with Executive Order 13132, this rule does not have significant Federalism effects. A Federalism assessment is not required. In keeping with Department of the Interior policy, we requested information from and coordinated development of this proposed critical habitat designation with appropriate State resource agencies in California. The proposed designation of critical habitat in areas currently occupied by the San Diego fairy shrimp imposes no additional significant restrictions beyond those currently in place and, therefore, has little incremental impact on State and local governments and their activities. The proposed designation of critical habitat in unoccupied areas may require a conference under section 7 of the Act on non-Federal lands (where a Federal nexus occurs) that might otherwise not have occurred.

The proposed designation of critical habitat may have some benefit to the State and local resource agencies in that the areas essential to the conservation of this species are more clearly defined, and the primary constituent elements of the habitat necessary to the survival of this species are specifically identified. While this definition and identification does not alter where and what Federally sponsored activities may occur, it may assist 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 Department of the Interior's Office of the Solicitor has determined that this rule does not unduly burden the judicial system and does meet the requirements of sections 3(a) and 3(b)(2) of the Order. We are proposing to designate critical habitat in accordance with the provisions of the Endangered Species Act. The rule 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 San Diego fairy shrimp.

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

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

National Environmental Policy Act

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 Endangered Species Act, as amended. A notice outlining our reason for this determination was published in the **Federal Register** on October 25, 1983 (48 FR 49244). This proposed rule 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 San Diego fairy shrimp because they do not support populations or suitable vernal pool habitat. Therefore, critical habitat for the

San Diego fairy shrimp has not been proposed 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 authors of this notice are the Carlsbad Fish and Wildlife Office staff (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 propose to amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations as set forth below:

PART 17—[AMENDED]

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

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

2. In § 17.95 revise the entry for the San Diego fairy shrimp (*Branchinecta sandiegonensis*) under paragraph (h) as follows:

§ 17.95 Critical habitat—fish and wildlife.

* * * * *

(h) Crustaceans.

* * * * *

San Diego fairy shrimp (*Branchinecta sandiegonensis*).

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

(2) Critical habitat includes vernal pool basins and vernal pool complexes indicated on the maps below and their associated watersheds and hydrologic regime.

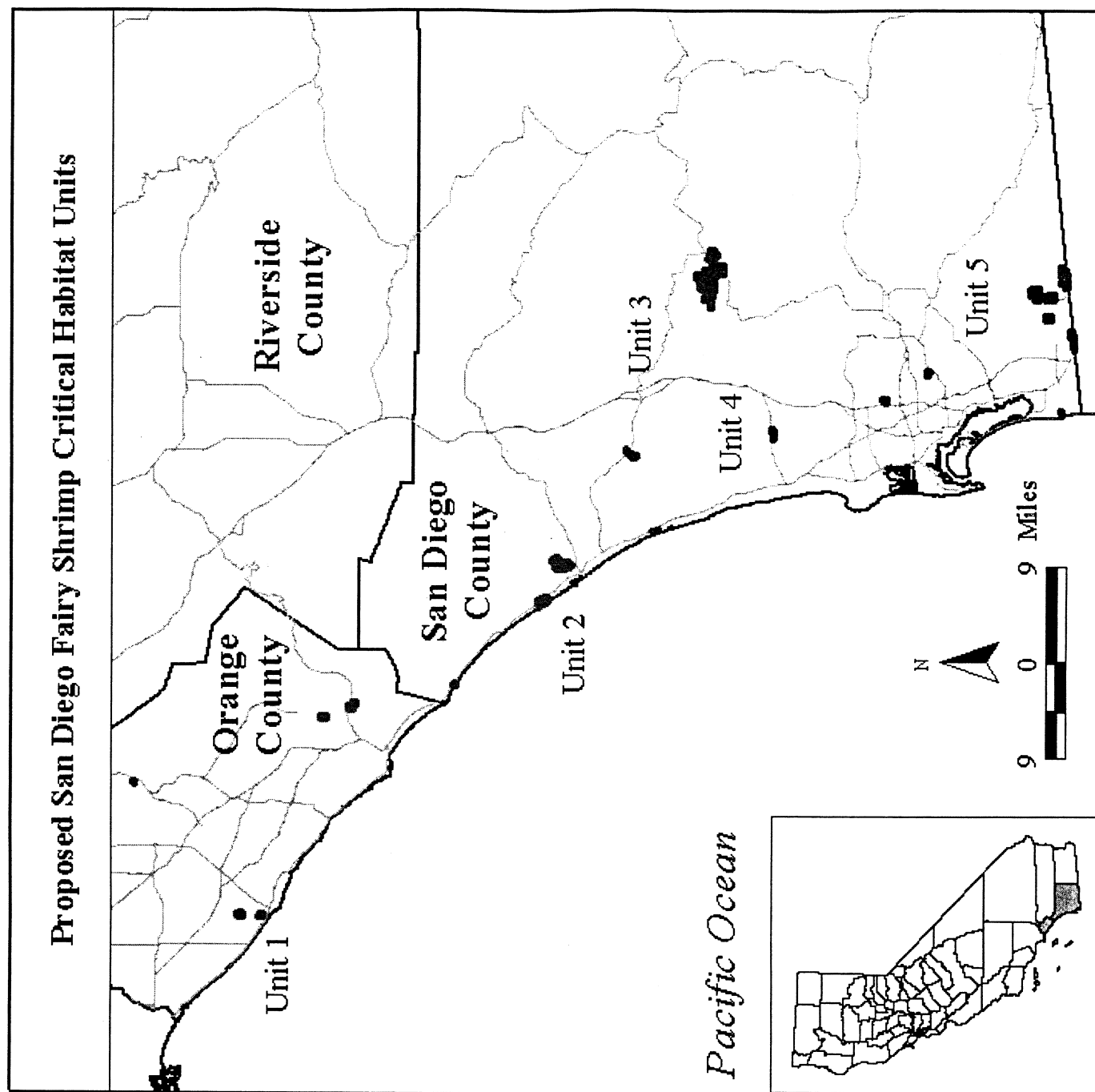
(3) Within these areas, the primary constituent elements include, but are not limited to, those habitat components that are essential for the primary biological needs of foraging, sheltering, reproduction, and dispersal. The primary constituent elements are found in those areas that support vernal pools or other ephemeral depressional wetlands. Within these seasonal wetlands, specific associations that are essential to the primary biological needs of the San Diego fairy shrimp include,

but are not limited to: Small to large vernal pools with shallow to moderate depths that hold water for sufficient lengths of time necessary for San Diego fairy shrimp incubation and reproduction, but not necessarily every year; entire watershed(s) and hydrology for vernal pool basins and their associated vernal pool complexes, ephemeral depressional wetlands, flat or gently sloping topography, and any soil type with a clay component and/or an impermeable surface or subsurface layer known to support vernal pool habitat.

(4) Existing features and structures, such as buildings, roads, railroads, urban development, and other features not containing primary constituent elements, are not considered critical habitat. In addition, critical habitat does not include non-Federal lands covered by a legally operative habitat conservation plan for the San Diego fairy shrimp issued under section 10(a)(1)(B) of the Act on or before April 22, 2003.

