

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

[Docket No. FWS-R8-ES-2009-0069;
92210-1117-0000-B4]

RIN 1018-AV89

**Endangered and Threatened Wildlife
and Plants; Revised Critical Habitat for
the Arroyo Toad (*Anaxyrus*
californicus)**

AGENCY: Fish and Wildlife Service,
Interior.

ACTION: Proposed rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), propose to revise designated critical habitat for the arroyo toad (*Anaxyrus californicus*), pursuant to the Endangered Species Act of 1973, as amended (Act). The previous final rule designated 11,695 acres (ac) (4,733 hectares (ha)) of critical habitat and was published in the **Federal Register** (FR) on April 13, 2005. We now propose to designate approximately 109,110 ac (44,155 ha) of lands located in Santa Barbara, Ventura, Los Angeles, San Bernardino, Riverside, Orange, and San Diego Counties, California, which, if finalized as proposed, would result in an increase of approximately 97,415 ac (39,422 ha) of critical habitat.

DATES: We will consider comments we receive on or before December 14, 2009. We must receive requests for public hearings, in writing, at the address shown in the **FOR FURTHER INFORMATION CONTACT** section by November 27, 2009.

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

- **Federal eRulemaking Portal:** <http://www.regulations.gov>. Follow the instructions for submitting comments to Docket No. FWS-R8-ES-2009-0069.

- **U.S. mail or hand-delivery:** Public Comments Processing, Attn: FWS-R8-ES-2009-0069, Division of Policy and Directives Management, U.S. Fish and Wildlife Service, 4401 N. Fairfax Drive, Suite 222, Arlington, VA 22203.

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

FOR FURTHER INFORMATION CONTACT: For general information on the proposed designation and information about the proposed revised designation in Santa Barbara and Ventura Counties, northern Los Angeles County, and the desert portion of San Bernardino County, contact Diane Noda, Field Supervisor,

or Michael McCrary, Listing and Recovery Coordinator, Ventura Fish and Wildlife Office, U.S. Fish and Wildlife Service, 2493 Portola Road, Suite B, Ventura, CA 93003; telephone (805) 644-1766; facsimile (805) 644-3958.

For information about the proposed revised designation in the remaining portions of Los Angeles and San Bernardino Counties, as well as Riverside, Orange, and San Diego Counties, contact Jim Bartel, Field Supervisor, Carlsbad Fish and Wildlife Office, U.S. Fish and Wildlife Service, 6010 Hidden Valley Road, Suite 101, Carlsbad, CA 92011; telephone (760) 431-9440; facsimile (760) 431-9624.

If you use a telecommunications device for the deaf (TDD), call the Federal Information Relay Service (FIRS) at (800) 877-8339.

SUPPLEMENTARY INFORMATION:

Public Comments

We intend any final action resulting from this proposed revised rule to be based on the best scientific and commercial data available and be as accurate and as effective as possible. Therefore, we request comments or information from the public, other government agencies, Tribes, the scientific community, industry, or other interested parties concerning this proposed rule. We particularly seek comments concerning:

1. The reasons why we should or should not revise the designation of habitat as "critical habitat" under section 4 of the Endangered Species Act of 1973, as amended (Act; 16 U.S.C. 1531 *et seq.*), including whether there are threats to the species from human activity, the degree of which can be expected to increase due to the designation, and whether that increase in threat outweighs the benefit of designation such that the designation of critical habitat is not prudent;

2. Specific information on:
 - The amount and distribution of arroyo toad habitat included in this proposed revised rule,

- What areas within the geographical area occupied by the species at the time of listing contain features essential to the conservation of the species and why, and

- What areas outside the geographical area occupied by the species at the time of listing are essential for the conservation of the species and why;

3. Land-use designations and current or planned activities in the subject areas and their possible effects on proposed revised critical habitat;

4. Any probable economic, national security, or other relevant impacts of designating any area that may be

included in the final designation. We are particularly interested in any impacts on small entities, and the benefits of including or excluding areas that exhibit these impacts;

5. Comments or information that may assist us in identifying or clarifying the primary constituent elements and the resulting physical and biological features essential to the conservation of the arroyo toad;

6. How the proposed revised critical habitat boundaries could be refined to more closely circumscribe the landscapes identified as essential;

7. Information regarding Trabuco Creek in Orange County and any special management considerations or protection that any essential physical or biological features in this area may require;

8. Information regarding the San Diego River in San Diego County from just below El Capitan Reservoir downstream to the confluence with San Vicente Creek, and any special management considerations or protection that any essential physical or biological features in this area may require;

9. Whether the potential exclusion under section 4(b)(2) of the Act of non-Federal lands covered by the Western Riverside County Multiple Species Habitat Conservation Plan from final revised critical habitat is or is not appropriate and why;

10. Whether the potential exclusion under section 4(b)(2) of the Act of non-Federal lands covered by the San Diego Multiple Species Conservation Program—City and County of San Diego's Subarea Plans from final revised critical habitat is or is not appropriate and why;

11. Whether the potential exclusion under section 4(b)(2) of the Act of non-Federal lands covered by the Coachella Valley Multiple Species Habitat Conservation Plan from final revised critical habitat is or is not appropriate and why;

12. Whether the potential exclusion under section 4(b)(2) of the Act of non-Federal lands covered by the Orange County Central-Coastal Subregional Habitat Conservation Plan/Natural Community Conservation Plan from final revised critical habitat is or is not appropriate and why;

13. Whether the potential exclusion under section 4(b)(2) of the Act of non-Federal lands covered by the Southern Orange County Natural Community Conservation Plan/Master Streambed Alteration Agreement/Habitat Conservation Plan from final revised critical habitat is or is not appropriate and why;

14. Whether the conservation needs of the arroyo toad can be achieved or not by limiting the designation of final revised critical habitat to non-Tribal lands and why;

15. Whether the potential exclusion under section 4(b)(2) of the Act of Tribal lands of the Rincon Band of Luiseño Mission Indians from final revised critical habitat is or is not appropriate and why;

16. Whether the potential exclusion under section 4(b)(2) of the Act of Tribal lands of the Pala Band of Luiseño Mission Indians from final revised critical habitat is or is not appropriate and why;

17. Whether the potential exclusion under section 4(b)(2) of the Act of Tribal lands of the Sycuan Band of the Kumeyaay Nation from final revised critical habitat is or is not appropriate and why;

18. Whether the potential exclusion under section 4(b)(2) of the Act of Tribal lands of the Capitan Grande Band of Diegueno Mission Indians from final revised critical habitat is or is not appropriate and why;

19. Whether the potential exclusion under section 4(b)(2) of the Act of Tribal lands of the Mesa Grande Band of Diegueno Mission Indians from final revised critical habitat is or is not appropriate and why;

20. Whether our exemption under section 4(a)(3)(B) of the Act of the lands on Department of Defense land at Marine Corps Base, Camp Pendleton, in San Diego County; Fallbrook Naval Weapons Station in San Diego County; and Fort Hunter Liggett Military Reservation in San Luis Obispo County is or is not appropriate, and why;

21. Information on any quantifiable economic costs or benefits of the proposed revised designation of critical habitat;

22. Whether the benefit of exclusion of any other particular area not specifically identified above outweighs the benefit of inclusion under section 4(b)(2) of the Act;

23. Information on the currently predicted effects of climate change on the arroyo toad and its habitat;

24. Any foreseeable impacts on energy supplies, distribution, and use resulting from the proposed revised designation and, in particular, any impacts on electricity production, and the benefits of including or excluding any particular areas that exhibit these impacts; and

25. Whether we could improve or modify our approach to designating critical habitat in any way to provide for greater public participation and understanding, or to better

accommodate public concerns and comments.

Our final determination concerning revised critical habitat for the arroyo toad will take into consideration all written comments received during the comment period, including comments requested from peer reviewers, comments received during a public hearing should one be requested, and any additional information we receive during the 60-day comment period. Our final determination will also consider all written comments and any additional information we receive during the comment period for the draft economic analysis. All comments will be included in the public record for this rulemaking. On the basis of peer reviewer and public comments, we may, during the development of our final determination, find that areas within those proposed do not meet the definition of critical habitat, that some modifications to the described boundaries are appropriate, or that areas are or are not appropriate for exclusion under section 4(b)(2) of the Act.

You may submit your comments and materials concerning this proposed rule by one of the methods listed in the **ADDRESSES** section.

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

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

You may obtain copies of the proposed revised rule by mail from the Ventura Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT**) or by visiting the Federal eRulemaking Portal at <http://www.regulations.gov>.

Background

It is our intent to discuss only those topics directly relevant to the revised designation of critical habitat in this proposed rule. Additional information

on the arroyo toad may also be found in the final listing rule published in the **Federal Register** on December 16, 1994 (59 FR 64859), the “Recovery Plan for the Arroyo Southwestern Toad” (recovery plan; Service 1999), and the designation of critical habitat for the arroyo toad published in the **Federal Register** on April 13, 2005 (70 FR 19562). These documents are available on the Ventura Fish and Wildlife Office and Carlsbad Fish and Wildlife Office Web sites at <http://www.fws.gov/ventura> and <http://www.fws.gov/carlsbad>. However, please note that this proposed rule incorporates new information on the distribution of arroyo toads that became available since the 2005 final critical habitat designation for this species.

Taxonomy and Nomenclature

On December 16, 1994, we published a final rule listing the arroyo southwestern toad (*Bufo microscaphus californicus*) as endangered (59 FR 64859). This animal, originally described as *Bufo cognatus californicus* (Camp 1915, p. 331), has consistently been treated as a distinct taxon. However, its rank as a subspecies or species and taxonomic affiliations with other species has changed several times since it was described. Myers (1930, p. 75) elevated it to species rank as *Bufo californicus* citing morphological, vocalization, and ecological data to distinguish it from *B. cognatus*. Subsequent to Myers’ paper, other authors again relegated the animal to subspecies rank aligned with various other species of *Bufo*. The name in use at the time of listing, *Bufo microscaphus californicus*, was published by Stebbins (1951, p. 275).

Since the toad was listed, an analysis of allozyme data (Gergus 1998, p. 322) supports recognition of *Bufo californicus* as separate from *B. microscaphus*. In addition, a phylogenetic analysis of comparative anatomical and molecular genetic data for amphibians (Frost *et al.* 2006, p. 363) segregated the Nearctic taxa of *Bufo* as the genus *Anaxyrus* and published the combination *Anaxyrus californicus*, the arroyo toad. This treatment is accepted by the Committee on Standard English and Scientific Names of the American Society of Ichthyologists and Herpetologists, The Herpetologists’ League, and the Society for the Study of Amphibians and Reptiles (Frost *et al.* 2008, p. 3).

In light of these changes and their acceptance by the above scientific authorities, we are proposing to amend the List of Threatened and Endangered Wildlife at 50 CFR 17.11 to identify the

listed entity as “arroyo toad (*Anaxyrus californicus*).” This change does not alter the description or distribution of the animals.

Species Description

The arroyo toad is a small, dark-spotted toad of the family Bufonidae. Its coloration ranges from light olive green or gray to light brown with a distinctive light-colored, V-shaped stripe across the head and the eyelids. The belly is white or buff and often lacks dark blotches or spots (Stebbins 2003, p. 212). The species is endemic to the coastal plain and mountains of central and southern California, and northwestern Baja California, Mexico, from near sea level to about 8,000 feet (ft) (2,440 meters (m)) in elevation. For a detailed description of the species, see the recovery plan and references cited within the plan (Service 1999, pp. 1–119), and information in previous **Federal Register** notices, proposed rules, and final rules (59 FR 64859, December 16, 1994; 66 FR 9414, February 7, 2001; 69 FR 23254, April 28, 2004; 70 FR 19562, April 13, 2005). In addition to the recovery plan, important sources for information on the biology of the arroyo toad include: Sweet (1992, pp. 1–198; 1993, pp. 1–73); Campbell *et al.* (1996, pp. 1–46); Griffin *et al.* (1998, pp. 1–66); Griffin and Case (2001, pp. 633–644); Holland and Sisk (2001); and Ramirez (2002a, pp. 1–62; 2002b; 2002c; 2003, pp. 1–101).

Life History

Breeding typically occurs from February to July on streams with persistent water (Griffin *et al.* 1999, p. 1). Males may breed with several females in a season; however, female arroyo toads release their entire clutch of eggs as a single breeding effort and probably do not produce a second clutch during the mating season. Eggs are deposited and tadpoles develop in shallow pools with minimal current and little or no emergent vegetation. The substrate in these pools is generally sand or fine gravel overlain with silt. The eggs hatch in 4 to 5 days and the tadpoles are immobile for an additional 5 to 6 days. Tadpoles then begin to disperse from the pool margin into the surrounding shallow water, where they spend an average of 10 weeks. Peak metamorphosis occurs during June and July in the northern part of the arroyo toad's range, and from late April through June farther south, although it could occur later, particularly at higher elevations (Holland 2000, *in litt.* p. 8). After metamorphosis, the juvenile arroyo toads remain on the bordering gravel bars until the pool dries out (usually from 8 to 12 weeks depending

on the site and rainfall). Most individuals become sexually mature by the following spring (Sweet 1992, p. 52).

Arroyo toad tadpoles feed on loose organic material such as interstitial algae, bacteria, and diatoms. They do not forage on macroscopic vegetation (Sweet 1992, p. 82; Jennings and Hayes 1994, p. 56). Juvenile arroyo toads feed on ants almost exclusively (Service 1999, p. 36). By the time they reach 0.7 to 0.9 inch (in) (1.78 centimeters (cm)) in length, they consume beetles along with ants (Sweet 1992, p. 99; Service 1999, p. 36). Adult arroyo toads probably consume a wide variety of insects and arthropods including (but not limited to) ants, beetles, spiders, larvae, and caterpillars.

Geographic Range

The historical and current range of the arroyo toad extends from the Salinas River Basin southward through the Santa Ynez, Santa Clara, and Los Angeles River basins (Sweet 1992, p. 18), to Orange, Riverside, and San Diego Counties (Jennings and Hayes 1994, p. 54) and southward to the Arroyo San Simeon system, Baja California, Mexico (Service 1999, p. 12; Ramirez 2007, p. 5). Populations also occur on the desert slopes of both the San Gabriel Mountains (in Little Rock Creek in Los Angeles County) and the San Bernardino Mountains (in the Mojave River and in its tributaries, Little Horsethief and Deep Creeks, in San Bernardino County) (Sweet 1992, p. 18; Jennings and Hayes 1994, p. 54).

At the time of listing (59 FR 64859; December 16, 1994), arroyo toads were believed to be extirpated from the Salinas River Basin. In 1996, arroyo toads were found during surveys on the Fort Hunter Liggett Military Reservation approximately 40 miles (mi) (64 kilometers (km)) downstream of the historical Santa Margarita arroyo toad locality (U.S. Army Reserve 2004, pp. 5–10). In 1997, arroyo toads were detected along a 17-mi (27-km) stretch of the San Antonio River. The Army surveyed approximately 6 mi (9.6 km) of the San Antonio River on the Military Reservation in 2002 and estimated there were as many as 7,000 arroyo toad larvae (tadpoles) in the area (U.S. Army Reserve Command 2004, p. 12). We believe this population was present but undetected on Fort Hunter Liggett at the time of listing for the following reasons: (1) Annual surveys (U.S. Army Reserve 2004, p. 38) indicate there is suitable breeding and upland habitats for this large, robust population; and (2) given that the nearest extant population of arroyo toads is 150 mi (240 km) southeast of Fort Hunter Liggett in Santa

Barbara County, it is unlikely that arroyo toads could have dispersed and newly colonized the Fort Hunter Liggett area by 1996, just 2 years subsequent to the species being listed in 1994. Therefore, we consider the population on Fort Hunter Liggett to have existed in 1994 and to represent the northernmost limit of the species' range at listing and currently. The geographical area occupied by the species at the time it was listed is the same as the species' current range in the coastal streams extending from Monterey County southward to San Diego County, and extending eastward into the riparian (along the shore of a river, stream, or lake) environments of San Bernardino and Riverside Counties.

Arroyo toads have been extirpated from approximately 75 percent of the habitat they originally occupied (Sweet 1992, p. 189; Jennings and Hayes 1994, p. 57; Campbell *et al.* 1996, p. 2). At present, arroyo toads are limited to isolated populations primarily in the headwaters of coastal streams. The species is likely restricted naturally as a result of specific habitat requirements for breeding and development (Service 1999, p. 39). These natural restrictions, coupled with the small sizes of many arroyo toad populations, make them particularly vulnerable to the negative effects of human-induced changes to their habitat (Jennings and Hayes 1994, p. 57).

Habitat

Stream order, elevation, and floodplain width appear to be important factors in determining habitat suitability (Sweet 1992, pp. 24–26; Griffin *et al.* 1999, pp. 1–3). Stream order ranks the size and potential power of streams. The smallest channels in a watershed with no tributaries are referred to as first-order streams. When two first-order streams unite, they form a second-order stream; when two second-order streams unite, they form a third-order stream, and so on. Fifth- and sixth-order streams are usually larger rivers, while first- and second-order streams are often small, steep, or intermittent. In the northern portion of the range, arroyo toads are found on third- to sixth-order streams (Sweet 1992, p. 24), while in the central and southern portion of the range, arroyo toads are found in first- to sixth-order streams (Service 1999, p. 32).

Optimal breeding habitat consists of low-gradient sections of slow-moving streams with shallow pools, nearby sandbars, and adjacent stream terraces. Arroyo toads breed and deposit egg masses in the shallow, sandy pools of these streams, which are usually

bordered by sand-gravel flood-terraces. Breeding sites favored by adult arroyo toads have clear water in shallow (less than 12 in (30 cm) deep) pools (Sweet 1992, p. 28). Optimal breeding sites also have flow rates less than 1.97 in (5 cm) per second and bottoms composed of sand or well-sorted, fine gravel, although a significant component of large gravel or cobble may also be present (Sweet 1992, p. 37).