(5) Index map of critical habitat units for San Diego fairy shrimp follows:

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BILLING CODE 4310-55-C

(6) Map Unit 1: Orange County, Orange County, California. From USGS 1:24,000 quadrangle maps Black Star Canyon, Newport Beach, and Canada Gobernadora, California.

(i) Unit 1a: lands bounded by the following UTM NAD27 coordinates (E,N): 432400, 3740900; 432700, 3740900; 432700, 3740600; 432400, 3740600; 432400, 3740700; 432300, 3740700; 432300, 3740800; 432400, 3740800; 432400, 3740900.

(ii) Unit 1b: lands bounded by the following UTM NAD27 coordinates

(E,N): 412700, 3725200; 412900, 3725200; 412900, 3725100; 413000, 3725100; 413000, 3724800; 413100, 3724800; 413100, 3724600; 412900, 3724600; 412900, 3724400; 412600, 3724400; 412600, 3725100; 412700, 3725100; 412700, 3725200.

(iii) Unit 1c: lands bounded by the following UTM NAD27 coordinates (E,N): 412500, 3722000; 412600, 3722000; 412600, 3721900; 412900, 3721900; 412900, 3721500; 412600, 3721500; 412600, 3721600; 412400, 3721600; 412400, 3721900; 412500, 3721900; 412500, 3722000.

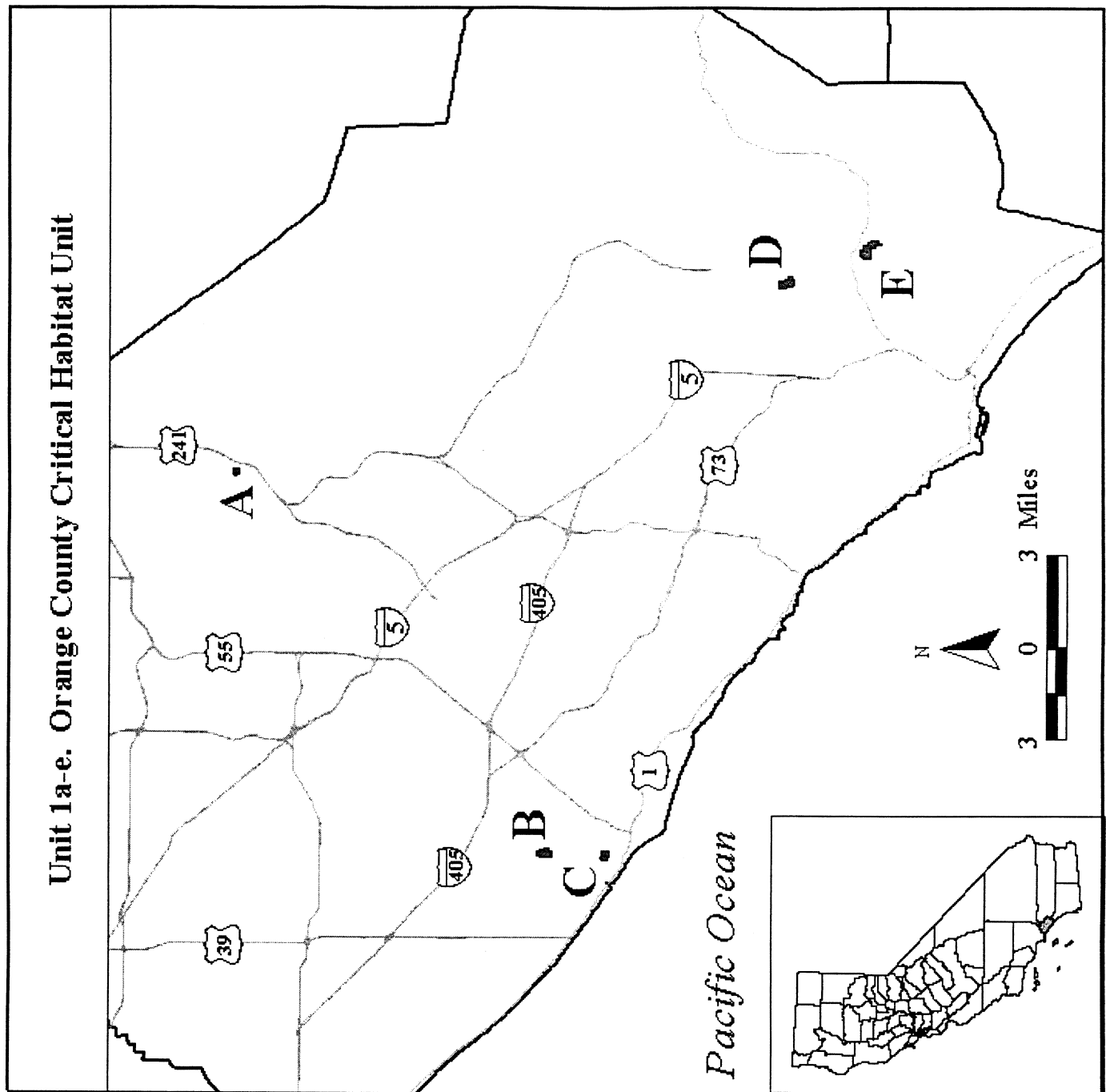
(iv) Unit 1d: lands bounded by the following UTM NAD27 coordinates (E,N): 442100, 3712800; 442500, 3712800; 442500, 3712500; 442600, 3712500; 442600, 3712300; 442700, 3712300; 442700, 3712100; 442600, 3712100; 442600, 3712000; 442300, 3712000; 442300, 3712100; 442200, 3712100; 442200, 3712400; 442100, 3712400; 442100, 3712800.

(v) Unit 1e: lands bounded by the following UTM NAD27 coordinates (E,N): 443800, 3708700; 444100, 3708700; 444100, 3708500; 444300, 3708500; 444300, 3708300; 444500,

3708300; 444500, 3708100; 444600,
3708100; 444600, 3707700; 444400,
3707700; 444400, 3707600; 444300,
3707600; 444300, 3707900; 444200,

3707900; 444200, 3708100; 443600,
3708100; 443600, 3708500; 443700,
3708500; 443700, 3708600; 443800,
3708600; 443800, 3708700.

(vi) Map of Unit 1a-e follows:
BILLING CODE 4310-55-P



BILLING CODE 4310-55-C

(7) Map Unit 2: San Diego: North Coastal Mesa, San Diego County, California. From USGS 1:24,000 quadrangle maps San Clemente, San Onofre Bluff, Las Pulgas Canyon, Oceanside, San Luis Rey, and Encinitas, California.

(i) Unit 2a: lands bounded by the following UTM NAD27 coordinates (E,N): 447100, 3693100; 447500, 3693100; 447500, 3693000; 447600, 3693000; 447600, 3692800; 447500, 3692800; 447500, 3692700; 447300, 3692700; 447300, 3692800; 447100, 3692800; 447100, 3693100, excluding the Pacific Ocean.

(ii) Unit 2b: lands bounded by the following UTM NAD27 coordinates (E,N): 459500, 3680600; 459900, 3680600; 459900, 3680500; 460000, 3680500; 460000, 3680300; 459800, 3680300; 459800, 3680400; 459700, 3680400; 459700, 3680300; 459600, 3680300; 459600, 3680200; 459500, 3680200; 459500, 3680000; 459300,

3680000; 459300, 3679900; 459200, 3679900; 459200, 3680000; 459100, 3680000; 459100, 3680100; 459000, 3680100; 459000, 3680300; 459300, 3680300; 459300, 3680500; 459500, 3680500; 459500, 3680600, excluding the Pacific Ocean.

(iii) Unit 2c: lands bounded by the following UTM NAD27 coordinates (E,N): 460000, 3680000; 460200, 3680000; 460200, 3679900; 460300, 3679900; 460300, 3679600; 460500, 3679600; 460500, 3679500; 460600, 3679500; 460600, 3679200; 460500, 3679200; 460500, 3679100; 460400, 3679100; 460300, 3679000; 460300, 3679100; 460100, 3679100; 460100, 3679000; 459800, 3679000; 459800, 3679100; 459700, 3679100; 459700, 3679200; 459600, 3679200; 459600, 3679400; 459500, 3679400; 459500, 3679500; 459400, 3679500; 459400, 3679700; 459300, 3679700; 459300, 3679800; 459800, 3679800; 459800, 3679700; 460000, 3679700; 460000, 3680000, excluding the Pacific Ocean.

(iv) Unit 2d: lands bounded by the following UTM NAD27 coordinates (E,N): 465800, 3678400; 466100, 3678400; 466100, 3678300; 466200, 3678300; 466200, 3677800; 466400, 3677800; 466400, 3677500; 466300, 3677500; 466300, 3677400; 466100,

3677400; 466100, 3677200; 466000, 3677200; 466000, 3677100; 465700, 3677100; 465700, 3677200; 465600, 3677200; 465600, 3677300; 465500, 3677300; 465500, 3677400; 465400, 3677400; 465400, 3677500; 465200, 3677500; 465200, 3677400; 465100, 3677400; 465100, 3677500; 465000, 3677500; 465000, 3677300; 464900, 3677300; 464900, 3677200; 464700, 3677200; 464700, 3677500; 464600, 3677500; 464600, 3677800; 464800, 3677800; 464800, 3677700; 464900, 3677700; 464900, 3677600; 465000, 3677600; 465000, 3678000; 465200, 3678000; 465200, 3677900; 465400, 3677900; 465400, 3677800; 465600, 3677800; 465600, 3677700; 465900, 3677700; 465900, 3677800; 465700, 3677800; 465700, 3678200; 465800, 3678200; 465800, 3678400.

(v) Unit 2e: lands bounded by the following UTM NAD27 coordinates (E,N): 464600, 3677800; 464800, 3677800; 464800, 3677700; 464900, 3677700; 464900, 3677500; 465000, 3677500; 465000, 3677300; 464900, 3677300; 464900, 3677200; 464700, 3677200; 464700, 3677500; 464600, 3677500; 464600, 3677800.

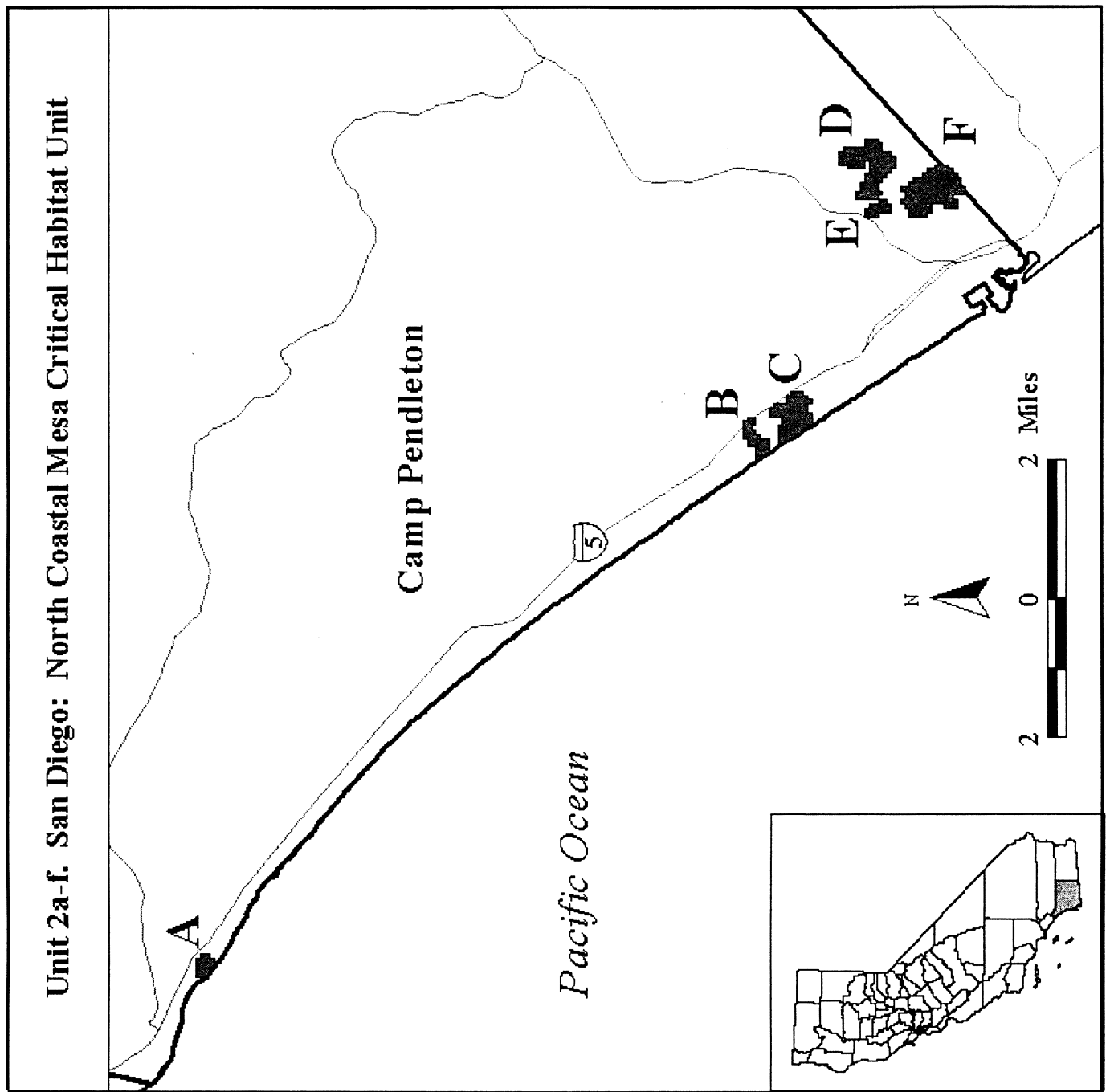
(vi) Unit 2f: lands bounded by the following UTM NAD27 coordinates (E,N): 464900, 3677000; 465000, 3677000; 465000, 3676900;