Stream terrace habitat consisting of alluvial bars and terraces that may have established cottonwoods (*Populus* spp.), oaks (*Quercus* spp.), or willows (*Salix* spp.) and almost no grass and herbaceous cover at ground level are extremely important for arroyo toads prior to, during, and after the breeding season (Griffin *et al.* 1999, p. 45; Sweet 1992, pp. 28–49). Areas that are used by juveniles consist primarily of sand or fine gravel bars with varying amounts of large gravel or cobble and adjacent stable sandy terraces and oak flats. Juvenile arroyo toads favor areas that are damp and have some vegetation cover (less than 10 percent), which offer refugia and thermal characteristics that are needed for juvenile survival and rapid growth (Campbell *et al.* 1996, p. 12). Bare sand and gravel bars may support large numbers of juvenile toads, but survivorship can be reduced due to high levels of predation (Sweet 1992, p. 113).

Adult arroyo toads are often found on sandy alluvial terraces adjacent to the stream that may be sparsely-to-heavily vegetated with brush and trees, such as mulefat (*Baccharis* spp.), California sycamore (*Platanus racemosa*), cottonwoods, coast live oak (*Quercus agrifolia*), and willow (Campbell *et al.* 1996, pp. 12–13). The understory of stream terraces may consist of scattered short grasses, herbs, and leaf litter, with patches of bare or disturbed soil, or have no vegetation at all. When foraging, juvenile and adult arroyo toads are often found around the drip lines of oak trees (Sweet 1992, pp. 45–46; Campbell *et al.* 1996, p. 10). When active at night, arroyo toads can often be observed near ant trails feeding on passing ants and other prey.

Upland habitats used by arroyo toads during both the breeding and non-breeding seasons include alluvial scrub, coastal sage scrub, chaparral (shrubby plants adapted to dry summers and moist winters), grassland, and oak woodland. Within terrace and upland habitats, arroyo toads aestivate (a state of dormancy similar to hibernation) in burrows during the non-breeding season, which usually starts in the late summer and extends from August to January (Ramirez 2003, p. 46). In habitat

utilization studies conducted by Ramirez (2007, pp. 11–14) from 1999 to 2006 in the West Fork Mojave River and Grass Valley Creek areas, arroyo toads were generally found burrowed within sandy or loamy substrates with no associated canopy cover, or within mulefat scrub or arroyo willow (*Salix lasiolepis*) patches. The majority of individuals tracked in these studies burrowed immediately adjacent to the active channel or on sandy terraces within riparian habitat located within flood-prone areas; however, toads were also found to use upland habitats up to 1,063 ft (324 m) from the active channel (Ramirez 2007, p. 13). In his 2005 study, Ramirez (2007, p. 93) observed several arroyo toad individuals burrowed in stable terrace habitats dominated by Great Basin sage scrub and Utah junipers (*Juniperus osteosperma*). At Little Rock Creek on the desert slopes of the San Gabriel Mountains, arroyo toads burrowed in areas closest to the creek that retained higher soil saturation and were cooler (Ramirez 2002a, p. 50). Griffin *et al.* (1999, p. 45) noted that sands are the preferred burrowing substrate for both male and female arroyo toads, confirming the importance of natural hydrologic regimes that maintain sand and fine sediment deposition across the floodplain.

Dispersal

Arroyo toad movement patterns also vary between watersheds or river reaches in response to different hydrological regimes (Griffin *et al.* 1999, p. 11). In broad floodplain river systems, arroyo toads searching for suitable egg-laying sites may have to move across parallel stream channels. Cristianitos Creek, Talega Creek, and the lower San Mateo River are examples of this type of river system because of their wide, sandy floodplains where the river flows into several channels during floods. Despite river depths of 24 in (60 cm) and swift currents, Griffin *et al.* (1999, p. 21) observed numerous toads crossing Talega Creek and the lower San Mateo River, confirming these river systems are not a barrier to arroyo toad dispersal. In their study of arroyo toad movement patterns, Griffin *et al.* (1999, pp. 18–21) tracked 10 female and 3 male arroyo toads in the lower San Mateo River and observed female arroyo toads regularly using riparian and upland habitats far from the river's edge and returning to these areas after traveling far upstream for egg-laying. In one case, a female arroyo toad traveled 919 ft (280 m) across the San Mateo Campground into upland native habitat; in another instance, a female was found 558 ft (170 m) from the San Mateo River under

cover of mulefat scrub (Griffin *et al.* 1999, p. 20). They also recorded arroyo toads moving in both up- and downstream directions, such as the female arroyo toad that traveled upstream more than 492 ft (150 m) in a single night to a breeding pool. The study found that both male and female arroyo toads moved more into upland habitats after completing individual breeding activity (Griffin *et al.* 1999, p. 46).

In contrast, arroyo toads searching for breeding pools in watersheds with relatively narrower, steeper-sided drainages (such as the Piru and Sespe Creek Watersheds in Ventura County) tend to move in both up- and downstream directions along these channels with their structure of alternating riffles and pools (Griffin *et al.* 1999, p. 11). In his Mono Creek study, Sweet (1993, pp. 24–65), concluded that female arroyo toads became relatively sedentary as they matured whereas males tended to travel up- and downstream fairly often during the breeding season (Sweet 1993, p. 65). This study also suggested that most juvenile arroyo toads disperse away from their natal pools about a year after metamorphosis (Sweet 1993, p. 65). In fact, numerous juvenile and adult arroyo toads were observed moving up- and downstream as much as 0.5 mi (0.8 km) and over 0.6 mi (1 km) in some cases (Sweet 1993, p. 1). Arroyo toads in these watersheds also travel laterally away from the stream channel into terrace and upland native habitats. On lower Piru Creek, Sweet (1992, pp. 42–45) observed two adult males under oaks that were 200 ft (61 m) away.

Reasons for Decline and Threats

A variety of factors contribute to the decline of arroyo toads but nearly half of historical extirpations prior to listing are attributed to dam building and operation (Sweet 1992, pp. 4–5; Ramirez 2003, p. 7). Suitable habitat is often flooded out by reservoir water, and downstream breeding and non-breeding habitat may be severely altered by reduced flows at some times and sudden excessive flows at others. Sudden excessive releases of water may destroy sand bars used during the breeding season, and reconfigure or destroy suitable breeding pools, thus disrupting clutch and larval development (Ramirez 2003, p. 7). Additionally, dams can interrupt the scouring and deposition processes needed to maintain arroyo toad pool and terrace habitats. Areas below dams can become unsuitable as fine sands are lost and not replaced (Service 1999, pp. 42–43).

In addition to flood control projects, other threats include agriculture; sand and gravel mining; urban development; off-highway vehicle use; urbanization; recreational activities such as camping, fishing, hiking, picnicking; and natural factors, including drought and fire (59 FR 64859; Service 1999, p. 39; Ramirez 2003, p. 7). Conversion of stream terrace habitat for farming, road construction, and residential and commercial uses has eliminated substantial arroyo toad habitat in some areas. Suction dredge mining of sand and gravel causes substantial alteration of habitat by degrading water quality, altering stream morphology, increasing siltation downstream, and creating deep pools that hold water year-round for introduced predators of arroyo toad eggs and larvae (Campbell *et al.* 1996, p. 16). Natural disturbances, such as drought and fire, also threaten the arroyo toad (Campbell *et al.* 1996, p. 17). Prolonged drought can result in the loss of suitable breeding pools, foraging habitat, and prey availability (Sweet 1992, p. 190). Fire can affect arroyo toads by causing direct mortality and destruction of stream or terrace vegetation.

The introduction of nonnative species that compete for resources or that prey on arroyo toads also poses a serious threat to arroyo toad existence. The introduction of aquatic species not native to southern California watercourses has been facilitated by construction of the California Aqueduct and other sources of inter-basin water transport (Service 1999, p. 48). Currently, the California Aqueduct is linked directly to the Santa Ynez River, Santa Clara River, San Jacinto River, and Mojave River Basins. Predatory species, many of which have used the aqueduct to colonize these river basins, include green sunfish (*Lepomis cyanellus*), largemouth bass (*Micropterus salmoides*), black bullhead (*Ictalurus nebulosus*), prickly sculpin (*Cottus asper*), stocked rainbow trout (*Oncorhynchus mykiss*), oriental gobies (*Tridentiger* spp.), red shiners (*Notropis lutrensis*), bullfrogs (*Rana catesbeiana*), African clawed frogs (*Xenopus laevis*), and crayfish (*Procambarus clarkii*) (Sweet 1992, pp. 118–122; Service 1999, p. 48). All of these species prey on arroyo toad tadpoles.

Of the above introduced-predators, bullfrogs are probably the most serious threat to arroyo toads (Stephenson and Calcarone 1999, p. 82). Bullfrogs are well adapted to deep water conditions in ponded areas above dams, and dam releases can introduce them to downstream habitats (CDFG 2005, p. 178). A broad diet and an extended breeding season give bullfrogs a

competitive advantage over native amphibians. Whereas arroyo toad breeding habitat requirements are highly specialized, in that they require shallow, slow-moving streams and riparian habitats that are disturbed on a regular basis, bullfrogs can tolerate elevated water temperatures and make use of standing pools resulting from urban runoff to complete their 2-year life cycle (CDFG 2005, p. 178).

Introduced plants have also had a negative effect on arroyo toads and their habitat. Nonnative plant species, particularly tamarisk (*Tamarix* spp.) and giant reed (*Arundo donax*) alter the natural hydrology of stream drainages by eliminating sandbars, breeding pools, and upland habitats. Tamarisk is an aggressive, woody invasive plant species that can tolerate a variety of environmental conditions and has become established over as much as a million acres of floodplains, riparian areas, wetlands, and lake margins in the western United States (Carpenter 2004, pp. 1–30). Tamarisk can replace or displace native woody species such as cottonwood and willow which occupy similar habitats, especially when timing and amount of peak water discharge, salinity, temperature, and substrate texture have been altered by human activities (Carpenter 2004, pp. 1–30). Tamarisk also consumes large quantities of water, possibly more than woody native plant species occupying the same habitat (Carpenter 2004, p. 3). Highly resistant to removal by flooding, tamarisk has the potential to form dense corridors along most large streams. Where this has been allowed to occur, tamarisk has replaced native vegetation, invaded sand bars, and led to channelization by constricting flood flows. *Arundo donax* is a tall, grass-like plant that grows up to 20 ft (6.1 m) in height with jointed stems that resemble corn stalks. *Arundo donax* also invades stream banks and lakeshores, where it can completely displace native vegetation, reduce wildlife habitat, increase fire risks, and alter flow regimes which can cause flooding (Ventura County 2006, pp. 21–23).

In summary, predation from introduced aquatic species and the loss of habitat, coupled with habitat modifications due to the establishment of nonnative plants and the manipulation of water levels in many central and southern California streams and rivers, have caused arroyo toads to disappear from a large portion of their previously occupied habitat in California.

Previous Federal Action

For more information on previous Federal actions concerning the arroyo toad, refer to our final designation of critical habitat published in the **Federal Register** on April 13, 2005 (70 FR 19562). On July 20, 2007 (Service 2007, pp. 1–2), we announced that we would review the April 13, 2005, final rule after questions were raised about the integrity of scientific information used and whether the decision made was consistent with the appropriate legal standards. Based on our review of the previous final critical habitat designation, we determined it was necessary to revise critical habitat and this rule proposes those revisions. On December 19, 2007, the Center for Biological Diversity filed a complaint in the U.S. District Court for the Southern District of California challenging our designation of critical habitat for the arroyo toad (*Center for Biological Diversity v. U.S. Fish and Wildlife Service*, Case No. 07–2380–JM–AJB). On June 5, 2008, the court entered a consent decree requiring a proposed revised critical habitat rule to be submitted to the **Federal Register** by October 1, 2009, and a final revised critical habitat designation to be submitted to the **Federal Register** by October 1, 2010.

Critical Habitat

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

(1) The specific areas within the geographical area occupied by a species, at the time it is listed in accordance with the Act, on which are found those physical or biological features;

(a) Essential to the conservation of the species; and

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

(2) Specific areas outside the geographical 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, as defined under section 3 of the Act, means the use of all methods and procedures that are necessary to bring any endangered species or threatened species to the point at which the measures provided under the Act are no longer necessary. Such methods and procedures include, but are not limited to, all activities associated with scientific resources management such as research, census, law enforcement, habitat acquisition and maintenance, propagation, live trapping and translocation, and in the extraordinary case where population

pressures within a given ecosystem cannot otherwise be relieved, may include regulated taking.

Critical habitat receives protection under section 7 of the Act through the prohibition against Federal agencies carrying out, funding, or authorizing activities that are likely to result in the destruction or adverse modification of critical habitat. Section 7(a)(2) of the Act requires consultation on Federal actions that may affect critical habitat. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. Such designation does not allow the government or public to access private lands. Such designation does not require implementation of restoration, recovery, or enhancement measures by private landowners. Where a landowner seeks or requests Federal agency funding or authorization of an activity that may affect a listed species or critical habitat, the consultation requirements of section 7(a)(2) would apply, but even in the event of a destruction or adverse modification finding, the Federal action agency's and the applicant's obligation is not to restore or recover the species, but to implement reasonable and prudent alternatives to avoid destruction or adverse modification of critical habitat.

To be considered for inclusion in a critical habitat designation, habitat within the geographical area occupied by the species at the time it was listed must contain the physical or biological features that are essential to the conservation of the species. Areas supporting the essential physical or biological features are identified, to the extent known using the best scientific data available, as the habitat areas that provide essential life cycle needs of the species; that is, areas on which are found the primary constituent elements laid out in the appropriate quantity and spatial arrangement essential to the conservation of the species. Habitat within the geographical area occupied by the species at the time of listing that contains features essential to the conservation of the species meets the definition of critical habitat only if these features may require special management considerations or protection. Under the Act and the regulations at 50 CFR 424.12, we can designate critical habitat in areas outside the geographical area occupied by the species at the time it is listed only when we determine that the best available scientific data demonstrate that the designation of those areas is essential for the conservation of the species.

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

When we are determining which areas to propose as revised critical habitat, our primary source of information is generally the information developed during the listing process for the species and any previous designations of critical habitat. Additional information sources may include the recovery plan and 5-year reviews for the species, articles in peer-reviewed journals, conservation plans developed by States and counties, scientific status surveys and studies, biological assessments, or other unpublished materials and expert opinion or personal knowledge.

Habitat is dynamic, and species may move from one area to another over time. In particular, we recognize that climate change may cause changes in the arrangement of occupied habitat patches. Current climate change predictions for terrestrial areas in the Northern Hemisphere indicate warmer air temperatures, more intense precipitation events, and increased summer continental drying (Field *et al.* 1999, pp. 1-3; Hayhoe *et al.* 2004, p. 12422; Cayan *et al.* 2005, p. 6; Intergovernmental Panel on Climate Change 2007, p. 11; Cayan *et al.* 2009, p. xi). However, predictions of climatic conditions for smaller sub-regions such as California remain uncertain. It is unknown at this time if climate change in California will result in a warmer trend with localized drying, higher precipitation events, or other effects. Thus, the information currently available on the effects of global climate change and increasing temperatures does not make sufficiently precise estimates of the location and magnitude of the effects. Nor are we currently aware of any climate change information specific to the habitat of the arroyo toad that would indicate what

areas may become important to the species in the future. Therefore, we are unable to determine what additional areas, if any, may be appropriate to include in the proposed revised critical habitat for this species; however, we specifically request information from the public on the currently predicted effects of climate change on the arroyo toad and its habitat. Additionally, we recognize that critical habitat designated at a particular point in time may not include all of the habitat areas that we may later determine are necessary for the recovery of the species. For these reasons, a critical habitat designation does not signal that habitat outside the designated critical habitat area is unimportant or may not be required for recovery of the species.

Areas that support populations of the arroyo toad, but are outside the critical habitat designation, may continue to be subject to conservation actions we and other Federal agencies implement under section 7(a)(1) of the Act. They are also subject to the regulatory protections afforded by the section 7(a)(2) jeopardy standard, as determined on the basis of the best available information at the time of the agency 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 (HCPs), section 7 consultations, or other species conservation planning efforts if new information available to these planning efforts calls for a different outcome.

Methods

As required by section 4(b) of the Act, we used the best scientific and commercial data available in determining which areas within the geographic area occupied by the species at the time of listing contain the features essential to the conservation of the arroyo toad, and which areas outside the geographical area occupied at the time of listing are essential for the conservation of the species. We reviewed information used to prepare the 2004 proposed critical habitat rule (69 FR 23254); the approach to provide conservation for the arroyo toad provided in its recovery plan (Service 1999, pp. 1-119); the 5-year review for the arroyo toad (Service 2009, pp. 1-51); the California Department of Fish and Game's (CDFG) California Natural Diversity Database (CNDDDB) records; published peer-reviewed articles;

unpublished papers and reports; academic theses; survey results; Geographic Information System (GIS) data (such as species occurrences, soil data, land use, topography, and ownership maps); and correspondence to the Service from recognized experts. We solicited new information collected since publication of the recovery plan and 2005 final critical habitat designation, including information from State, Federal, and Tribal governments, and from academia and private organizations that have collected scientific data on the arroyo toad. We also based our determination of areas meeting the definition of critical habitat for the arroyo toad in part on the approach in the recovery plan that focuses on protection and management of breeding and non-breeding habitat on a watershed basis for the conservation of the species (Service 1999, pp. 1–119).