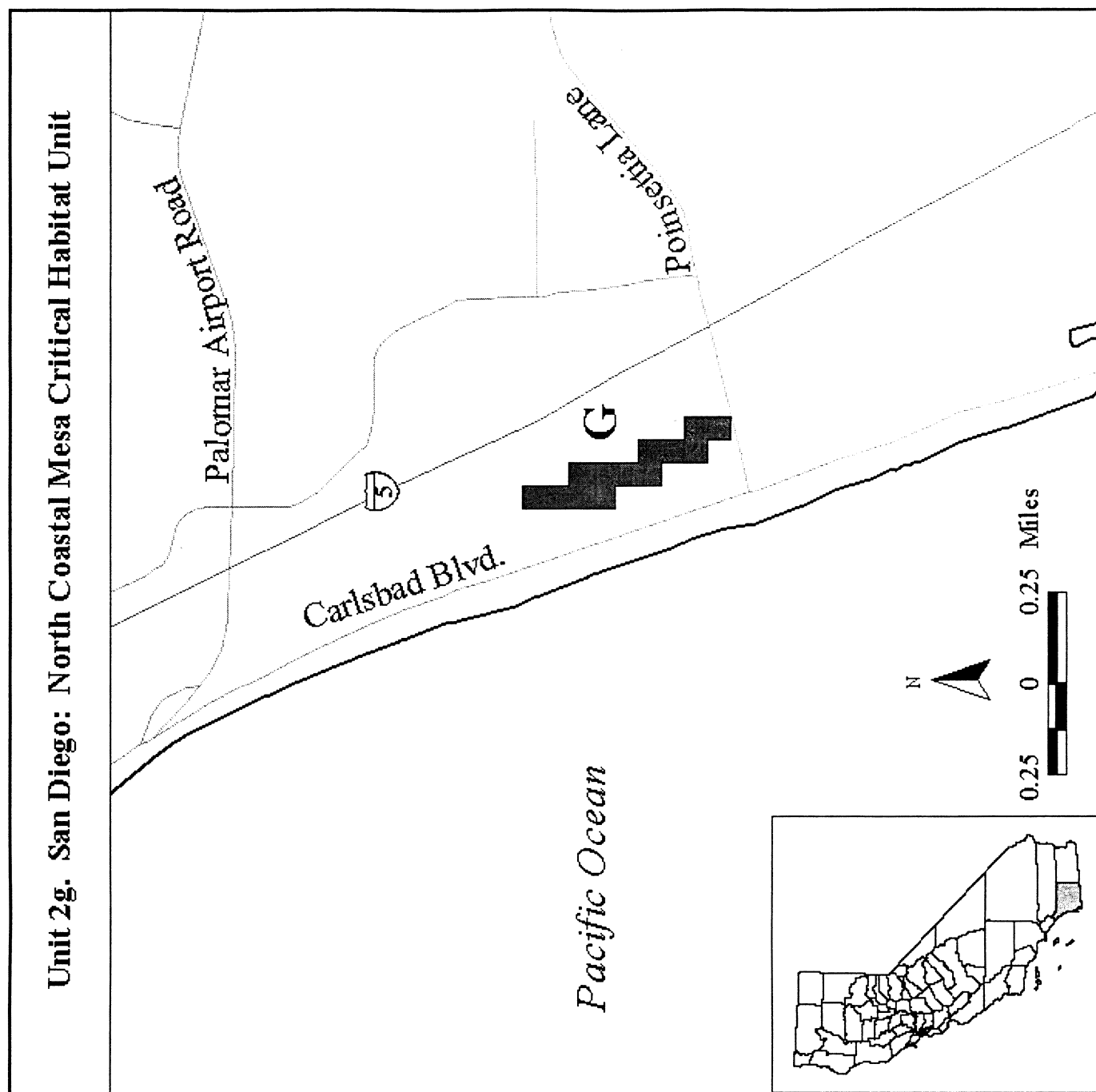
465200, 3676900; 465200, 3677000; 465300, 3677000; 465300, 3676800; 465400, 3676800; 465400, 3676700; 465500, 3676700; 465500, 3676500; 465600, 3676500; 465600, 3676400; 465700, 3676400; 465700, 3676200; 465800, 3676200; 465800, 3675900; 465700, 3675900; 465700, 3675800; 465600, 3675800; 465600, 3675700; 465500, 3675700; 465500, 3675600; 465300, 3675600; 465300, 3675500; 465100, 3675500; 465100, 3675800; 465000, 3675800; 465000, 3675700; 464800, 3675700; 464800, 3676000; 464900, 3676000; 464900, 3676300; 464700, 3676300; 464700, 3676400; 464600, 3676400; 464600, 3676800; 464800, 3676800; 464800, 3676900; 464900, 3676900; 464900, 3677000.

(vii) Unit 2g: lands bounded by the following UTM NAD27 coordinates (E,N): 470300, 3663400; 470400, 3663400; 470400, 3663200; 470500, 3663200; 470500, 3662900; 470600, 3662900; 470600, 3662700; 470700, 3662700; 470700, 3662500; 470600, 3662500; 470600, 3662600; 470500, 3662600; 470500, 3662800; 470400, 3662800; 470400, 3663000; 470300, 3663000; 470300, 3663400.

(viii) Maps of Unit 2 follow:

BILLING CODE 4310-55-P





BILLING CODE 4310-55-C

(8) Map Unit 3: San Diego: Inland Valley, San Diego County, California. From USGS 1:24,000 quadrangle maps San Marcos, San Pasqual, and Ramona, California.

(i) Unit 3a: lands bounded by the following UTM NAD27 coordinates (E,N): 482500,3667500; 482800,3667500; 482800,3667300; 482600,3667300; 482600,3667100; 482400,3667100; 482400,3667000; 482200,3667000; 482200,3667200; 482300,3667200; 482300,3667400; 482500,3667400; 482500,3667500.

(ii) Unit 3b: lands bounded by the following UTM NAD27 coordinates (E,N): 481800,3667300; 482000,3667300; 482000,3667100; 481800,3667100; 481800,3667300.

(iii) Unit 3c: lands bounded by the following UTM NAD27 coordinates (E,N): 481600,3666800; 481900,3666800; 481900,3666700; 482100,3666700; 482100,3666500; 482000,3666500; 482000,3666300; 481900,3666300; 481900,3666100; 482000,3666100; 482000,3665900; 481900,3665900; 481900,3665800;

481700,3665800; 481700,3665900; 481600,3665900; 481600,3666100; 481400,3666100; 481400,3666300; 481800,3666300; 481800,3666400; 481600,3666400; 481600,3666500; 481500,3666500; 481500,3666600; 481600,3666600; 481600,3666800.

(iv) Unit 3d: lands bounded by the following UTM NAD27 coordinates (E,N): 482800,3666600; 483000,3666600; 483000,3666400; 482800,3666400; 482800,3666600.