Physical and Biological Features

In accordance with section 3(5)(A)(i) of the Act and regulations at 50 CFR 424.12(b), in determining which areas within the geographical area occupied at the time of listing to propose as revised critical habitat, we consider the physical and biological features that are essential to the conservation of the species that may require special management considerations or protection. Those features are the primary constituent elements (PCEs) laid out in the appropriate quantity and spatial arrangement for conservation of the species. The PCEs include, but are not limited to:

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

We derive the specific PCEs required for conservation of the arroyo toad from its biological needs. The areas proposed for designation as revised critical habitat provide aquatic habitat for breeding activities and upland habitat for shelter, foraging, predator avoidance, and dispersal across the arroyo toad's current range. The PCEs and the resulting physical and biological features essential to the conservation of the species are determined based on studies of arroyo toad ecology as described in the "Background" section

of this proposed rule and in the final listing rule published in the **Federal Register** on December 16, 1994 (59 FR 64859).

Space for Individual and Population Growth, and for Normal Behavior

The arroyo toad is found along medium-to-large streams in coastal and desert drainages in central and southern California, and Baja California, Mexico. It occupies aquatic, riparian, and upland habitats in a number of the remaining suitable drainages within its range. Suitable habitat for the arroyo toad is created and maintained by the fluctuating hydrological, geological, and ecological processes that naturally occur in riparian ecosystems and adjacent uplands (Campbell *et al.* 1996, pp. 13–15; Service 1999, p. 39). Periodic flooding that modifies stream channels, redistributes channel sediments, and alters pool location and form, coupled with upper terrace stabilization by vegetation, is required to keep a stream segment suitable for all life stages of the arroyo toad (Campbell *et al.* 1996, p. 13; Service 1999, p. 39). This natural flooding regime helps maintain areas of open, sparsely vegetated, sandy stream channels and terraces.

The substrate in habitats preferred by arroyo toads consists primarily of sand, fine gravel, or pliable soil, with varying amounts of large gravel, cobble, and boulders. Areas that are damp and have less than 10 percent vegetation cover provide the best conditions for juvenile survival and rapid growth (Campbell *et al.* 1996, p. 12; Service 1999, pp. 32–34). Arroyo toads breed in the quiet margins of open streams and avoid sites with deep or swift water, tree canopy cover, or steeply incised banks. Larvae occupy shallow areas of open streambeds on substrates ranging from silt to cobble, with preferences for sand or gravel. Newly metamorphosed arroyo toads and juveniles remain on sparsely vegetated sand and gravel bars bordering the natal pool for 3 to 5 weeks (Sweet 1992, p. 52).

Arroyo toads must be able to move between the stream and upland foraging sites, as well as up and down the stream corridor. Juveniles and adult arroyo toads require and spend much of their lives in riparian and upland habitats adjacent to breeding locations (Campbell *et al.* 1996, p. 12). Riparian habitats used for foraging and burrowing include sand bars, alluvial terraces, and streamside benches that lack vegetation, or are sparsely to moderately vegetated. Upland habitats used by arroyo toads during both the breeding and non-breeding seasons include alluvial scrub,

coastal sage scrub, chaparral, grassland, and oak woodland.

Food, Water, and Physiological Requirements

Arroyo toad tadpoles eat microscopic algae, bacteria, and protozoans consumed from the spaces among pebbles, gravel, and sand, or abraded from stones (Sweet 1992, p. 82). Juveniles and adults eat insects, although ants are preferred. When foraging, arroyo toads are often found around the drip lines of oak trees. These areas often lack vegetation, yet have levels of prey that will support arroyo toads. When active at night, toads often are observed near ant trails feeding on ants, beetles, and other prey.

Cover or Shelter

During the day and other periods of inactivity, arroyo toads seek shelter by burrowing into sand. Thus, areas of sandy or friable (readily crumbled) soils are necessary, but these soils can be interspersed with gravel or cobble deposits. Additionally, arroyo toads may seek temporary shelter under rocks or debris and have been found in mammal burrows on occasion. Upland sites with compact soils can also be used for foraging and dispersal (Holland 2000, *in litt.*).

Sites for Breeding, Reproduction, and Rearing of Offspring

The arroyo toad has specialized breeding habitat requirements. They favor shallow pools (less than 12 in (30 cm) deep) and open sand and gravel channels along low-gradient (typically less than 6 percent) reaches of medium to large streams (Service 1999, pp. 31–32). These streams can have either intermittent or perennial streamflow and typically experience periodic flooding that scours vegetation and replenishes fine sediments. In at least some portions of its range, the species also breeds in smaller streams and canyons where low-gradient breeding sites are more sporadically distributed. Breeding pools must persist long enough for the completion of larval development, which is generally March through June, depending on location and weather. Because the suitability of breeding pools may vary from year to year due to the dynamics of southern California riparian systems and flood regimes, adult arroyo toads may move up or down stream in search of suitable breeding pools, or not breed that year (Campbell *et al.* 1996, p. 14).

Arroyo toads breed in rivers with intermittent, seasonal flow, with a breeding period that may range from late February through July. Breeding at

a given site may extend over several months (Griffin and Case 2001, p. 634). Breeding arroyo toads lay their eggs in water over substrates of sand, gravel, or cobble in open sites such as overflow pools, old flood channels, and shallow pools along streams. Such habitats rarely have closed canopies over the lower banks of the stream channel due to periodic flood events. Heavily shaded pools are generally unsuitable for larval and juvenile arroyo toads because of lower water and soil temperatures and poor algal mat development. Pools less than 12 in (30 cm) deep with clear water, flow rates less than 0.2 ft per second (5 cm per second), and bottoms composed of sand or well-sorted fine gravel are favored by adults for breeding and egg deposition (Sweet 1992, pp. 29–37). Although egg strings are laid in very slow-moving water, larvae (tadpoles) can be found in water velocities of up to 1.0 to 1.3 ft per second (30 to 40 cm per second) (Sweet 1992, p. 29). Breeding may occur on several dates at a single site, and eggs may be deposited over a period of 7 to 8 weeks (Campbell *et al.* 1996, p. 6). Breeding pools must persist a minimum of 2 months for the completion of larval development because changes in stream level or altering of the stream bed or breeding pool may cause high mortality to eggs and small larvae, sweeping them downstream, stranding and exposing them to desiccation, or burying and asphyxiating them with silt (Campbell *et al.* 1996, p. 6). Larvae usually hatch in 4 to 6 days at water temperatures of 54 to 59 degrees Fahrenheit (12 to 16 degrees Celsius). Tadpoles disperse from the pool margin into the surrounding shallow water, where they spend an average of 10 weeks. After metamorphosis, the juvenile arroyo toads remain on the bordering gravel bars until the pool dries out (usually from 8 to 12 weeks depending on the site and rainfall).

Primary Constituent Elements (PCEs) for the Arroyo Toad

Pursuant to the Act and its implementing regulations, when considering the designation of critical habitat, we must focus on the known principal primary constituent elements within the geographical area occupied by the arroyo toad at the time of listing that are essential to the conservation of the species. The essential physical and biological features are those PCEs laid out in an appropriate quantity and spatial arrangement determined to be essential to the conservation of the species. All areas proposed in this rule as revised critical habitat for the arroyo toad are currently occupied, are within

the geographical area occupied by the species at the time of listing, and contain sufficient PCEs to support at least one life-history function.

Based on the above needs and our current knowledge of the life history, biology, and ecology of the species, and the habitat requirements for sustaining the essential life-history functions of the species, we have determined that the PCEs specific to the arroyo toad are:

(1) Rivers or streams with hydrologic regimes that supply water to provide space, food, and cover needed to sustain eggs, tadpoles, metamorphosing juveniles, and adult breeding toads. Breeding pools must persist a minimum of 2 months for the completion of larval development. However, due to the dynamic nature of southern California riparian systems and flood regimes, the location of suitable breeding pools may vary from year to year. Specifically, the conditions necessary to allow for successful reproduction of arroyo toads are:

- Breeding pools with areas less than 12 in (30 cm) deep;
- Areas of flowing water with current velocities less than 1.3 ft per second (40 cm per second); and
- Surface water that lasts for a minimum of 2 months during the breeding season (a sufficient wet period in the spring months to allow arroyo toad larvae to hatch, mature, and metamorphose).

(2) Riparian and adjacent upland habitats, particularly low-gradient (typically less than 6 percent) stream segments and alluvial streamside terraces with sandy or fine gravel substrates that support the formation of shallow pools and sparsely vegetated sand and gravel bars for breeding and rearing of tadpoles and juveniles; and adjacent valley bottomlands that include areas of loose soil where toads can burrow underground, to provide foraging and living areas for juvenile and adult arroyo toads.

(3) A natural flooding regime, or one sufficiently corresponding to natural, characterized by intermittent or near perennial flow that contributes to the persistence of shallow pools into at least mid-summer, and that maintains areas of open, sparsely vegetated, sandy stream channels and terraces by periodically scouring riparian vegetation; and also that modifies stream channels and terraces and redistributes sand and sediment, such that breeding pools and terrace habitats with scattered vegetation are maintained.

(4) Stream channels and adjacent upland habitats that allow for movement to breeding pools, foraging

areas, overwintering sites, upstream and downstream dispersal, and connectivity to areas that contain suitable habitat.

In summary, the need for space for individual and population growth and normal behavior is met by PCE (1); the need for food, water and physiological requirements is met by PCE (1); cover and shelter requirements are met by PCE (2); areas for breeding reproduction, and rearing of offspring are met by PCEs (1), (2), and (3); and habitats representative of the historical, geographical, and ecological distributions of a species are met by PCE (4).

With this proposed revised designation of critical habitat, we intend to conserve the physical and biological features that are essential to the conservation of the species, through the identification of the appropriate quantity and spatial arrangement of the PCEs sufficient to support the life-history functions of the species. Because not all life-history functions require all the PCEs, not all areas designated as critical habitat will contain all the PCEs. Each of the areas proposed for designation in this rule has been determined to contain sufficient PCEs to provide for one or more of the life-history functions of the arroyo toad.

Special Management Considerations or Protection

In accordance with the definition of critical habitat in section 3(5)(A) of the Act, when designating critical habitat within the geographical area occupied by the species at the time of listing, we assess whether the physical and biological features essential to the conservation of the arroyo toad may require special management considerations or protection. All areas being proposed as critical habitat may require some level of management to address current and future threats to the arroyo toad, to maintain or enhance the physical and biological features essential to its conservation, and to ensure the recovery and survival of the species.

A detailed discussion of threats impacting the physical and biological features essential to the conservation of the arroyo toad which may require special management considerations or protection, can be found in the final listing rule (59 FR 64859; December 16, 1994), the 2001 critical habitat designation (66 FR 9414; February 7, 2001), the 2005 critical habitat designation (70 FR 19561; April 13, 2005), and the recovery plan (Service 1999, pp. 1–119). In summary, these threats include habitat destruction and alteration due to short- and long-term changes in river hydrology, including

construction of dams and water diversions; alteration of riparian wetland habitats by agriculture and urbanization; construction of roads; site-specific damage by off-highway vehicle use and other recreational activities; overgrazing; and mining activities. Arroyo toads and their habitats are also threatened by introduced nonnative predators (such as bullfrogs and predatory fish), drought, periodic fires, unseasonal water releases from dams, livestock grazing, and light and noise pollution from adjacent developments and campgrounds. Activities that may require special management considerations or protection of the features essential to the conservation of the arroyo toad include, but are not limited to: dam construction and operation, river diversion, conversion of riparian wetland habitat by agriculture and urbanization, road construction, off-highway vehicle use, campground development, grazing, and mining. In each proposed critical habitat unit, special management may be needed to ensure that aquatic and terrestrial habitat are able to provide abundant breeding and non-breeding habitat, prey habitat, shelter, and connectivity within the landscape.

In summary, we find that each of the areas we are proposing as revised critical habitat contains features essential to the conservation of the arroyo toad, and that these features may require special management considerations or protection. Special management considerations or protection may be required to eliminate, or reduce to negligible level, the threats affecting each unit and to preserve and maintain the essential features that the proposed critical habitat units provide to the arroyo toad. A more comprehensive discussion of threats facing individual sites is in the individual unit descriptions.

The designation of critical habitat does not imply that lands outside of critical habitat do not play an important role in the conservation of the arroyo toad. Activities with a Federal nexus that may affect those unprotected areas outside of critical habitat, such as development, agricultural activities, and road construction, are still subject to review under section 7 of the Act if they may affect the arroyo toad. The take prohibitions of section 9 of the Act also continue to apply both inside and outside of designated critical habitat. Take is broadly defined in the Act as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect a listed species, or to attempt to engage in any such conduct.

Criteria Used To Identify Critical Habitat

Using the best scientific and commercial data available as required by section 4(b)(1)(A) of the Act, we identified those areas to propose for revised designation as critical habitat that, within the geographical area occupied by the species at the time of listing (see "Geographic Range" section), possess those physical and biological features essential to the conservation of the arroyo toad and which may require special management considerations or protection. We also considered the area outside the geographical area occupied by the species at the time of listing for any areas that are essential for the conservation of the arroyo toad. The material we used included the 1994 final listing rule (59 FR 64859), the 2004 proposed critical habitat rule (69 FR 23254), 2008 CNDDDB records, the arroyo toad recovery plan, data in reports submitted during section 7 consultations and by biologists holding section 10(a)(1)(A) recovery permits, research published in peer-reviewed articles and presented in academic theses and agency reports, the 5-year review for the arroyo toad (Service 2009, pp. 1–51), and regional GIS coverages. We analyzed this information to develop criteria for identifying areas that contain the PCEs in the appropriate quantity and spatial arrangement essential to the conservation of the arroyo toad that may require special management considerations or protection, or that are essential for the conservation of the arroyo toad.

To begin our analysis, we first examined the CNDDDB current and historical records to get an indication of the habitat where arroyo toads are present or absent. The CNDDDB is a continually refined and updated inventory of location information gathered during species surveys and observations. We then examined the arroyo toad recovery plan (Service 1999, pp. 1–119), which has a recovery strategy focused on providing sufficient breeding and upland habitat to maintain self-sustaining populations of arroyo toads (defined as populations that require little or no direct human assistance such as captive breeding or rearing, or translocation between sites) throughout the historical range of the species, and on minimizing or eliminating impacts and threats to arroyo toad populations (Service 1999, p. 67). The recovery plan states that in-stream and riparian habitats that support breeding, as well as upland habitats that provide foraging and

overwintering habitat, need to be managed to maintain and enhance populations throughout the range of the arroyo toad (Service 1999, p. 68). The recovery plan divides the range of the arroyo toad into three large recovery units—northern, southern, and desert—and we considered the recovery of each of these as well as the species as a whole in our analysis. Using the recovery plan as our guide, we analyzed areas within the geographical area occupied by the arroyo toad at the time of listing to determine which areas contained the PCEs laid out in the appropriate quantity and spatial arrangement essential to the conservation of the species (the physical and biological features).

In determining the specific areas containing the essential physical and biological features, based on the recovery plan, 5-year review, previous critical habitat proposals for the arroyo toad, scientific literature, and results of studies that have been conducted since the species was listed, we made sure that we are proposing critical habitat that will provide for the conservation of the species. Criteria we evaluated to assist our process include units: (1) That are dispersed throughout the current geographical, elevational, and ecological distribution of the species; (2) that would maintain the appropriate population structure across the species' range; (3) that retain or provide the connectivity between breeding sites that allows for the continued existence of essential metapopulations (a population of subpopulations in somewhat geographically isolated patches, interconnected through patterns of gene flow, extinction, and recolonization (Soule 1987, p. 7), despite fluctuations in the status of subpopulations); and (4) that contain upland habitat around each breeding location to allow for survival and recruitment to maintain a breeding population over the long term.

We also evaluated the area outside the geographical area occupied by the species at the time of listing to identify any areas that are essential for the conservation of the arroyo toad. We looked at areas that may have been historically occupied by arroyo toads based on CNDDDB records but were no longer occupied at the time of listing. We also considered areas that may have the physical and biological features essential for the conservation of the species but have never been occupied. However, based on the best available scientific information, including the recovery plan which does not identify any such areas as being important to the recovery of the species, we determined that there are no areas outside the

geographical area occupied by the species at the time of listing that are essential for the conservation of the arroyo toad.

To identify and map areas that we determined meet the definition of critical habitat, we used data on known arroyo toad locations and data on movement distances by arroyo toads. The main source for arroyo toad locations was the CNDDDB (2008); we also obtained locations that have not yet been entered into the CNDDDB directly from the biologists that collected them.

Areas meeting the definition of critical habitat for the arroyo toad include occupied areas on stream reaches containing suitable breeding and upland habitat. To determine the extent of suitable arroyo toad habitat as discussed in the "Habitat" section above, we used spatial data on stream gradients with grades less than 6 percent, aerial photography, surveys of habitat suitability, and site visits. Additionally, we included higher gradient areas between breeding habitat because these areas are used by toads during the non-breeding period and allow toads to disperse between breeding areas. To delineate upland habitat areas, we used a GIS-based modeling procedure to identify alluvial terraces, valley bottomlands, and upland habitats adjacent to stream reaches occupied by the arroyo toad. Lacking spatially explicit data on geomorphology, we used elevation above the stream channel as an indicator of the extent of alluvial and upland foraging habitat. We determined that areas up to 82 ft (25 m) in elevation above the stream channel were most likely to contain the riparian and upland habitat elements essential to arroyo toads. Most arroyo toad activity and movement occurred within these areas; therefore, steeper slopes away from the stream were eliminated. However, we truncated the upland habitat delineation in flat areas at 4,921 ft (1,500 m) from the stream channel (a distance based on known movement of arroyo toads, see below) if the 82-ft (25-m) elevation limit had not yet been reached at that point. The 82-ft (25-m) elevation limit was reached at distances less than 4,921 ft (1,500 m) from the mapped stream channel along the majority of the stream reaches, so the distance limit was often not a factor. These model parameters are based on the best scientific data available and are the same as those used in the 2004 proposed critical habitat designation (69 FR 23254).

To evaluate our critical habitat model, we assessed its effectiveness at capturing documented toad locations

from studies that focused specifically on surveying toads in upland habitats and studies involving radio telemetry.

Holland and Sisk (2000, pp. 1–28) established extensive pitfall trap arrays at discrete distances from two stream courses and operated these arrays at various periods throughout the year. They had 466 captures of arroyo toads, 35 (7.5 percent) of which were identified as being in upland areas. The low percentage of toads captured in upland areas may be because the vast majority of captures (98.7 percent) were during the months from January to September, when breeding and metamorphosis occurs and when toads would likely be in close proximity to the stream. Nevertheless, toads were captured at distances that ranged from 49 to 3,855 ft (15 to 1,175 m) from the upland-riparian ecotone (boundary) (Holland and Sisk 2000, pp. 1–28). For the two areas sampled in that study (Cristianitos Creek and the upper Santa Margarita River, San Diego County), we found that our critical habitat boundaries encompassed all of the pitfall trapping stations where arroyo toads were detected.

We also assessed studies that involved the tracking of arroyo toads with radio telemetry equipment. For example, in a number of studies by Ramirez (2002a, p. 10; 2002b, p. 50; 2002c, p. 23; 2003, pp. 72–81), arroyo toads were tracked from the end of breeding activity until the commencement of aestivation, generally May through September. Cumulatively, these four studies involved tracking 77 adult arroyo toads in three separate critical habitat units in Orange, San Bernardino, and Los Angeles Counties. All but one of the numerous burrow sites chosen by these arroyo toads fell within our proposed revised critical habitat boundaries.

Upon completion of our analyses with our GIS modeling, we identified six tribes that own lands within areas identified as meeting the definition of critical habitat: Rincon Band of Luiseño Mission Indians; Pala Band of Luiseño Mission Indians; Sycuan Band of the Kumeyaay Nation; the Barona Group of Capitan Grande Band of Mission Indians and the Viejas (Baron Long) Group of Capitan Grande Band of Mission Indians, which jointly manage the Capitan Grande Band of Diegueno Mission Indians Reservation (Capitan Grande Reservation); and Mesa Grande Band of Diegueno Mission Indians. These areas are included in this proposed revised critical habitat, although we are requesting public comment on whether the conservation needs of the arroyo toad can be achieved

or not by limiting the designation of final revised critical habitat to non-Tribal lands, and are otherwise considering these Tribal lands for exclusion from the final critical habitat under section 4(b)(2) of the Act based on partnerships and habitat management plans and practices. We will evaluate any submitted plans in consideration of Secretarial Order 3206, "American Indian Tribal Rights, Federal Tribal Trust Responsibilities, and the Endangered Species Act" (June 5, 1997); the President's memorandum of April 29, 1994, "Government-to-Government Relations with Native American Tribal Governments" (59 FR 22951); Executive Order 13175; and the relevant provision of the Departmental Manual of the Department of the Interior (512 DM 2) in relation to the conservation benefits to the arroyo toad, the features essential to the conservation of the species, and the appropriateness of excluding Tribal lands under section 4(b)(2) of the Act. Please see the "Tribal Lands—Exclusions Under Section 4(b)(2) of the Act" section for additional discussion.

To provide legal boundaries for the critical habitat areas, critical habitat boundaries for all drainages were mapped as contiguous blocks of 98-ft by 98-ft (30-m by 30-m) cells that conform to a Universal Transverse Mercator (UTM) grid. Due to the conversion of GIS data from two different geographic projections (UTM zone 10 and zone 11) and conversion of the data to acres and hectares, some rounding adjustments may be reflected in the total acreage of the units designated as critical habitat that are shown in the acreage tables and unit descriptions.

After determining the criteria used to identify critical habitat, we made every effort to avoid developed areas such as lands covered by buildings, pavement, and other structures because such lands lack PCEs for the arroyo toad. We also avoided fragmented areas such as those surrounded by development. Agricultural lands may have been included if they were within areas identified as necessary for dispersal or connectivity between known occurrences. However, we avoided known areas of intensive agriculture that lacked the PCEs for the arroyo toad. The scale of the maps we prepared under the parameters for publication within the Code of Federal Regulations may not reflect the exclusion of such developed lands. Any such lands inadvertently left inside critical habitat boundaries shown on the maps of this proposed revised critical habitat are excluded by text in this rule and are not proposed for critical habitat designation. Therefore, if the critical habitat is

finalized as proposed, a Federal action involving these lands would not trigger section 7 consultation with respect to critical habitat and the requirement of no adverse modification, unless the specific action may affect adjacent critical habitat.

We propose to designate 22 critical habitat units within the geographic area occupied by the species at the time of listing based on the criteria presented above. A brief discussion of each area proposed for designation as critical habitat is provided in the unit descriptions below. Additional detailed documentation concerning the essential nature of these areas is contained in our supporting record for this rulemaking.

Summary of Changes From Previously Designated Critical Habitat

In this proposal to revise critical habitat for the arroyo toad, we determined that it would be appropriate to begin our analysis of critical habitat using the previous proposed critical habitat designation (69 FR 23254; April 28, 2004) as a base from which to make changes. We are not using the previous final critical habitat designation (70 FR 19562, April 13, 2005) after questions were raised about the integrity of the scientific information used and whether the decision made was consistent with appropriate legal standards. This new analysis based on the best scientific information currently available has resulted in an overall decrease in the amount and distribution of habitat identified as meeting the definition of critical habitat, as compared to the previous 2004 proposed designation (69 FR 23254). In this revised rule, we are proposing to designate 109,110 ac (44,155 ha) of land in Los Angeles, Orange, Riverside, San Bernardino, San Diego, Santa Barbara, and Ventura Counties, California, as critical habitat, which is a decrease of approximately 29,603 ac (11,978 ha) as proposed in 2004 (69 FR 23254). However, it should be noted that this does not reflect a decrease in every proposed unit compared to the previous proposal. In fact, the area included in some proposed revised critical habitat units is larger than it was in the 2004 proposed critical habitat designation (69 FR 23254) because in some cases new information has identified additional arroyo toad areas that meet the definition of critical habitat and these areas are now included.

The main differences between the 2004 proposed critical habitat rule (69 FR 23254) and this 2009 proposed revised critical habitat rule for the arroyo toad include the following:

(1) Our analysis of new and updated information received since the 2004 proposed critical habitat designation (69 FR 23254) resulted in the identification of areas meeting the definition of critical habitat that differs from the areas identified in 2004.

(2) We modified the mapping methodology from our previous proposed critical habitat designation (69 FR 23254). For the 2004 proposed designation, unit boundaries were snapped to points on a grid conforming to the Universal Transverse Mercator (UTM) projection. The reason for using a grid, which consisted of 100-meter by 100-meter cells, was to decrease the number of coordinate pairs and thereby simplify the description of unit boundaries. However, for this revised proposed designation, we use a more detailed description of unit boundaries. Although the change in area resulting from this modification is relatively minor (about 5 percent), this change affects all units.

(3) We did not exclude any areas in this proposed rule pursuant to section 4(b)(2) of the Act. In accordance with 50 CFR 424.19, in making our final determination regarding the revised designation, we will consider the impacts of designating lands (such as tribal and HCP lands) as critical habitat and may exclude such lands in the final rule pursuant to section 4(b)(2) of the Act.

The following paragraphs provide explanations of how the proposed revised critical habitat units differ from those in the 2004 proposed critical habitat designation (69 FR 23254), except for those units where the only change was from the modification in mapping methodology described above (units 2, 3, 4, 5, 6, 14, and 21). The unit names used in the subsection headings refer to the unit names as proposed in 2004.

Unit 1: San Antonio River

In the current proposal, we are now exempting areas within the Department of Defense's Fort Hunter Liggett Military Reservation from designation as revised critical habitat under section 4(a)(3)(B) of the Act. This unit is within the geographical area occupied at the time of listing (see "Geographical Range" section) and contains the physical or biological features essential to the conservation of the species which may require special management considerations or protection. In the previous 2004 proposed designation (69 FR 23254), Fort Hunter Liggett had not yet completed its Integrated Natural Resources Management Plan (INRMP) and, therefore, was not exempted under

section 4(a)(3)(B) of the Act. However, Fort Hunter Liggett was excluded under section 4(b)(2) of the Act for reasons of national security and because existing management plans provided a benefit to the arroyo toad. Fort Hunter Liggett's first INRMP was approved in 2005, and an updated version was approved in 2007, which includes management actions that benefit the arroyo toad. Unit 1 as proposed in 2004 (69 FR 23254) encompassed approximately 6,546 ac (2,649 ha). For this proposed revised critical habitat designation, the modified mapping methodology we used resulted in a 1.4 percent decrease in acres in Unit 1, for a total of 6,453 ac (2,612 ha). With our current exemption of all areas within Fort Hunter Liggett (see "Application of Section 4(a)(3) of the Act" section), the entire unit has been exempted from designation as revised critical habitat.

Unit 7: Upper Los Angeles River Basin

We have removed Subunit 7a (approximately 2,262 ac (915 ha)) within Unit 7 from our proposed revision of critical habitat. Subunit 7a is within the geographical area occupied at the time of listing; however, this subunit was erroneously included in the previous proposed rule (69 FR 23254). Although we were not aware of this issue when we published the previous proposed rule, high-flow water releases from the Big Tujunga Dam upstream of this subunit have likely altered the hydrology such that arroyo toad breeding habitat is not maintained (that is, lack of PCEs 1 and 3) (Hitchcock *et al.* 2004, p. 8; Backlin 2009, pers. comm.). The loss of the PCEs from this area has resulted in the extirpation of arroyo toads (Backlin *et al.* 2002, pp. 6, 12; Hitchcock *et al.* 2004, pp. 8–9, 29). Furthermore, the presence of the Big Tujunga Dam blocks dispersal from occupied areas upstream. Therefore, we have determined that the area does not contain the physical and biological features essential to the conservation of the arroyo toad and therefore does not meet the definition of critical habitat for the arroyo toad.

Unit 8: Lower Santa Ana River Basin

Areas meeting the definition of critical habitat that were excluded in the 2004 proposed critical habitat designation (69 FR 23254) within the Orange County Central-Coastal NCCP/HCP are now being proposed in this rule, and we are considering them for exclusion in the final rule (see "Habitat Conservation Plans—Exclusions Under Section 4(b)(2) of the Act" section). These areas include: (1) Black Star Creek from the NCCP/HCP boundary

downstream to the confluence with Santiago Creek, (2) Baker Canyon from the NCCP/HCP boundary downstream to the confluence with Santiago Creek, and (3) Santiago Creek from the confluence with Silverado Creek downstream to Irvine Lake. Information received since our previous 2004 proposed critical habitat designation (69 FR 23254) indicates that areas within Santiago Creek upstream of the confluence with Silverado Creek contain occupied suitable habitat on which are found the physical and biological features essential to the conservation of the species. Therefore, we also added areas to Unit 8 encompassing approximately 6.6 mi (11 km) of Santiago Creek from just below the town of Modjeska downstream to Irvine Lake. Additionally, new information indicates that Silverado Creek contains occupied suitable habitat on which are found the features essential to the conservation of the species (Haase 2005, p. 2; Haase 2008, pp. 2–3; Thomas 2009, pers. comm.). Therefore, we added areas to Unit 8 encompassing approximately 7.3 mi (12 km) of Silverado Creek from the eastern edge of section 11 (T05S, R07W) in the Cleveland National Forest downstream to the confluence with Santiago Creek. With the exception of areas that were excluded within the Orange County Central–Coastal NCCP/HCP, this unit encompassed approximately 172 ac (69 ha) in the 2004 proposed critical habitat designation (69 FR 23254). With the proposed addition of areas within the Orange County Central–Coastal NCCP/HCP and other areas described above, it now encompasses approximately 2,182 ac (883 ha).

Unit 9: San Jacinto River Basin

Areas meeting the definition of critical habitat that were excluded in the 2004 proposed critical habitat designation (69 FR 23254) within the Western Riverside County MSHCP are now being proposed in this rule, and we are considering them for exclusion in the final rule (see “Habitat Conservation Plans—Exclusions Under Section 4(b)(2) of the Act” section). These areas include: (1) The San Jacinto River from the Sand Canyon confluence downstream to the Soboba Indian Reservation border, and (2) Bautista Creek from areas outside of the San Bernardino National Forest downstream to near the middle of Section 27 (T5S, R1E) where the stream enters a debris basin. Unit 9 encompassed approximately 683 ac (277 ha) along Bautista Creek in the 2004 proposed critical habitat designation (69 FR 23254); with the addition of the areas

described above, areas along the San Jacinto River and Bautista Creek are now proposed as separate subunits. Subunit 9a along the San Jacinto River encompasses approximately 1,226 ac (496 ha) and Subunit 9b along Bautista Creek encompasses approximately 1,180 ac (478 ha).

Unit 10: San Juan Creek Basin

Information received since our previous 2004 proposed critical habitat designation (69 FR 23254) indicates that areas upstream of Subunit 10a in Bell Canyon, up to the southern half of section 8 (T06S, R06W) in the Cleveland National Forest, contain occupied suitable habitat on which are found the physical and biological features essential to the conservation of the species (Haase 2009a, *in litt.*). In the previous 2004 proposed critical habitat designation (69 FR 23254), Subunit 10a encompassed approximately 5,143 ac (2,076 ha) of Bell Canyon from just below Crow Canyon downstream to the confluence with San Juan Creek. We added these upstream areas to Subunit 10a, which now totals 4,728 ac (1,913 ha). Although we added upstream areas to Subunit 10a, the total area of this subunit decreases from the 2004 proposed critical habitat designation (69 FR 23254) because of our change in mapping methodology.

Unit 11: San Mateo Creek and San Onofre Creek Basins

In the 2004 proposed critical habitat designation (69 FR 23254), areas in Subunits 11a and 11c within Marine Corps Base (MCB) Camp Pendleton were exempted from critical habitat under section 4(a)(3)(B) of the Act, except areas leased to outside parties for other land uses (such as San Onofre State Park and private agricultural lands). We are now exempting all lands within MCB Camp Pendleton from designation as revised critical habitat, including the leased lands (which are subject to the approved Integrated Natural Resources Management Plan (INRMP) for MCB Camp Pendleton), due to the benefits afforded to the arroyo toad by the management described in the approved INRMP for MCB Camp Pendleton (see “Application of Section 4(a)(3) of the Act” section). Subunit 11a encompassed approximately 4,112 ac (1,664 ha) in the 2004 proposed critical habitat designation (69 FR 23254); with the exemption of all areas within MCB Camp Pendleton, it now encompasses approximately 1,034 ac (418 ha). Subunit 11c encompassed approximately 399 ac (161 ha) as proposed in 2004; with the exemption

of all areas within MCB Camp Pendleton (including the lands leased to other parties), the entire subunit is removed.

Unit 12: Lower Santa Margarita River Basin

In the 2004 proposed critical habitat designation (69 FR 23254), we exempted a portion of Unit 12 within MCB Camp Pendleton under section 4(a)(3)(B) of the Act. In this proposed rule, we are exempting all lands within both MCB Camp Pendleton and the Fallbrook Naval Weapons Station from designation as revised critical habitat (see “Application of Section 4(a)(3) of the Act” section). Unit 12 encompassed approximately 1,840 ac (744 ha) in the 2004 proposed critical habitat designation (69 FR 23254); with the exemption of all areas within MCB Camp Pendleton and the Fallbrook Naval Weapons Station, it now encompasses approximately 1,009 ac (408 ha).

Unit 13: Upper Santa Margarita River Basin

Areas meeting the definition of critical habitat that were excluded in the 2004 proposed critical habitat designation within the Western Riverside County MSHCP are now being proposed in this rule, and we are considering them for exclusion in the final rule (see “Habitat Conservation Plans—Exclusions Under Section 4(b)(2) of the Act” section). These areas include: (1) Areas around Subunit 13a along Arroyo Seco Creek, (2) areas downstream of Subunit 13b along Temecula Creek to Vail Lake, and (3) Wilson Creek from Lancaster Valley downstream to Vail Lake. Subunit 13a encompassed approximately 704 ac (285 ha) in the 2004 proposed critical habitat designation (69 FR 23254); with the addition of surrounding areas in Arroyo Seco Creek, it now encompasses approximately 1,155 ac (467 ha). Subunit 13b encompassed approximately 2,924 ac (1,183 ha) as proposed in 2004; with the addition of downstream areas of Temecula Creek, it now encompasses approximately 4,756 ac (1,925 ha). Information received since our previous critical habitat designation indicates that areas upstream of Lancaster Valley along Wilson Creek (included in this proposed rule as Subunit 13c) to the confluence with Cahuilla Creek contain occupied suitable habitat on which are found the physical and biological features essential to the conservation of the species (Haase 2009a, *in litt.*). This new subunit encompasses approximately 2,226 ac (901 ha).

Unit 15: Upper San Luis Rey River Basin

Information received since our previous 2004 proposed critical habitat designation (69 FR 23254) indicates that the area downstream of Barker Valley (formerly Subunit 15b) along the West Fork of the San Luis Rey River, which is within the geographical area occupied by the species at the time of listing, contains suitable habitat on which are found the physical and biological features essential to the conservation of the species, and provides for dispersal between populations in this area and populations in Lake Henshaw (formerly Subunit 15a) (Haase 2009, pers. comm.). In the 2004 proposed critical habitat designation (69 FR 23254), Subunits 15a and 15b together encompassed approximately 11,725 ac (4,745 ha). We are including the area between Barker Valley and Lake Henshaw in this proposed revised designation and have merged the two subunits into a single unit (Unit 15), which now totals 12,026 ac (4,867 ha).