(v) Unit 3e: lands bounded by the following UTM NAD27 coordinates

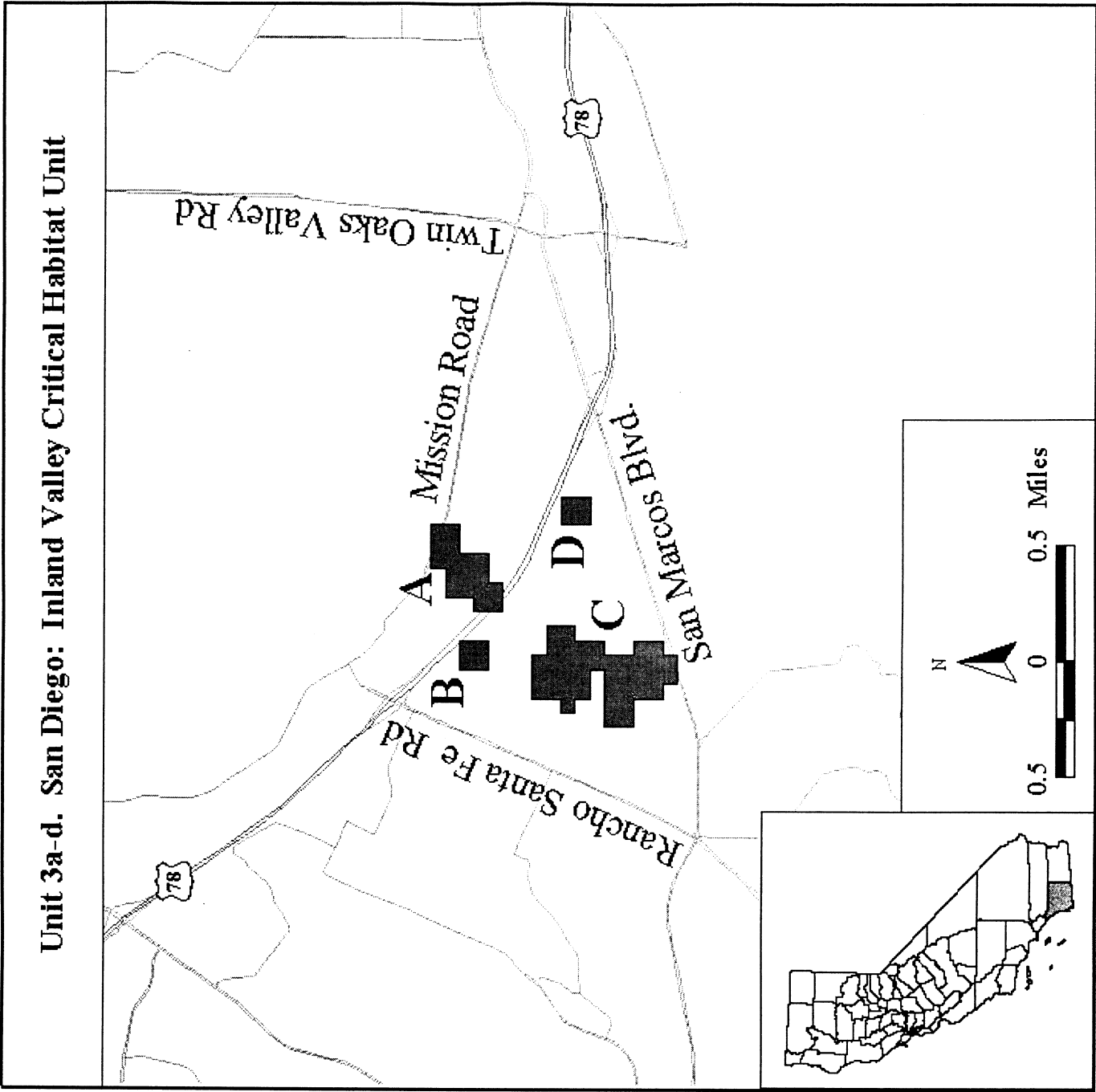
(E,N): 508400,3657000;
509000,3657000; 509000,3656200;
509300,3656200; 509300,3656000;
509800,3656000; 509800,3655500;
509500,3655500; 509500,3655000;
509300,3655000; 509300,3653700;
509600,3653700; 509600,3653800;
509700,3653800; 509700,3653900;
509800,3653900; 509800,3654000;
509900,3654000; 509900,3654100;
510000,3654100; 510000,3654200;
510100,3654200; 510100,3654300;
510200,3654300; 510200,3654400;
510300,3654400; 510300,3654500;
510400,3654500; 510400,3654600;
510500,3654600; 510500,3654800;
511300,3654800; 511300,3655100;
511200,3655100; 511200,3655400;
511400,3655400; 511400,3655300;
511500,3655300; 511500,3655100;
511600,3655100; 511600,3655200;
511800,3655200; 511800,3655000;

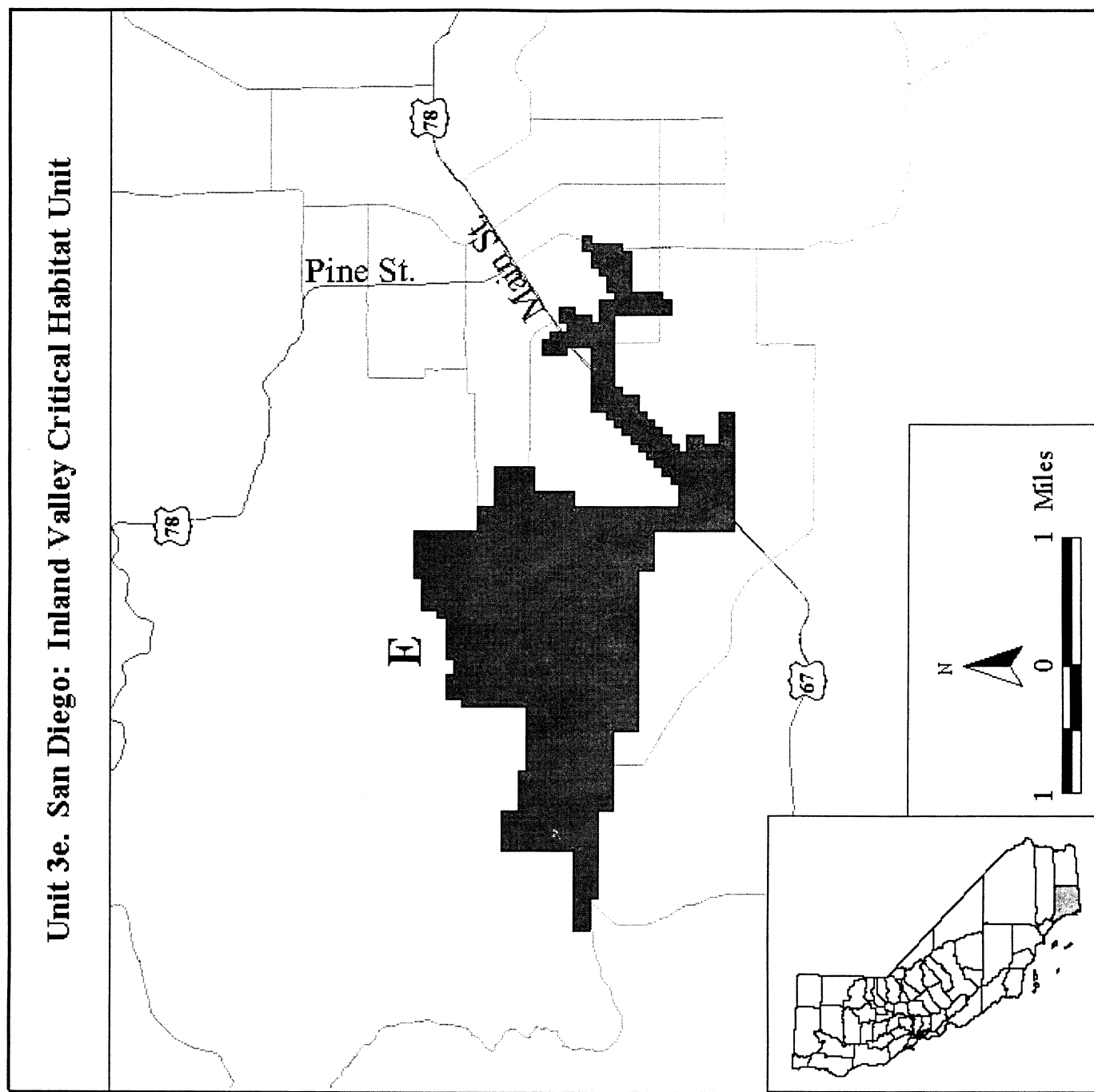
511700,3655000; 511700,3654800;
511600,3654800; 511600,3654700;
511900,3654700; 511900,3654500;
512000,3654500; 512000,3654600;
512200,3654600; 512200,3654700;
512300,3654700; 512300,3654800;
512500,3654800; 512500,3654900;
512700,3654900; 512700,3654800;
512600,3654800; 512600,3654400;
512500,3654400; 512500,3654300;
512000,3654300; 512000,3653900;
511900,3653900; 511900,3653800;
511700,3653800; 511700,3654500;
510800,3654500; 510800,3654400;
510700,3654400; 510700,3654200;
510500,3654200; 510500,3654100;
510400,3654100; 510400,3654000;
510300,3654000; 510300,3653900;
510200,3653900; 510200,3653800;
510100,3653800; 510100,3653700;
510000,3653700; 510000,3653600;
510200,3653600; 510200,3653400;

510100,3653400; 510100,3653200;
510500,3653200; 510500,3653000;
509000,3653000; 509000,3654000;
508500,3654000; 508500,3654200;
506500,3654200; 506500,3654500;
505500,3654500; 505500,3654700;
504400,3654700; 504400,3654800;
504000,3654800; 504000,3655000;
505000,3655000; 505000,3655900;
505500,3655900; 505500,3655700;
506000,3655700; 506000,3655600;
506800,3655600; 506800,3656400;
506900,3656400; 506900,3656600;
507200,3656600; 507200,3656500;
507400,3656500; 507400,3656600;
507900,3656600; 507900,3656700;
508000,3656700; 508000,3656900;
508400,3656900; 508400,3657000.

(vi) Maps of Unit 3 follow:

BILLING CODE 4310-55-P





BILLING CODE 4310-55-C

(9) Map Unit 4: San Diego: Central Coastal Mesa, San Diego County, California. From USGS 1:24,000 quadrangle maps Del Mar, La Mesa, and National City, California.

(i) Unit 4a: lands bounded by the following UTM NAD27 coordinates (E,N): 485400, 3645900; 485900, 3645900; 485900, 3645500; 485600, 3645500; 485600, 3645400; 485400, 3645400; 485400, 3645900.

(ii) Unit 4b: lands bounded by the following UTM NAD27 coordinates (E,N): 484300, 3645600; 484600,

3645600; 484600, 3645500; 484700, 3645500; 484700, 3645300; 484400, 3645300; 484400, 3645500; 484300, 3645500; 484300, 3645600.

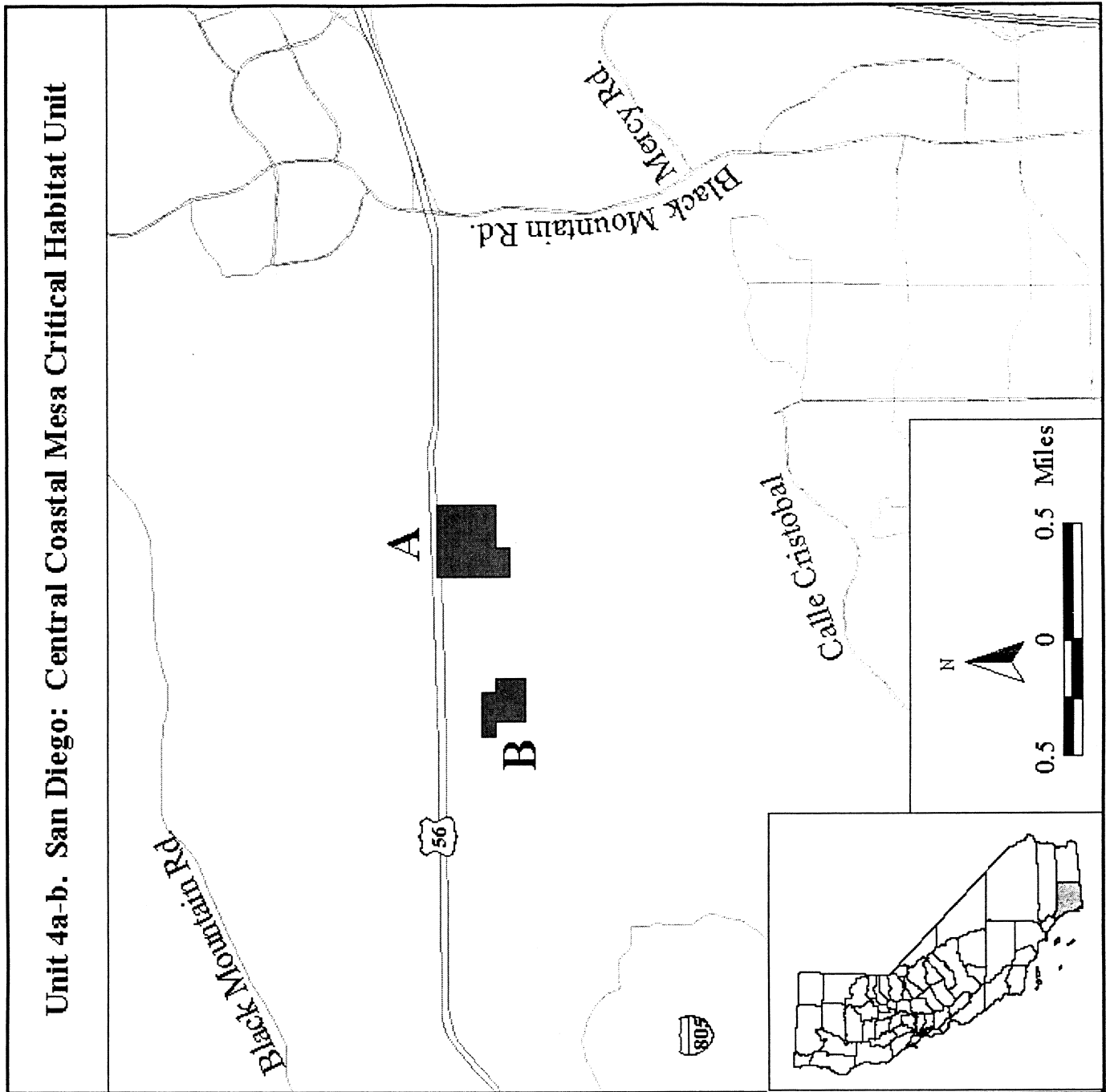
(iii) Unit 4c: lands bounded by the following UTM NAD27 coordinates (E,N): 490200, 3629300; 490400, 3629300; 490400, 3629200; 490500, 3629200; 490500, 3629100; 490400, 3629100; 490400, 3628700; 490300, 3628700; 490300, 3628600; 490200, 3628600; 490200, 3628500; 490100, 3628500; 490100, 3628600; 490000, 3628600; 490000, 3628500; 489700,