Unit 16: Santa Ysabel Creek Basin

Areas meeting the definition of critical habitat that were excluded in the 2004 proposed critical habitat designation (69 FR 23254) within the San Diego MSCP—City and County of San Diego Subarea Plans are now being proposed in this rule, and we are considering them for exclusion in the final rule (see “Habitat Conservation Plans—Exclusions Under Section 4(b)(2) of the Act” section). In the previous 2004 proposed critical habitat designation (69 FR 23254), Subunits 16a, 16b, and 16c were three separate areas due to our exclusion in the 2004 proposed rule of downstream habitat along Santa Ysabel Creek. Subunit 16a encompassed approximately 2,758 ac (1,116 ha) along Santa Ysabel Creek from just below Sutherland Reservoir, Temescal Creek, and Boden Canyon; Subunit 16b encompassed approximately 2,727 ac (1,104 ha) along Guejito Creek; and Subunit 16c encompassed approximately 3,749 ac (1,517 ha) along Santa Maria Creek. We merged these three subunits into a single subunit (16a) in this proposed revised critical habitat rule; thus, Subunit 16a now totals 12,136 ac (4,911 ha).

In this proposed revised critical habitat designation, we removed areas within Subunit 16a that encompass Santa Ysabel Creek from just below Sutherland Reservoir downstream to the confluence with Temescal Creek. When we published our previous 2004 proposed critical habitat designation (69 FR 23254), we believed this area, which

is within the geographical area occupied at the time of listing, met the definition of critical habitat. However, information we received since then indicates that breeding habitat is not available due to the absence of a natural flooding regime downstream of Sutherland Dam and the steepness of the stream corridor (lack of PCEs 1, 2, and 3). Furthermore, this area does not provide connectivity to upstream areas occupied by the species due to the presence of the dam. Survey information indicates arroyo toads have been extirpated from this area as a result of the loss of PCEs (Service 2006, p. 2). Therefore, we determined that this area, which is within the geographical area occupied by the species at the time of listing, does not contain features essential to the conservation of the species and therefore does not meet the definition of critical habitat for the arroyo toad.

Unit 17: San Diego River Basin/San Vicente Creek

Information received since our previous 2004 proposed critical habitat designation (69 FR 23254) indicates that areas upstream of Subunit 17a along the San Diego River to Temescal Creek, which are within the geographical area occupied by the species at the time of listing, contain occupied suitable habitat on which are found the physical and biological features essential to the conservation of the species (HELIX 2008, pp. 2, 7; Brown and Rochester 2009, pers. comm.). Subunit 17a as proposed in 2004 encompassed approximately 1,003 ac (406 ha) along the San Diego River from Ritchie Creek downstream to the upper edge of El Capitan Reservoir. In this proposed rule, we added these upstream areas to Subunit 17a, which now totals 1,241 ac (502 ha).

Areas meeting the definition of critical habitat that were excluded in the 2004 proposed critical habitat designation within the San Diego MSCP—City and County of San Diego Subarea Plans are now being proposed in this rule, and we are considering them for exclusion in the final rule (see “Habitat Conservation Plans—Exclusions Under Section 4(b)(2) of the Act” section). In the previous 2004 proposed critical habitat designation (69 FR 23254), Subunits 17b and 17c were two separate areas due to our exclusion in the 2004 proposed rule of downstream habitat along the San Diego River. Subunit 17b encompassed approximately 174 ac (70 ha) and Subunit 17c approximately 707 ac (286 ha) along the San Diego River as proposed in 2004. We merged the two subunits into a single subunit (17b) in

this proposed revised critical habitat rule; thus Subunit 17b now totals 1,865 ac (755 ha).

Unit 18: Sweetwater River Basin

Areas meeting the definition of critical habitat that were excluded in the 2004 proposed critical habitat designation (69 FR 23254) within the San Diego MSCP—City and County of San Diego Subarea Plans are now being proposed in this rule, and we are considering them for exclusion in the final rule (see “Habitat Conservation Plans—Exclusions Under Section 4(b)(2) of the Act” section). In the previous 2004 proposed critical habitat designation (69 FR 23254), Subunits 18a, 18b, and 18d were three separate areas due to our exclusion in the 2004 proposed rule of downstream habitat along the Sweetwater River. As proposed in 2004, Subunit 18a encompassed approximately 4,196 ac (1,698 ha) along the Sweetwater River from the top of Upper Green Valley in Cuyamaca Rancho State Park, Subunit 18b encompassed approximately 583 ac (236 ha) along Peterson Canyon, and Subunit 18d encompassed approximately 474 ac (192 ha) along Viejas Creek. In this proposed rule, we merged these three subunits into a single subunit (18a), which now totals 4,156 ac (1,682 ha). Although we added areas that were excluded from the 2004 proposed critical habitat designation (69 FR 23254), the total area of the new Subunit 18a is smaller than the areas proposed in Subunits 18a, 18b, and 18d in the 2004 proposed rule because of our change in mapping methodology.

In this proposed revised critical habitat designation, we removed areas within Subunit 18c that encompass the Sweetwater River from just above Sycuan Resort downstream to the upper edge of Sweetwater Reservoir. These areas were erroneously included in the previous 2004 proposed rule. We now know that sand mining operations and channelization of the river through two golf courses have likely altered the hydrology in this area such that breeding habitat is not maintained (that is, lack of PCEs 1 and 3) (Brown and Rochester 2009, pers. comm.). Furthermore, information received since our previous 2004 proposed critical habitat designation (69 FR 23254) indicates that this area is no longer occupied by arroyo toads (Madden-Smith *et al.* 2005, p. 22; Brown and Rochester 2009, pers. comm.; Martin 2009, pers. comm.) because of the loss of PCEs. Therefore, we have determined that this area does not contain features essential to the conservation of the species and therefore does not meet the

definition of critical habitat for the arroyo toad. As proposed in 2004, Subunit 18c encompassed approximately 3,982 ac (1,611 ha) along the Sweetwater River from immediately below Loveland Dam downstream to the upper edge of Sweetwater Reservoir; with the proposed removal of the areas described above, Subunit 18c now totals 627 ac (254 ha).

Unit 19: Cottonwood Creek Basin

In this proposed revised critical habitat designation, we removed areas within Subunit 19b that encompass 9.9 mi (16 km) of Cottonwood Creek from approximately 2.5 mi (4 km) below Morena Reservoir downstream to Barrett Reservoir. These areas were erroneously included in the previous 2004 proposed rule. Information received since our previous 2004 proposed critical habitat designation (69 FR 23254) indicates that the hydrology in this area was altered since the construction of the Morena Dam in the early 1900s such that breeding habitat is not maintained (lack of PCEs 1 and 3), and therefore this area is no longer occupied by arroyo toads (Jennings 2009, pers. comm.). Moreover, the presence of Morena and Barrett reservoirs block arroyo toad dispersal from occupied areas upstream and downstream along Cottonwood Creek (lack of PCE 5). Therefore, we determined that this area, which is within the geographical area occupied by the toad at the time of listing, does not contain features essential to the conservation of the species and therefore does not meet the definition of critical habitat for the arroyo toad.

Areas meeting the definition of critical habitat downstream of Subunit 19b to the U.S.-Mexico border that were excluded in the 2004 proposed rule within the San Diego MSCP—City and County of San Diego Subarea Plans are now being proposed in this rule, and we are considering them for exclusion in the final rule (see “Habitat Conservation Plans—Exclusions Under Section 4(b)(2) of the Act” section). Subunit 19b, which encompassed approximately 5,564 ac (2,252 ha) in the 2004 proposed critical habitat designation (69 FR 23254), now encompasses approximately 5,129 ac (2,076 ha). Additionally, data received since our previous 2004 proposed critical habitat designation (69 FR 23254) indicate that Campo Creek, which is within the geographical area

occupied by the species at the time of listing, has occupied suitable habitat on which are found the physical and biological features essential to the conservation of the species (LEI 2008, pp. 5, 8). Therefore, we added areas encompassing approximately 4.4 mi (7 km) of Campo Creek from Campo Lake downstream to the U.S.-Mexico border as part of Subunit 19e.

Unit 20: Upper Santa Ana River Basin/Cajon Wash

Information received since our previous 2004 proposed critical habitat designation (69 FR 23254) indicates that areas upstream of Unit 20 to just below Cajon Junction are within the geographical area occupied by the arroyo toad at the time of listing and contain the physical and biological features essential to the conservation of the species (Rathbun 2007, *in litt.*; Meyer 2009, *in litt.*). In the previous 2004 proposed critical habitat designation (69 FR 23254), Unit 20 encompassed approximately 1,262 ac (511 ha) of Cajon Wash from just south of Cajon campground. We added these upstream areas to Unit 20, which now totals 1,775 ac (718 ha).

Unit 22: Upper Mojave River Basin

We have removed Subunit 22b (approximately 8,631 ac (3,493 ha)) within Unit 22 from our proposed revision of critical habitat. Subunit 22b is within the geographical area occupied at the time of listing. However, new information received since our previous 2004 proposed critical habitat designation (69 FR 23254) indicates that this area was erroneously proposed as critical habitat in 2004. Habitat in this area for the arroyo toad has been altered by steadily declining groundwater levels along the Upper Narrows to Lower Narrows reach of the Mojave River (Webb *et al.* 2001, p. 1) to such an extent that it does not contain features essential to the conservation of the species and therefore does not meet the definition of critical habitat for the arroyo toad.

Unit 23: Whitewater River Basin

In this proposed revised critical habitat designation, we removed areas within Unit 23 that encompass Whitewater River from the Colorado River Aqueduct downstream to Interstate Highway 10. When we

published our previous 2004 proposed critical habitat designation (69 FR 23254), we believed this area, which is within the geographical area occupied at the time of listing, met the definition of critical habitat. However, information received since our previous 2004 proposed critical habitat designation (69 FR 23254) indicates that high-flow water releases and channelization of the river downstream of the aqueduct has likely altered the habitat such that it no longer supports the physical and biological features essential to the conservation of the arroyo toad (Roberts 2009, pers. comm.). We have determined that this area does not meet the definition of critical habitat for the arroyo toad and should not have been proposed in 2004. As proposed in 2004, Unit 23 encompassed approximately 1,997 ac (808 ha) along the Whitewater River from near Red Dome downstream to Interstate 10; with the removal of the areas described above, Unit 23 now totals 1,355 ac (548 ha).

Proposed Revisions to Critical Habitat Designation

We are proposing to designate 22 units (Units 2 through 23) as critical habitat for the arroyo toad. The total area identified as Unit 1 is exempted from critical habitat designation under section 4(a)(3)(B) of the Act, and therefore is not proposed. All proposed units are within the geographical area occupied by the species at the time of listing and contain the physical and biological features essential to the conservation of the arroyo toad which may require special management considerations or protection. Although not a prerequisite for designation as critical habitat, all units are currently occupied. The proposed revised critical habitat areas described below constitute our best assessment at this time of areas that meet the definition of critical habitat for the arroyo toad. Approximate area encompassing the proposed revised critical habitat by county and land ownership is shown in Table 1, and the overall area of proposed revised critical habitat units for the arroyo toad are shown by unit in Table 2. The designation of these units, if finalized, would replace the existing critical habitat designation for the arroyo toad in 50 CFR 17.95(d).

TABLE 1—APPROXIMATE PROPOSED REVISED CRITICAL HABITAT FOR THE ARROYO TOAD, IN ACRES (AC) (HECTARES (HA)) BY COUNTY (ORDERED FROM NORTH TO SOUTH) AND LAND OWNERSHIP

County	Federal	State/local	Tribal	Private	Total
Santa Barbara	3,914	0	0	2,892	6,806

TABLE 1—APPROXIMATE PROPOSED REVISED CRITICAL HABITAT FOR THE ARROYO TOAD, IN ACRES (AC) (HECTARES (HA)) BY COUNTY (ORDERED FROM NORTH TO SOUTH) AND LAND OWNERSHIP—Continued

County	Federal	State/local	Tribal	Private	Total
Ventura	(1,584) 4,392	 0	 0	(1,171) 639	(2,755) 5,031
Los Angeles	(1,778) 2,382	 0	 0	(259) 3,453	(2,036) 5,835
San Bernardino	(964) 3,964	 132	 0	(1,398) 3,599	(2,362) 7,695
Riverside	(1,604) 1,789	(53) 210	 0	(1,456) 7,504	(3,113) 9,503
Orange	(724) 434	(85) 1,909	 0	(3,037) 6,362	(3,846) 8,705
San Diego	(176) 6,843	(773) 3,481	 4,046	(2,575) 51,165	(3,524) 65,535
	(2,769)	(1,409)	(1,636)	(20,707)	(26,521)
Total	23,718 (9,598)	5,732 (2,320)	4,046 (1,636)	76,951 (31,141)	109,110 (44,155)

Values in table may not sum due to rounding.

TABLE 2—APPROXIMATE PROPOSED REVISED CRITICAL HABITAT UNITS FOR THE ARROYO TOAD

Unit	Critical habitat units and subunits	County	Acres	Hectares
Northern Recovery Unit				
1	San Antonio River—exempt	Monterey	0	0
2	Sisquoc River	Santa Barbara	3,775	1,528
3	Upper Santa Ynez River	Santa Barbara	3,032	1,227
4	Sespe Creek	Ventura	2,760	1,117
5	Piru Creek	Ventura	2,507	1,015
5a .....	.....	.....	1,358	550
5b .....	.....	.....	1,149	465
6	Upper Santa Clara River	Los Angeles	3,795	1,537
6a .....	.....	.....	520	210
6b .....	.....	.....	1,995	807
6c .....	.....	.....	1,279	518
7	Upper Los Angeles River Basin	Los Angeles	1,190	482
Subtotal .....	.....	.....	17,059	6,904
Southern Recovery Unit				
8	Lower Santa Ana River Basin	Orange	2,182	883
9	San Jacinto River Basin	Riverside	2,406	974
9a .....	.....	.....	1,226	496
9b .....	.....	.....	1,180	478
10	San Juan Creek Basin	Orange, Riverside	5,667	2,293
10a .....	.....	.....	4,728	1,913
10b .....	.....	.....	939	380
11	San Mateo Basin	Orange, San Diego	1,068	432
11a .....	.....	.....	1,034	418
11b .....	.....	.....	34	14
12	Lower Santa Margarita, Basin	San Diego	1,009	408
12a .....	.....	.....	394	159
12b .....	.....	.....	615	248
13	Upper Santa Margarita Basin	Riverside, San Diego	8,137	3,293
13a .....	.....	.....	1,155	467
13b .....	.....	.....	4,756	1,925
13c .....	.....	.....	2,226	901
14	Lower and Middle San Luis Rey Basin	San Diego	12,906	5,223
15	Upper San Luis Rey Basin	San Diego	12,026	4,867
16	Santa Ysabel Creek	San Diego	13,567	5,490
16a .....	.....	.....	12,136	4,911
16d .....	.....	.....	1,431	579
17	San Diego River Basin	San Diego	4,263	1,725
17a .....	.....	.....	1,241	502
17b .....	.....	.....	1,865	755
17d .....	.....	.....	1,158	469
18	Sweetwater River Basin	San Diego	4,783	1,936
18a .....	.....	.....	4,156	1,682
18c .....	.....	.....	627	254

TABLE 2—APPROXIMATE PROPOSED REVISED CRITICAL HABITAT UNITS FOR THE ARROYO TOAD—Continued

Unit	Critical habitat units and subunits	County	Acres	Hectares
19	Cottonwood Creek Basin	San Diego	14,375	5,817
19a .....	.....	.....	5,847	2,366
19b .....	.....	.....	5,129	2,076
19c .....	.....	.....	1,511	611
19d .....	.....	.....	938	380
19e .....	.....	.....	950	384
Subtotal .....	.....	.....	82,389	33,342
Desert Recovery Unit				
20	Upper Santa Ana River Basin/Cajon Wash.	San Bernardino	1,775	718
21	Little Rock Creek Basin	Los Angeles	612	248
22	Upper Mojave River Basin	San Bernardino	5,919	2,395
22a .....	.....	.....	5,684	2,300
22c .....	.....	.....	235	95
23	Whitewater River Basin	Riverside	1,355	548
Subtotal .....	.....	9,661 .....	.....	3,909
Total .....	.....	109,110 .....	.....	44,155

Values in table may not sum due to rounding.

Presented below are brief descriptions of all units. The units are grouped by recovery unit as described in the recovery plan (Service 1999) and listed in order geographically north to south and west to east within each recovery unit. A brief description of each unit and the reasons it meets the definition of critical habitat are presented below.

Northern Recovery Unit

As described in the recovery plan (Service 1999, pp. 1–119), maintaining arroyo toad populations in the areas described by the following 7 unit descriptions is necessary to conserve the species in the northern recovery unit. Because the toad populations in this recovery unit have been reduced in size and their habitat fragmented by road construction, dams, agriculture, and urbanization, it is important to protect all of them and safeguard against the loss of any one population due to random natural or human-caused events. The U.S. Forest Service is the primary landowner of proposed revised critical habitat within the northern recovery unit.