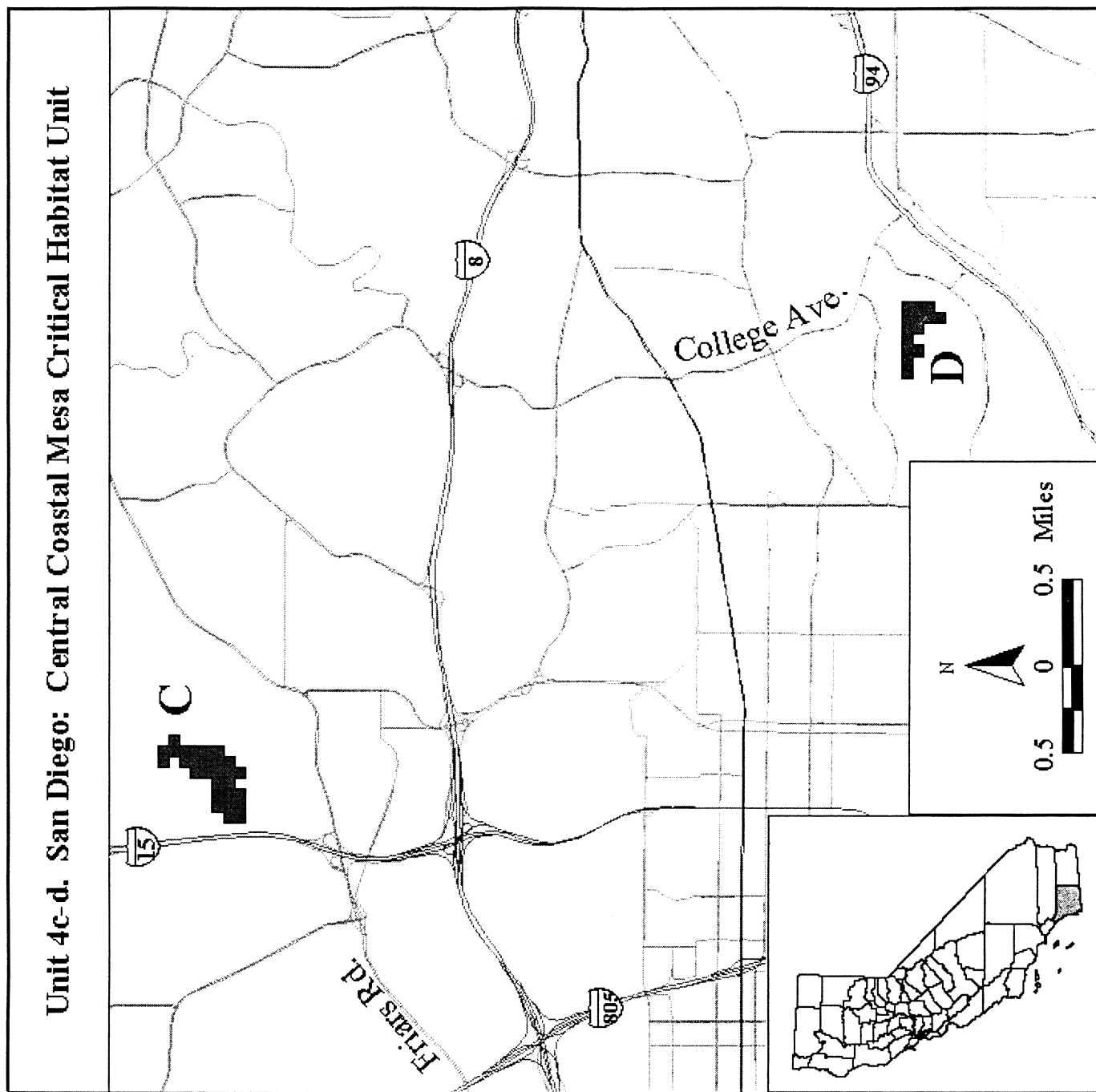
3628500; 489700, 3628700; 489800, 3628700; 489800, 3628800; 490100, 3628800; 490100, 3629000; 490200, 3629000; 490200, 3629100; 490300, 3629100; 490300, 3629200; 490200, 3629200; 490200, 3629300.

(iv) Unit 4d: lands bounded by the following UTM NAD27 coordinates (E,N): 493800, 3622500; 494500, 3622500; 494500, 3622200; 494400, 3622200; 494400, 3622100; 494300, 3622100; 494300, 3622300; 494200, 3622300; 494200, 3622400; 494100, 3622400; 494100, 3622300; 494000,

3622300; 494000, 3622400; 493800,
3622400; 493800, 3622500.

(v) Maps of Unit 4 follow:
BILLING CODE 4310-55-P





BILLING CODE 4310-55-C

(10) Map Unit 5: San Diego: Southern Coastal Mesa, San Diego County, California. From USGS 1:24,000 quadrangle maps Imperial Beach and Otay Mesa, California.

(i) Unit 5a: lands bounded by the following UTM NAD27 coordinates (E,N): 506000, 3607300; 506600, 3607300; 506600, 3607100; 506700, 3607100; 506700, 3606900; 506900, 3606900; 506900, 3606500; 507000, 3606500; 507000, 3606000; 506900, 3606000; 506900, 3605800; 506800, 3605800; 506800, 3605900; 506400,

3605900; 506400, 3606200; 506800, 3606200; 506800, 3606400; 506300, 3606400; 506300, 3606300; 506000, 3606300; 506000, 3606200; 505700, 3606200; 505700, 3606100; 505400, 3606100; 505400, 3606000; 505100, 3606000; 505100, 3605900; 505000, 3605900; 505000, 3606400; 505100, 3606400; 505100, 3606500; 505400, 3606500; 505400, 3606600; 505600, 3606600; 505600, 3606700; 506000, 3606700; 506000, 3607000; 505900, 3607000; 505900, 3607200; 506000, 3607200; 506000, 3607300.