Unit 1: San Antonio River

Although the lands in this unit are exempt from critical habitat designation under section 4(a)(3)(B) of the Act, we provide the following information to explain why these lands meet the definition of critical habitat. This unit is located in Monterey County and encompasses: (1) San Antonio River and adjacent uplands from about 2 mi (3 km) upstream of the confluence with Mission Creek downstream to San

Antonio Reservoir, a distance of about 17 mi (27 km); and (2) small portions of Mission Creek and other tributaries. The unit consists of 6,453 ac (2,612 ha) of Federal (Department of Defense) land and is entirely contained within Fort Hunter Liggett Military Reservation boundaries. Arroyo toads can be found along the entire length of this segment of the San Antonio River, which is still in a relatively natural state, consists of high-quality arroyo toad habitat, and supports probably one of the largest populations within the northern recovery unit (U.S. Army Reserve Command 2004, p. 38). The northernmost known population of arroyo toads is located here and is approximately 100 mi (160 km) north of the nearest documented extant population. Arroyo toads in this unit may experience climatic conditions not faced by toads farther south. Unit 1 contains the physical and biological features that are essential to the conservation of the species, including breeding pools in low-gradient stream segments with sandy or fine gravel substrates (PCEs 1 and 2), seasonal flood flows (PCE 3), and relatively undisturbed riparian and upland habitat for foraging and dispersal (PCE 4). The physical and biological features essential to the conservation of the species in this unit may require special management considerations or protection to address threats from nonnative vertebrate predators such as bullfrogs and beavers (*Castor canadensis*). These lands on Fort Hunter Liggett are exempt from critical habitat designation under section 4(a)(3)(B) of

the Act because they are subject to the 2007 Integrated Natural Resources Management Plan (INRMP) for Fort Hunter Liggett, and the INRMP provides a benefit to the arroyo toad (see the “Application of Section 4(a)(3) of the Act” section of this proposed rule for a detailed discussion).

Unit 2: Sisquoc River (3,775 ac (1,528 ha))

This unit is located in Santa Barbara County and encompasses approximately 33 mi (54 km) of the Sisquoc River and adjacent uplands from Sycamore Campground downstream to just below the confluence with La Brea Creek. Upper stretches of the river are within the Los Padres National Forest and mostly within the San Rafael Wilderness Area. Below the National Forest boundary, the river and adjacent uplands are on rural private lands. The unit consists of 1,700 ac (688 ha) of Federal land and 2,073 ac (839 ha) of private land. This long, undammed river is one of the few remaining major rivers in southern California with a natural flow regime, and supports a core population of arroyo toad that is important for maintaining the genetic diversity of the species. Unit 2 contains the physical and biological features that are essential to the conservation of the species, including breeding pools in low-gradient stream segments with sandy or fine gravel substrates (PCEs 1 and 2), seasonal flood flows (PCE 3), and relatively undisturbed riparian and upland habitat for foraging and dispersal (PCE 4). The physical and biological features essential to the

conservation of the species in this unit may require special management considerations or protection to address threats from the removal and alteration of habitat due to sand and gravel mining, livestock overgrazing of riparian habitats, and limited recreational activities. Please see the "Special Management Considerations or Protection" section of this proposed rule for a discussion of the threats to arroyo toad habitat and potential management considerations.

Unit 3: Upper Santa Ynez River Basin (3,032 ac (1,227 ha))

This unit is located in Santa Barbara County upstream of Gibraltar Reservoir and encompasses approximately 27 mi (43 km) of the upper Santa Ynez River, Indian Creek, Mono Creek, and adjacent uplands. The unit consists of 2,214 ac (896 ha) of Federal land and 818 ac (331 ha) of private land within the Los Padres National Forest, and supports a large and well-studied arroyo toad population (Sweet 1992, pp. 1–198; 1993, pp. 1–73) that likely experiences precipitation and soil moisture conditions not faced by toads at drier sites. Potential adaptations to these conditions make this unit important for maintaining the genetic diversity of the species. Unit 3 contains the physical and biological features that are essential to the conservation of the species, including breeding pools in low-gradient stream segments with sandy or fine gravel substrates (PCEs 1 and 2), seasonal flood flows (PCE 3), and relatively undisturbed riparian and upland habitat for foraging and dispersal (PCE 4). The physical and biological features essential to the conservation of the species in this unit may require special management considerations or protection to address threats, primarily along the lower Santa Ynez River and lower Mono Creek, from nonnative species, recreation, and problems associated with an upstream dam (such as sediment trapping, altered hydrological regime, and temperature changes). Please see the "Special Management Considerations or Protection" section of this proposed rule for a discussion of the threats to arroyo toad habitat and potential management considerations.

Unit 4: Sespe Creek (2,760 ac (1,117 ha))

This unit is located in Ventura County and encompasses approximately 27 mi (43 km) of Sespe Creek and adjacent uplands, from the lower end of Sespe Gorge (elevation approximately 3,530 ft (1,076 m)) downstream to the confluence with Alder Creek. The unit consists of 2,498 ac (1,011 ha) of Federal

land and 262 ac (106 ha) of private land. This unit supports one of the largest arroyo toad populations on the Los Padres National Forest along Sespe Creek, which is undammed and retains its natural flooding regime. Up to several hundred adult arroyo toads inhabit this reach of the Sespe River (Sweet 1992, p. 192), and during years of successful reproduction, such as 2003, thousands of juveniles can be found as well (Murphy 2008, pers. comm.). Arroyo toads have been found up to 3,300 ft (1,000 m) in elevation in this area, which is one of the highest known occurrences in the northern recovery unit. The arroyo toads in this unit likely experience temperature extremes or other environmental conditions not faced by toads at lower elevations so that potential adaptations to these conditions make this unit important for maintaining the genetic diversity of the species. Unit 4 contains the physical and biological features that are essential to the conservation of the species, including numerous suitable breeding pools (shallow, sand- or gravel-based pools with a minimum of vegetation along one or both margins during the breeding season from late March to June (Sweet 1992, p. 28)) and an abundance of sandy substrates (PCEs 1 and 2), unimpeded seasonal flood flows (PCE 3), and relatively undisturbed riparian habitat and upland benches for foraging and dispersal (PCE 4). The physical and biological features essential to the conservation of the species in this unit may require special management considerations or protection to address threats from recreational activities and nonnative predators. Please see the "Special Management Considerations or Protection" section of this proposed rule for a discussion of the threats to arroyo toad habitat and potential management considerations.

Unit 5: Piru Creek (2,507 ac (1,015 ha))

This unit is located in Ventura and Los Angeles Counties and consists of two subunits totaling 2,105 ac (852 ha) of Federal land and 402 ac (163 ha) of private inholdings.

Subunit 5a

Subunit 5a encompasses approximately 17 mi (27 km) of Piru Creek and adjacent uplands from the confluence with Lockwood Creek downstream to Pyramid Reservoir. The subunit consists of 1,277 ac (517 ha) of Federal land and 81 ac (33 ha) of private land. The upper portion of Subunit 5a is free of nonnative vertebrate predators, and the substantial arroyo toad population supported by this subunit

has been increasing and expanding in this area over the past several years (Uyehara 2003, pers. comm.). Subunit 5a contains the physical and biological features that are essential to the conservation of the species, including breeding pools in low-gradient stream segments with sandy substrates (PCEs 1 and 2), seasonal flood flows (PCE 3), and riparian habitat and upland benches for foraging and dispersal (PCE 4). The physical and biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from horse and cattle grazing and recreational activities. Please see the "Special Management Considerations or Protection" section of this proposed rule for a discussion of the threats to arroyo toad habitat and potential management considerations.

Subunit 5b

Subunit 5b is primarily within the Sespe Wilderness and encompasses approximately 15 mi (24 km) of Piru Creek from the confluence with Fish Creek downstream to Lake Piru, as well as Agua Blanca Creek from Devil's Gateway downstream to the confluence with Piru Creek. The subunit supports a substantial arroyo toad population and consists of 828 ac (335 ha) of Federal land and 321 ac (130 ha) of private land. Subunit 5b contains the physical and biological features that are essential to the conservation of the species, including breeding pools in low-gradient stream segments with sandy substrates (PCEs 1 and 2), seasonal flood flows (modified to some extent below Pyramid Dam) (PCE 3), and riparian habitat and upland benches for foraging and dispersal (PCE 4). Because lower Piru Creek in Subunit 5b is downstream of a large dam, the habitat there has experienced some degradation over the years from perennial water releases, rapid changes in flow volume, excessive flows during the breeding season, and an increased presence of nonnative predators. However, Pyramid Dam has permanently changed the water release schedule to one that will more closely mimic natural flows and will benefit the arroyo toad (State Water Board 2008, p. 3). The physical and biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from nonnative predators and recreational activities. Please see the "Special Management Considerations or Protection" section of this proposed rule for a discussion of the threats to arroyo

toad habitat and potential management considerations.

Unit 6: Upper Santa Clara River Basin (3,795 ac (1,537 ha))

This unit is located in northwestern Los Angeles County and consists of three subunits totaling 443 ac (179 ha) of Federal land and 3,351 ac (1,356 ha) of private land.

Subunit 6a

Subunit 6a encompasses approximately 7 mi (12 km) of Castaic Creek from Bear Canyon downstream to Castaic Lake, and 0.7 mi (1.2 km) of Fish Creek from Cienega Spring to the confluence with Castaic Creek. Subunit 6a encompasses approximately 11 mi (18 km) of upper Santa Clara River from Arrastre Canyon downstream to the confluence with Bee Canyon Creek. The subunit consists of 284 ac (115 ha) of Federal land and 236 ac (96 ha) of private land. Subunit 6a contains the physical and biological features that are essential to the conservation of the species, including breeding pools in low-gradient stream segments with sandy substrates (PCEs 1 and 2), seasonal flood flows (PCE 3), and riparian habitat and upland benches for foraging and dispersal (PCE 4). The physical and biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from urban development, agriculture, recreation, mining, and nonnative predators. Please see the "Special Management Considerations or Protection" section of this proposed rule for a discussion of the threats to arroyo toad habitat and potential management considerations.

Subunit 6b

Subunit 6b encompasses: (1) Approximately 2.6 mi (4.2 km) of Castaic Creek from the downstream edge of The Old Road right-of-way (adjacent to Interstate 5) down to the confluence with the Santa Clara River, (2) 6 mi (10 km) of the Santa Clara River from the confluence with Bouquet Creek down to the confluence with Castaic Creek, and (3) 1.1 mi (2 km) of San Francisquito Creek from Newhall Ranch Road downstream to the confluence with the Santa Clara River. The subunit consists of 159 ac (65 ha) of Federal land and 1,995 ac (807 ha) of private land. This subunit allows for natural population expansion and fluctuation of the Santa Clara River population by connecting arroyo toad habitat in Castaic Creek with San Francisquito Creek and the occupied reach of the Santa Clara River. Subunit 6b contains the physical and

biological features that are essential to the conservation of the species, including breeding pools in low-gradient stream segments with sandy substrates (PCEs 1 and 2), seasonal flood flows (PCE 3), and riparian habitat and upland benches for foraging and dispersal (PCE 4). The physical and biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from urban development, agriculture, recreation, mining, and nonnative predators. Please see the "Special Management Considerations or Protection" section of this proposed rule for a discussion of the threats to arroyo toad habitat and potential management considerations.

Subunit 6c

Subunit 6c encompasses approximately 11 mi (18 km) of upper Santa Clara River from Arrastre Canyon downstream to the confluence with Bee Canyon Creek. The subunit consists of 159 ac (64 ha) of Federal land and 1,120 ac (453 ha) of private land. This subunit is important for maintaining the arroyo toad metapopulation in the upper Santa Clara River Basin. Additionally, the upper portion of the Santa Clara River in this subunit supports a breeding population of arroyo toads (Sandburg 2001, *in litt.*; Farris 2001, pers. comm.; Hovore 2001, *in litt.*) that has the potential to greatly increase in size. Subunit 6c contains the physical and biological features that are essential to the conservation of the species, including breeding pools in low-gradient stream segments with sandy substrates (PCEs 1 and 2), seasonal flood flows (PCE 3), and riparian habitat and upland benches for foraging and dispersal (PCE 4). The physical and biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from urban development, agriculture, recreation, mining, and nonnative predators. Please see the "Special Management Considerations or Protection" section of this proposed rule for a discussion of the threats to arroyo toad habitat and potential management considerations.

Unit 7: Upper Los Angeles River Basin (1,190 ac (482 ha))

This unit is located in central Los Angeles County and encompasses: (1) Approximately 8 mi (13 km) of upper Big Tujunga Creek from immediately above Big Tujunga Reservoir upstream to approximately 1.2 mi (2 km) above the confluence with Alder Creek, (2)

almost 3.7 mi (6 km) of Mill Creek from the Monte Cristo Creek confluence downstream to Big Tujunga Creek, and (3) approximately 1.9 mi (3 km) of Alder Creek from the Mule Fork confluence downstream to Big Tujunga Creek. The unit consists of 1,113 ac (451 ha) of Forest Service land and 77 ac (31 ha) of private land. This unit supports an important high-elevation arroyo toad population in the Big Tujunga Canyon watershed in the Upper Los Angeles River Basin within the Angeles National Forest, which is atypical for arroyo toads, and supports the only significant known population remaining in the coastal foothills of the San Gabriel Mountains. Unit 7 contains the physical and biological features that are essential to the conservation of the species, including aquatic habitat for breeding and non-breeding activities (PCEs 1, 2, and 3) and upland habitat for foraging and dispersal activities (PCE 4). The physical and biological features essential to the conservation of the species in this unit may require special management considerations or protection to address threats from nonnative predators, such as crayfish, bullfrogs, and nonnative plants such as *Arundo donax*. Please see the "Special Management Considerations or Protection" section of this proposed rule for a discussion of the threats to arroyo toad habitat and potential management considerations.

Southern Recovery Unit

As described in the recovery plan (Service 1999, pp. 1–119), maintaining arroyo toad populations in the following 12 critical habitat units is necessary to conserve the species in the southern recovery unit. The units consist of a range of geographic locations from coastal regions to interior mountains. Arroyo toads likely occurred throughout each of these river and creek basins, but are now found only in segments of the rivers and creeks due to loss or change of habitat and nonnative predators. Conserving arroyo toad populations in these river basins is necessary for preserving the species' full range of genetic and phenotypic (observable characteristics produced by the interaction of the genotype and the environment) variation.

Unit 8: Lower Santa Ana River Basin (2,182 ac (883 ha))

This unit is located in east-central Orange County and encompasses: (1) Approximately 6.6 mi (11 km) of Santiago Creek from just below the town of Modjeska downstream to Irvine Lake, (2) approximately 2 mi (3 km) of Black Star Creek downstream to the

confluence with Santiago Creek, (3) an approximately 2.4 mi (4 km) stretch of lower Baker Canyon downstream to the confluence with Santiago Creek, and (4) approximately 7.3 mi (12 km) of Silverado Creek from the eastern edge of section 11 (T05S, R07W) in the Cleveland National Forest downstream to the confluence with Santiago Creek. The unit consists of 54 ac (22 ha) of Forest Service land and 2,128 ac (861 ha) of private land. This unit contains a vital arroyo toad population in central Orange County that may represent one of the last remnants of a greater historical population from the Santa Ana River Basin that was mostly extirpated due to urbanization of the greater Los Angeles metropolitan area. It is also possible that this population belongs to a larger metapopulation that extends across the lower coastal mountain slopes of the Santa Ana Mountains from Santiago Creek to San Mateo Creek (including Units 10 and 11 discussed below). Unit 8 contains the physical and biological features that are essential to the conservation of the species, including aquatic habitat for breeding and non-breeding activities (PCEs 1, 2, and 3) and upland habitat for foraging and dispersal activities (PCE 4). The physical and biological features essential to the conservation of the species in this unit may require special management considerations or protection to address threats from nearby residential activities and degrading habitat conditions due to past commercial sand and gravel removal operations. Please see the "Special Management Considerations or Protection" section of this proposed rule for a discussion of the threats to arroyo toad habitat and potential management considerations. We are considering the exclusion of approximately 1,497 ac (606 ha) of lands in Unit 8 within the Orange County Central-Coastal NCCP/HCP from the final revised critical habitat designation under section 4(b)(2) of the Act (see "Application of Section 4(b)(2) of the Act" section of this proposed revised rule for a detailed discussion).

Unit 9: San Jacinto River Basin (2,406 ac (974 ha))

This unit is located in west-central Riverside County and consists of two subunits totaling 13 ac (5 ha) of Bureau of Land Management land, 492 ac (199 ha) of Forest Service land, 210 ac (85 ha) of State land, and 1,691 ac (684 ha) of private land. This unit supports the most northeastern arroyo toad populations within the coastal region of the species' range and is effectively isolated from other known toad

populations to the south in the Santa Margarita Watershed, to the west in the San Juan Watershed, and from residual populations to the north in the Santa Ana Watershed due to geographic features. It is likely that this isolation occurred over a long geologic time period; therefore, toads in the San Jacinto Watershed may have evolved unique genetic, phenotypic, or behavioral characteristics that are important for the conservation of the species.

Subunit 9a

Subunit 9a encompasses approximately 6.3 mi (10 km) of the San Jacinto River from the Sand Canyon confluence downstream to the Soboba Indian Reservation border. The subunit consists of 64 ac (26 ha) of Forest Service land, 8 ac (3 ha) of Bureau of Land Management land, and 1,154 ac (467 ha) of private land. Subunit 9a contains the physical and biological features that are essential to the conservation of the species, including aquatic habitat for breeding and non-breeding activities (PCEs 1, 2, and 3) and upland habitat for foraging and dispersal activities (PCE 4). The physical and biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from cumulative impacts from human activities, including direct mortality from vehicular traffic, trampling, trash dumping, and collection (Ortega 2009, *in litt.* p. 1; Wilcox 2009, pers. comm.). Please see the "Special Management Considerations or Protection" section of this proposed rule for a discussion of the threats to arroyo toad habitat and potential management considerations. We are considering the exclusion of approximately 678 ac (274 ha) of private lands in Subunit 9a within the Western Riverside County MSHCP from the final revised critical habitat designation under section 4(b)(2) of the Act (see "Application of Section 4(b)(2) of the Act" section of this proposed revised rule for a detailed discussion).

Subunit 9b

Subunit 9b encompasses approximately 7.4 mi (12 km) of Bautista Creek from near the eastern edge of Section 20 (T6S, R2E) downstream to approximately the middle of Section 27 (T5S, R1E), where the stream enters a debris basin. The subunit consists of 428 ac (173 ha) of Forest Service land, 5 ac (2 ha) of Bureau of Land Management land, 210 ac (85 ha) of State land, and 537 ac (217 ha) of private land. Subunit 9b contains

the physical and biological features that are essential to the conservation of the species, including aquatic habitat for breeding and non-breeding activities (PCEs 1, 2, and 3) and upland habitat for foraging and dispersal activities (PCE 4). The physical and biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from recreation and vehicular traffic (USGS 2001, p. 8). Please see the "Special Management Considerations or Protection" section of this proposed rule for a discussion of the threats to arroyo toad habitat and potential management considerations. We are considering the exclusion of approximately 475 ac (192 ha) of private lands in Subunit 9b within the Western Riverside County MSHCP from the final revised critical habitat designation under section 4(b)(2) of the Act (see "Application of Section 4(b)(2) of the Act" section of this proposed revised rule for a detailed discussion).

Unit 10: San Juan Creek Basin (5,667 ac (2,293 ha))

This unit is located in southern Orange County and southwestern Riverside County and consists of two subunits totaling 558 ac (225 ha) of Forest Service land, 1,909 ac (773 ha) of local government land, and 3,200 ac (1,295 ha) of private land. This unit supports a vital arroyo toad population in the San Juan Creek Basin, and arroyo toad populations in this unit may function as an important linkage between toads in Santiago Creek (Unit 8) to the north and the San Mateo Creek Basin (Unit 11) to the south.

Subunit 10a

This subunit is located in southern Orange County and southwestern Riverside County. Subunit 10a encompasses: (1) Approximately 5 mi (8 km) of San Juan Creek from immediately above the Upper San Juan Campground downstream to Interstate 5, (2) approximately 9.9 mi (16 km) of Bell Canyon from the southern half of section 8 (T06S, R06W) in the Cleveland National Forest downstream to the confluence with San Juan Creek, and (3) approximately 1.2 mi (2 km) of an unnamed tributary to the west of Bell Canyon in sections 8 and 18 (T06S, R06W) downstream to the confluence with Bell Creek. The subunit consists of 547 ac (221 ha) of Forest Service land, 1,406 ac (569 ha) of local government land, and 2,775 ac (1,123 ha) of private land. Subunit 10a contains the physical and biological features that are essential to the conservation of the species,

including aquatic habitat for breeding and non-breeding activities (PCEs 1, 2, and 3) and upland habitat for foraging and dispersal activities (PCE 4). The physical and biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from nonnative predators (bullfrogs), increased water diversions, and residual effects of recent gravel mining operations (Bloom 1998, p. 2). Please see the “Special Management Considerations or Protection” section of this proposed rule for a discussion of the threats to arroyo toad habitat and potential management considerations. We are considering the exclusion of approximately 3,405 ac (1,378 ha) of permittee-owned or controlled lands in Subunit 10a within the Southern Orange County NCCP/Master Streambed Alteration Agreement/HCP from the final revised critical habitat designation under section 4(b)(2) of the Act (see “Application of Section 4(b)(2) of the Act” section of this proposed revised rule for a detailed discussion).

Subunit 10b

This subunit is located in southern Orange County. Subunit 10b encompasses 5.2 mi (8 km) of Trabuco Creek downstream from approximately the middle of section 6 (T06S, R06W) in the Cleveland National Forest. The subunit consists of 11 ac (4 ha) of Forest Service land, 503 ac (204 ha) of local government land, and 425 ac (172 ha) of private land. Subunit 10b contains the physical and biological features that are essential to the conservation of the species, including aquatic habitat for breeding and non-breeding activities (PCEs 1, 2, and 3) and upland habitat for foraging and dispersal activities (PCE 4). The physical and biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from nonnative predators (bullfrogs), increased water diversions, and residual effects of recent gravel mining operations (Bloom 1998, p. 2). Please see the “Special Management Considerations or Protection” section of this proposed rule for a discussion of the threats to arroyo toad habitat and potential management considerations.

Unit 11: San Mateo Creek Basin (1,068 ac (432 ha))

This unit is located in northwestern San Diego County, southern Orange County, and southwestern Riverside County and consists of two subunits totaling 34 ac (14 ha) of Forest Service

land and 1,034 ac (418 ha) of private land. This unit supports large arroyo toad populations in close proximity to the coast. Nearly all of the other near-coastal, historical populations of arroyo toad were extirpated due to extensive urbanization and river channelization along the coastal regions of southern California. Distinctive climatic conditions near the coast may provide different selective pressures on toads in this area, and favor specific genetic characteristics that help maintain the genetic diversity of the species. We are exempting from designation approximately 5,994 ac (2,426 ha) of military land that fall within the boundaries of this proposed revised critical habitat unit under section 4(a)(3)(B) of the Act because the lands are subject to the 2007 INRMP for MCB Camp Pendleton, and the INRMP provides a benefit to the arroyo toad (see the “Application of Section 4(a)(3) of the Act” section of this proposed revised rule for a detailed discussion).

Subunit 11a

Subunit 11a encompasses: (1) Approximately 1.7 mi (3 km) of Cristianitos Creek from just above Gabino Creek downstream to the MCB Camp Pendleton boundary; (2) approximately 3.1 mi (5 km) of Gabino Creek upstream from its confluence with Cristianitos Creek, including about 0.6 mi (1 km) of La Paz Creek; and (3) approximately 4 mi (6 km) of Talega Creek upstream from its confluence with Cristianitos Creek and beyond the boundaries of MCB Camp Pendleton. The subunit consists of 1,034 ac (418 ha) of private land. Subunit 11a contains the physical and biological features that are essential to the conservation of the species, including aquatic habitat for breeding and non-breeding activities (PCEs 1, 2, and 3) and upland habitat for foraging and dispersal activities (PCE 4). The physical and biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from cumulative impacts from human activities, including direct mortality from vehicle collisions and vehicular crossings of streambeds, grazing, and nonnative predators (Bloom 1996, pp. 4–5; Bloom 1998, *in litt.*, pp. 1, 3). Please see the “Special Management Considerations or Protection” section of this proposed rule for a discussion of the threats to arroyo toad habitat and potential management considerations. We are considering the exclusion of approximately 963 ac (390 ha) of permittee-owned or controlled lands in

Subunit 11a within the Southern Orange County NCCP/Master Streambed Alteration Agreement/HCP from the final revised critical habitat designation under section 4(b)(2) of the Act (see “Application of Section 4(b)(2) of the Act” section of this proposed revised rule for a detailed discussion).

Subunit 11b

Subunit 11b encompasses approximately 1 mi (2 km) of San Mateo Creek beyond the boundaries of MCB Camp Pendleton within the Cleveland National Forest near Devil Canyon. The subunit consists of 34 ac (14 ha) of Forest Service land. Subunit 11b contains the physical and biological features that are essential to the conservation of the species, including aquatic habitat for breeding and non-breeding activities (PCEs 1, 2, and 3) and upland habitat for foraging and dispersal activities (PCE 4). The physical and biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from nonnative predators (ECORP 2004, p. 16). Please see the “Special Management Considerations or Protection” section of this proposed rule for a discussion of the threats to arroyo toad habitat and potential management considerations.

Unit 12: Lower Santa Margarita River Basin (1,009 ac (408 ha))

This unit is located in northwestern San Diego County and consists of two subunits totaling 5 ac (2 ha) of State land and 1,004 ac (406 ha) of private land. This unit supports large arroyo toad populations in proximity to other large populations to the north (Unit 11), and provides potential connectivity to populations in the upper Santa Margarita River Basin (Unit 13). We are exempting from designation approximately 7,239 ac (2,929 ha) of military land (7,016 ac (2,839 ha) on MCB Camp Pendleton and 223 ac (90 ha) on Fallbrook Naval Weapons Station) that fall within the boundaries of this critical habitat unit from the proposed revised designation of critical habitat under section 4(a)(3)(B) of the Act because the lands are subject to the 2007 INRMP for MCB Camp Pendleton and the 2006 INRMP for the Fallbrook Naval Weapons Station, and each INRMP provides a benefit to the arroyo toad (see the “Application of Section 4(a)(3) of the Act” section of this proposed revised rule for a detailed discussion).

Subunit 12a

Subunit 12a encompasses approximately 2.1 mi (3 km) of De Luz Creek from the town of De Luz downstream to the MCB Camp Pendleton boundary. The subunit consists of 394 ac (159 ha) of private land. Subunit 12a contains the physical and biological features that are essential to the conservation of the species, including aquatic habitat for breeding and non-breeding activities (PCEs 1, 2, and 3) and upland habitat for foraging and dispersal activities (PCE 4). The physical and biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from cumulative impacts to the species' habitat from recreation, nonnative predators, and nonnative plants (CNDDDB 2008 EO 26). Please see the "Special Management Considerations or Protection" section of this proposed rule for a discussion of the threats to arroyo toad habitat and potential management considerations.

Subunit 12b

Subunit 12b encompasses approximately 5.5 mi (9 km) of the Santa Margarita River upstream from the MCB Camp Pendleton boundary. The subunit consists of 5 ac (2 ha) of State land and 610 ac (247 ha) of private land. Subunit 12b contains the physical and biological features that are essential to the conservation of the species, including aquatic habitat for breeding and non-breeding activities (PCEs 1, 2, and 3) and upland habitat for foraging and dispersal activities (PCE 4). The physical and biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from cumulative impacts to the species' habitat from nonnative predators, nonnative plants, and vehicular traffic (Varanus Biological Services, Inc. 1999, pp. 34–35). Please see the "Special Management Considerations or Protection" section of this proposed rule for a discussion of the threats to arroyo toad habitat and potential management considerations.

Unit 13: Upper Santa Margarita River Basin (8,137 ac (3,293 ha))

This unit is located in southern Riverside County and northern San Diego County and consists of three subunits totaling 23 ac (9 ha) of Bureau of Land Management land, 434 ac (176 ha) of Forest Service land, and 7,682 ac (3,109 ha) of private land. This unit

provides potential links to arroyo toad populations in the lower Santa Margarita River Basin and other nearby drainages containing suitable habitat.

Subunit 13a

Subunit 13a encompasses approximately 7.3 mi (12 km) of Arroyo Seco Creek from just south of the San Diego-Riverside County boundary downstream to Vail Lake. The subunit consists of 343 ac (139 ha) of Forest Service land and 813 ac (329 ha) of private land. Subunit 13a contains the physical and biological features that are essential to the conservation of the species, including aquatic habitat for breeding and non-breeding activities (PCEs 1, 2, and 3) and upland habitat for foraging and dispersal activities (PCE 4). The physical and biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from nonnative predators and campground activities (USGS 2000, p. 3). Please see the "Special Management Considerations or Protection" section of this proposed rule for a discussion of the threats to arroyo toad habitat and potential management considerations. We are considering the exclusion of approximately 690 ac (279 ha) of private land in Subunit 13a within the Western Riverside County MSHCP from the final revised critical habitat designation under section 4(b)(2) of the Act (see "Application of Section 4(b)(2) of the Act" section of this proposed revised rule for a detailed discussion).

Subunit 13b

Subunit 13b encompasses approximately 16.3 mi (26 km) of Temecula Creek from Dodge Valley downstream to Vail Lake. The subunit consists of 91 ac (37 ha) of Forest Service land, 23 ac (9 ha) of Bureau of Land Management land, and 4,643 ac (1,879 ha) of private land. Subunit 13b contains the physical and biological features that are essential to the conservation of the species, including aquatic habitat for breeding and non-breeding activities (PCEs 1, 2, and 3) and upland habitat for foraging and dispersal activities (PCE 4). The physical and biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from road maintenance and sand-mining operations (HELIX 2004, p. 1). Please see the "Special Management Considerations or Protection" section of this proposed rule for a discussion of the threats to arroyo toad habitat and

potential management considerations. We are considering the exclusion of approximately 2,318 ac (938 ha) of private land in Subunit 13b within the Western Riverside County MSHCP from the final revised critical habitat designation under section 4(b)(2) of the Act (see "Application of Section 4(b)(2) of the Act" section of this proposed revised rule for a detailed discussion).

Subunit 13c

Subunit 13c encompasses approximately 6.5 mi (10 km) of Wilson Creek from the confluence with Cahuilla Creek downstream to Vail Lake. The subunit consists of 2,226 ac (901 ha) of private land. Subunit 13c contains the physical and biological features that are essential to the conservation of the species, including aquatic habitat for breeding and non-breeding activities (PCEs 1, 2, and 3) and upland habitat for foraging and dispersal activities (PCE 4). The physical and biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from direct mortality and habitat degradation from off-highway vehicular traffic, and upstream sedimentation caused by urbanization, agriculture, or wildfire (R. Haase, MCAS Camp Pendleton, *in litt.* 2009b, p. 1). Please see the "Special Management Considerations or Protection" section of this proposed rule for a discussion of the threats to arroyo toad habitat and potential management considerations. We are considering the exclusion of approximately 2,225 ac (900 ha) of private land in Subunit 13c within the Western Riverside County MSHCP from the final revised critical habitat designation under section 4(b)(2) of the Act (see "Application of Section 4(b)(2) of the Act" section of this proposed revised rule for a detailed discussion).

Unit 14: Lower and Middle San Luis Rey River Basin (12,906 ac (5,223 ha))

This unit is located in northern San Diego County and encompasses approximately 30 mi (48 km) of the San Luis Rey River from the western edge of the La Jolla Indian Reservation downstream to the confluence with Guajome Creek near the City of Oceanside. It also includes approximately 3.4 mi (5.5 km) of Pala Creek and 1.7 mi (2.7 km) of Keys Creek upstream from their confluence with the San Luis Rey River. The unit consists of approximately 5 ac (2 ha) of Bureau of Land Management land, 10 ac (4 ha) of State land, 3,540 ac (1,432 ha) of tribal land, and 9,351 ac (3,785 ha) of private land, and supports one of the largest

contiguous river reaches that is occupied by the species. Unit 14 contains the physical and biological features that are essential to the conservation of the species, including aquatic habitat for breeding and non-breeding activities (PCEs 1, 2, and 3) and upland habitat for foraging and dispersal activities (PCE 4). The physical and biological features essential to the conservation of the species in this unit may require special management considerations or protection to address threats from dams and water diversions, intensive urbanization, agriculture, and nonnative predators and plants. Please see the "Special Management Considerations or Protection" section of this proposed rule for a discussion of the threats to arroyo toad habitat and potential management considerations.

As discussed in the "Application of Section 4(b)(2) of the Act" section of this proposed revised rule, we recognize the importance of government-to-government relationships with Tribes; therefore, we are considering the exclusion of approximately 1,155 ac (467 ha) of Rincon Band of Luiseño Mission Indians Tribal Lands and approximately 2,385 ac (963 ha) of Pala Band of Luiseño Mission Indians Tribal Lands in Unit 14 from the final revised critical habitat designation under section 4(b)(2) of the Act. We are seeking public comment on the appropriateness of the inclusion or exclusion of these lands from final designation of revised critical habitat and whether the conservation needs of the arroyo toad can be achieved by limiting the designation to non-tribal lands (see Public Comments section).

Unit 15: Upper San Luis Rey River Basin (12,026 ac (4,867 ha))

This unit is located in northern San Diego County and encompasses: (1) Approximately 8.6 mi (14 km) of the West Fork of the San Luis Rey River from Barker Valley downstream to the upper end of Lake Henshaw, (2) approximately 11.4 mi (18 km) of the upper San Luis Rey River from the Indian Flats area downstream to the upper end of Lake Henshaw, and (3) approximately 6.9 mi (11 km) of Agua Caliente Creek from the western edge of section 13 (T10S, R3E) to the confluence with the San Luis Rey River. The unit consists of 1,428 ac (578 ha) of Forest Service land and 10,598 ac (4,289 ha) of private land. This unit supports a unique assemblage of several small, disjunct, high-elevation arroyo toad populations and one significant population on Agua Caliente Creek (Gergus 1992, *in litt.*; Ervin 2000, *in litt.*;

CNDDDB 2008, Element Occurrences (EOs) 27, 32) in an area where in-stream and overland dispersal between populations is likely still possible. Unit 15 contains the physical and biological features that are essential to the conservation of the species, including aquatic habitat for breeding and non-breeding activities (PCEs 1, 2, and 3) and upland habitat for foraging and dispersal activities (PCE 4). The physical and biological features essential to the conservation of the species in this unit may require special management considerations or protection to address threats from groundwater pumping on private lands, nonnative predators, and grazing. Please see the "Special Management Considerations or Protection" section of this proposed rule for a discussion of the threats to arroyo toad habitat and potential management considerations.

Unit 16: Santa Ysabel Creek Basin (13,567 ac (5,490 ha))

This unit is located in north-central San Diego County and consists of two subunits totaling 6 ac (2 ha) of Bureau of Land Management land, 138 ac (56 ha) of Forest Service land, 182 ac (74 ha) of State land, 143 ac (58 ha) of local government land, 23 ac (9 ha) of tribal land, and 13,074 ac (5,291 ha) of private land. This unit supports large amounts of suitable habitat connecting large populations with several additional populations.