(ii) Unit 5b: lands bounded by the following UTM NAD27 coordinates (E,N): 502000, 3604900; 502800, 3604900; 502800, 3603900; 502600, 3603900; 502600, 3604000; 502000, 3604000; 502000, 3604900.

(iii) Unit 5c: lands bounded by the following UTM NAD27 coordinates (E,N): 505200, 3604800; 505700, 3604800; 505700, 3604400; 506100, 3604400; 506100, 3603500; 505200, 3603500; 505200, 3604800.

(iv) Unit 5d: lands bounded by the following UTM NAD27 coordinates (E,N): 509600, 3602700; 510000,

3602700; 510000, 3602600; 510100,
3602600; 510100, 3602400; 510000,
3602400; 510000, 3602100; 509900,
3602100; 509900, 3602000; 509800,
3602000; 509800, 3601600; 509500,
3601600; 509500, 3601500; 508500,
3601500; 508500, 3601400; 507500,
3601400; 507500, 3601300; 507000,
3601300; 507000, 3601900; 507200,
3601900; 507200, 3602000; 507300,
3602000; 507300, 3601900; 507400,
3601900; 507400, 3602000; 507500,
3602000; 507500, 3602200; 507600,
3602200; 507600, 3602300; 507700,
3602300; 507700, 3602500; 507900,
3602500; 507900, 3602300; 508000,

3602300; 508000, 3602100; 508100,
3602100; 508100, 3602200; 508300,
3602200; 508300, 3602000; 508600,
3602000; 508600, 3602100; 508700,
3602100; 508700, 3602500; 508800,
3602500; 508800, 3602600; 508900,
3602600; 508900, 3602500; 509100,
3602500; 509100, 3602100; 509200,
3602100; 509200, 3602500; 509300,
3602500; 509300, 3602600; 509600,
3602600; 509600, 3602700, excluding
Mexico.

(v) Unit 5e: lands bounded by the
following UTM NAD27 coordinates
(E,N): 488300, 3602600; 488500,

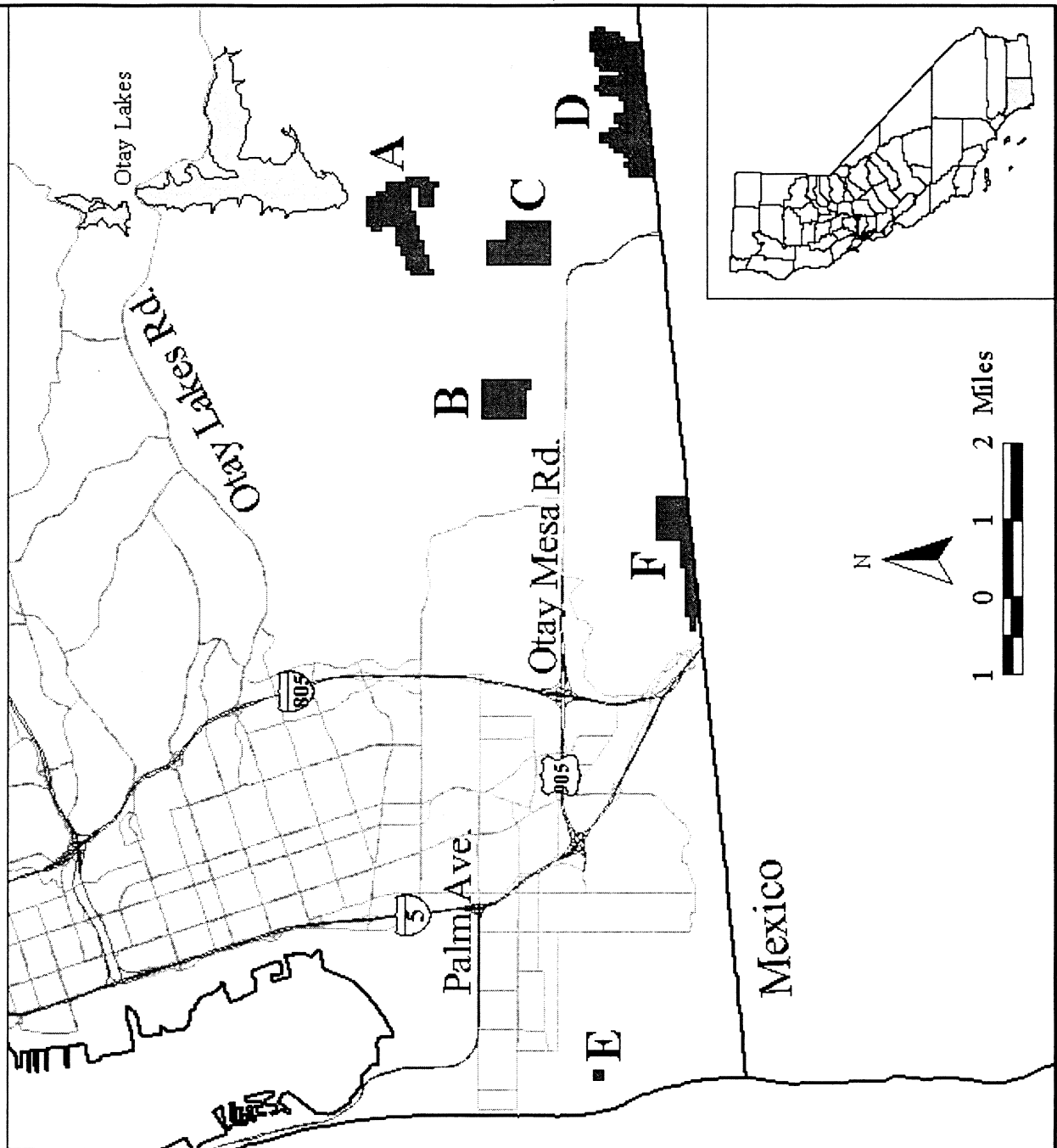
3602600; 488500, 3602400; 488300,
3602400; 488300, 3602600.

(vi) Unit 5f: lands bounded by the
following UTM NAD27 coordinates
(E,N): 499500, 3601300; 500400,
3601300; 500400, 3600600; 499500,
3600600; 499500, 3600500; 498400,
3600500; 498400, 3600400; 497900,
3600400; 497900, 3600500; 497600,
3600500; 497600, 3600600; 497900,
3600600; 497900, 3600700; 498900,
3600700; 498900, 3600800; 499500,
3600800; 499500, 3601300, excluding
Mexico.

(vii) Maps of Unit 5 follow:

BILLING CODE 4310-55-P

Unit 5a-f. San Diego: Southern Coastal Mesa Critical Habitat Unit



BILLING CODE 4310-55-C

* * * * *

Dated: April 10, 2003.

Craig Manson,

Assistant Secretary for Fish and Wildlife and Parks.

[FR Doc. 03-9434 Filed 4-21-03; 8:45 am]

BILLING CODE 4310-55-P