Subunit 16a

Subunit 16a encompasses: (1) Approximately 12 mi (19 km) of Santa Ysabel Creek from the confluence with Temescal Creek downstream to the confluence with Santa Maria Creek, (2) approximately 10 mi (16.1 km) of Guejito Creek from the 2,000 ft (610 m) elevation contour downstream to the confluence with Santa Ysabel Creek, (3) approximately 2.5 mi (4.0 km) of Boden Canyon upstream from the Santa Ysabel Creek confluence, (4) approximately 4.3 mi (7 km) of Temescal Creek from the northern edge of Pamo Valley to the confluence with Santa Ysabel Creek, and (5) approximately 9.1 mi (15 km) of Santa Maria Creek from the west side of Ramona to the confluence with Santa Ysabel Creek. The subunit consists of 138 ac (56 ha) of Forest Service land, 6 ac (2 ha) of Bureau of Land Management land, 182 ac (74 ha) of State land, 143 ac (58 ha) of local government land, and 11,667 ac (4,721 ha) of private land. Subunit 16a contains the physical and biological features that are essential to the conservation of the species, including aquatic habitat for breeding and non-breeding activities (PCEs 1, 2,

and 3) and upland habitat for foraging and dispersal activities (PCE 4). The physical and biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from grazing, nonnative predators, and urbanization (Tierra Environmental Services 2001, *in litt.*; CNDDDB 2008, EOs 59, 61). Please see the "Special Management Considerations or Protection" section of this proposed rule for a discussion of the threats to arroyo toad habitat and potential management considerations. We are considering the exclusion of approximately 3,915 ac (1,585 ha) of private lands in Subunit 16a within the San Diego MSCP–City and County of San Diego Subarea Plans from the final revised critical habitat designation under section 4(b)(2) of the Act (see "Application of Section 4(b)(2) of the Act" section of this proposed revised rule for a detailed discussion).

Subunit 16d

Subunit 16d encompasses approximately 5.2 mi (8.3 km) of Santa Ysabel Creek about 0.5 mi (0.8 km) east of Highway 79 downstream to approximately 0.25 mi (0.4 km) downstream of the confluence with Witch Creek. The subunit consists of 23 ac (9 ha) of Mesa Grande Reservation tribal land and 1,408 ac (570 ha) of private land. Subunit 16d contains the physical and biological features that are essential to the conservation of the species, including aquatic habitat for breeding and non-breeding activities (PCEs 1, 2, and 3) and upland habitat for foraging and dispersal activities (PCE 4). The physical and biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from grazing (CNDDDB 2008, EO 62). Please see the "Special Management Considerations or Protection" section of this proposed rule for a discussion of the threats to arroyo toad habitat and potential management considerations.

As discussed in the "Application of Section 4(b)(2) of the Act" section of this proposed revised rule, we recognize the importance of government-to-government relationships with Tribes; therefore, we are considering the exclusion of approximately 23 ac (9 ha) of Mesa Grande Band of Diegueno Mission Indians Tribal Lands in Subunit 16d from the final revised critical habitat designation under section 4(b)(2) of the Act. We are seeking public comment on the appropriateness of the inclusion or exclusion of these lands from final designation of revised critical

habitat and whether the conservation needs of the arroyo toad can be achieved by limiting the designation to non-tribal lands (see Public Comments section).

Unit 17: San Diego River Basin/San Vicente Creek (4,263 ac (1,725 ha))

This unit is located in central San Diego County and consists of three subunits totaling 35 ac (14 ha) of Bureau of Land Management land, 390 ac (158 ha) of Forest Service land, 93 ac (38 ha) of Capitan Grande Band of Diegueno Mission Indians tribal land, and 3,746 ac (1,516 ha) of private land. This unit supports suitable habitat for population expansion, thus increasing the probability of the long-term persistence of these populations.

Subunit 17a

Subunit 17a encompasses: (1) Approximately 8.7 mi (14 km) of the San Diego River from Temescal Creek downstream through 0.5 mi (0.9 km) of the Capitan Grande Reservation to the upper edge of El Capitan Reservoir, and (2) approximately 1 mi (2 km) of lower Cedar Creek. The subunit consists of 354 ac (143 ha) of Forest Service land, 92 ac (37 ha) of Capitan Grande Band of Diegueno Mission Indians tribal land, and 795 ac (322 ha) of private land. Subunit 17a contains the physical and biological features that are essential to the conservation of the species, including aquatic habitat for breeding and non-breeding activities (PCEs 1, 2, and 3) and upland habitat for foraging and dispersal activities (PCE 4). The physical and biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from urbanization and nonnative predators. Please see the "Special Management Considerations or Protection" section of this proposed rule for a discussion of the threats to arroyo toad habitat and potential management considerations.

As discussed in the "Application of Section 4(b)(2) of the Act" section of this proposed revised rule, we recognize the importance of government-to-government relationships with Tribes; therefore, we are considering the exclusion of approximately 92 ac (37 ha) of Capitan Grande Band of Diegueno Mission Indians Tribal Lands in Subunit 17a from the final revised critical habitat designation under section 4(b)(2) of the Act. We are seeking public comment on the appropriateness of the inclusion or exclusion of these lands from final designation of revised critical habitat and whether the conservation needs of the arroyo toad can be achieved

by limiting the designation to non-tribal lands (see Public Comments section).

Subunit 17b

Subunit 17b encompasses approximately 7.2 mi (12 km) of the San Diego River downstream from San Vicente Reservoir. The subunit consists of 12 ac (5 ha) of Bureau of Land Management land, 36 ac (15 ha) of Forest Service land, and 1,817 ac (735 ha) of private land. Subunit 17b contains the physical and biological features that are essential to the conservation of the species, including aquatic habitat for breeding and non-breeding activities (PCEs 1, 2, and 3) and upland habitat for foraging and dispersal activities (PCE 4). The physical and biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from urbanization, agriculture, nonnative predators, and adverse water releases (based on timing or amount) from the Sutherland/San Vicente Aqueduct. Please see the "Special Management Considerations or Protection" section of this proposed rule for a discussion of the threats to arroyo toad habitat and potential management considerations. We are considering the exclusion of approximately 1,730 ac (700 ha) of private lands in Subunit 17b within the San Diego MSCP—City and County of San Diego Subarea Plans from the final revised critical habitat designation under section 4(b)(2) of the Act (see "Application of Section 4(b)(2) of the Act" section of this proposed revised rule for a detailed discussion).

Subunit 17d

Subunit 17d encompasses approximately 7.6 mi (12 km) of San Vicente Creek upstream from San Vicente Reservoir. The subunit consists of 23 ac (9 ha) of Bureau of Land Management land and 1,134 ac (459 ha) of private land. Subunit 17d contains the physical and biological features that are essential to the conservation of the species, including aquatic habitat for breeding and non-breeding activities (PCEs 1, 2, and 3) and upland habitat for foraging and dispersal activities (PCE 4). The physical and biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from urbanization, agriculture, nonnative predators, and adverse water releases (based on timing or amount) from the Sutherland/San Vicente Aqueduct (Varanus Biological Services, Inc. 1999, p. 20; RECON 2008, pp. 1, 3–4). Please

see the "Special Management Considerations or Protection" section of this proposed rule for a discussion of the threats to arroyo toad habitat and potential management considerations. We are considering the exclusion of approximately 931 ac (377 ha) of private lands in Subunit 17d within the San Diego MSCP—City and County of San Diego Subarea Plans from the final revised critical habitat designation under section 4(b)(2) of the Act (see "Application of Section 4(b)(2) of the Act" section of this proposed revised rule for a detailed discussion).

Unit 18: Sweetwater River Basin (4,783 ac (1,936 ha))

This unit is located in south-central San Diego County and consists of two subunits totaling 553 ac (224 ha) of Forest Service land, 3 ac (1 ha) of San Diego National Wildlife Refuge land, 1,659 ac (671 ha) of State land, 391 ac (158 ha) of tribal land, and 2,178 ac (882 ha) of private land. This unit supports several significant populations over large stretches of rivers and streams (Gergus 1992, *in litt.*; Ervin 1997, *in litt.*; Varanus Biological Services, Inc. 1999, pp. 4–16; CNDDDB 2008, EOs 38, 43, 67, 73, 77, 85, 99, 100).

Subunit 18a

Subunit 18a encompasses: (1) Approximately 26.6 mi (43 km) of the Sweetwater River from the top of Upper Green Valley in Cuyamaca Rancho State Park downstream to the top of Loveland Reservoir, (2) approximately 4.3 mi (7 km) of Viejas Creek from the western border of the Viejas Indian Reservation downstream to the confluence with the Sweetwater River, and (3) approximately 1.5 mi (2 km) of Peterson Canyon from just east of the Taylor Creek confluence downstream to the top of Loveland Reservoir. The subunit consists of 553 ac (224 ha) of Forest Service land, 1,554 ac (629 ha) of State land, and 2,049 ac (829 ha) of private land. Subunit 18a contains the physical and biological features that are essential to the conservation of the species, including aquatic habitat for breeding and non-breeding activities (PCEs 1, 2, and 3) and upland habitat for foraging and dispersal activities (PCE 4). The physical and biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from vehicular traffic, including off-highway vehicular traffic; horse-riding activities; nonnative predators; reservoir inundation; and cumulative impacts from human activities, including direct mortality from trampling and trash

dumping (Varanus Biological Services, Inc. 1999, p. 14; Mendelsohn *et al.* 2005, pp. 10–11). Please see the “Special Management Considerations or Protection” section of this proposed rule for a discussion of the threats to arroyo toad habitat and potential management considerations. We are considering the exclusion of approximately 545 ac (221 ha) of private lands in Subunit 18a within the San Diego MSCP–City and County of San Diego Subarea Plans from the final revised critical habitat designation under section 4(b)(2) of the Act (see “Application of Section 4(b)(2) of the Act” section of this proposed revised rule for a detailed discussion).

Subunit 18c

Subunit 18c encompasses approximately 5.8 mi (9.3 km) of the Sweetwater River from immediately below Loveland Dam downstream to just above the Sycuan Resort. The subunit consists of 3 ac (1 ha) of San Diego National Wildlife Refuge land, 391 ac (158 ha) of Sycuan Band of the Kumeyaay Nation tribal land, 105 ac (42 ha) of State land, and 129 ac (53 ha) of private land. Subunit 18c contains the physical and biological features that are essential to the conservation of the species, including aquatic habitat for breeding and non-breeding activities (PCEs 1, 2, and 3) and upland habitat for foraging and dispersal activities (PCE 4). The physical and biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from adverse water releases (based on timing or amount) from the Loveland Reservoir and gravel mining operations (Madden-Smith *et al.* 2003, pp. 15, 17). Please see the “Special Management Considerations or Protection” section of this proposed rule for a discussion of the threats to arroyo toad habitat and potential management considerations.

As discussed in the “Application of Section 4(b)(2) of the Act” section of this proposed revised rule, we recognize the importance of government-to-government relationships with Tribes; therefore, we are considering the exclusion of approximately 391 ac (158 ha) of Sycuan Band of the Kumeyaay Nation Tribal Lands in Subunit 18c from the final revised critical habitat designation under section 4(b)(2) of the Act. We are seeking public comment on the appropriateness of the inclusion or exclusion of these lands from final designation of revised critical habitat and whether the conservation needs of the arroyo toad can be achieved by limiting the designation to non-tribal lands (see Public Comments section).

We are also considering the exclusion of approximately 595 ac (241 ha) of private lands in Subunit 18c within the San Diego MSCP–City and County of San Diego Subarea Plans from the final revised critical habitat designation under section 4(b)(2) of the Act (see “Application of Section 4(b)(2) of the Act” section of this proposed revised rule for a detailed discussion).

Unit 19: Cottonwood Creek Basin (14,375 ac (5,817 ha))

Unit 19 is located in southern San Diego County and consists of five subunits totaling 190 ac (77 ha) of Bureau of Land Management land, 3,928 ac (1,589 ha) of Forest Service land, 1,482 ac (600 ha) of local government land, and 8,778 ac (3,551 ha) of private land. This unit encompasses a large number of distinct arroyo toad occurrences (Gergus 1992, *in litt.*; Varanus Biological Services, Inc. 1999, pp. 2–3; Gergus 2000, *in litt.*; CNDDDB 2008, EOs 20–22, 30, 40, 44, 63–65, 69, 79) in an area where in-stream and overland dispersal between populations is likely still possible and where there is room for population expansion.

Subunit 19a

Subunit 19a encompasses: (1) Approximately 7 mi (11.2 km) of Cottonwood Creek from Buckman Springs (near Interstate 8) downstream to Morena Reservoir, (2) approximately 2.8 mi (4.5 km) of Morena Creek downstream to the Cottonwood Creek confluence, (3) approximately 0.5 mi (1 km) of an unnamed tributary of Morena Creek in section 35 (T16S, R04E) downstream to the confluence with Morena Creek, (4) approximately 5 mi (8 km) of Kitchen Creek downstream to the Cottonwood Creek confluence, and (5) approximately 3.7 mi (6 km) of La Posta Creek downstream to the Cottonwood Creek confluence. The subunit consists of 2,129 ac (862 ha) of Forest Service land, 1,482 ac (600 ha) of local government land, and 2,237 ac (905 ha) of private land. Subunit 19a contains the physical and biological features that are essential to the conservation of the species, including aquatic habitat for breeding and non-breeding activities (PCEs 1, 2, and 3) and upland habitat for foraging and dispersal activities (PCE 4). The physical and biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from grazing, recreational activities, and nonnative plants and predators (Ervin 2000, *in litt.*; TAIC 2005, p. 1; CNDDDB 2008, EOs 20, 44, 69). Please see the “Special Management Considerations or

Protection” section of this proposed rule for a discussion of the threats to arroyo toad habitat and potential management considerations.

Subunit 19b

Subunit 19b encompasses approximately 12.7 mi (20 km) of Cottonwood Creek from immediately below Barrett Lake downstream to the U.S.-Mexico border and includes 10.3 mi (17 km) of Potrero Creek from approximately the 2,466-ft (752-m) elevation benchmark downstream to the confluence with Cottonwood Creek. The subunit consists of 80 ac (32 ha) of Forest Service land, 129 ac (52 ha) of Bureau of Land Management land, and 4,921 ac (1,991 ha) of private land. Subunit 19b contains the physical and biological features that are essential to the conservation of the species, including aquatic habitat for breeding and non-breeding activities (PCEs 1, 2, and 3) and upland habitat for foraging and dispersal activities (PCE 4). The physical and biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from grazing, and nonnative plants and predators (Ervin 1997, *in litt.*; TAIC 2005, pp. 1, 3; CNDDDB 2008, EOs 40, 64, 65, 79). Please see the “Special Management Considerations or Protection” section of this proposed rule for a discussion of the threats to arroyo toad habitat and potential management considerations. We are considering the exclusion of approximately 1,226 ac (496 ha) of private lands in Subunit 19b within the San Diego MSCP–City and County of San Diego Subarea Plans from the final revised critical habitat designation under section 4(b)(2) of the Act (see “Application of Section 4(b)(2) of the Act” section of this proposed revised rule for a detailed discussion).

Subunit 19c

Subunit 19c encompasses: (1) Approximately 7.6 mi (12 km) of Pine Valley Creek from the north edge of section 12 (T15S, R4E) downstream to approximately 0.6 mi (1 km) south of Interstate 8, (2) approximately 0.6 mi (1 km) of Noble Creek downstream to the confluence with Pine Valley Creek, (3) approximately 2.4 mi (4 km) of Scove Canyon downstream to the confluence with Pine Valley Creek, and (4) approximately 1.3 mi (2 km) of an unnamed tributary upstream of Scove Canyon in sections 25 and 36 (T15S, R04E). The subunit consists of 809 ac (327 ha) of Forest Service land and 703 ac (284 ha) of private land. Subunit 19c contains the physical and biological

features that are essential to the conservation of the species, including aquatic habitat for breeding and non-breeding activities (PCEs 1, 2, and 3) and upland habitat for foraging and dispersal activities (PCE 4). The physical and biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from urbanization, grazing, vehicular traffic, and nonnative predators (Holland and Sisk 2001, p. 9; CNDDDB 2008, EOs 21, 22, 30). Please see the "Special Management Considerations or Protection" section of this proposed rule for a discussion of the threats to arroyo toad habitat and potential management considerations.

Subunit 19d

Subunit 19d encompasses approximately 8 mi (13 km) of Pine Valley Creek from the Nelson Canyon confluence downstream to Barrett Reservoir and approximately 1.6 mi (3 km) of Horsethief Canyon downstream to the confluence with Pine Valley Creek. The subunit consists of 910 ac (368 ha) of Forest Service land and 28 ac (11 ha) of private land. Subunit 19d contains the physical and biological features that are essential to the conservation of the species, including aquatic habitat for breeding and non-breeding activities (PCEs 1, 2, and 3) and upland habitat for foraging and dispersal activities (PCE 4). The physical and biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from grazing and U.S. Border Patrol activities (Varanus Biological Services, Inc. 1999, p. 2; CNDDDB 2008, EO 63). Please see the "Special Management Considerations or Protection" section of this proposed rule for a discussion of the threats to arroyo toad habitat and potential management considerations.

Subunit 19e

Subunit 19e encompasses approximately 4.4 mi (7 km) of Campo Creek from Campo Lake downstream to the U.S.-Mexico border. The subunit consists of 61 ac (25 ha) of Bureau of Land Management land and 889 ac (360 ha) of private land. Subunit 19e contains the physical and biological features that are essential to the conservation of the species, including aquatic habitat for breeding and non-breeding activities (PCEs 1, 2, and 3) and upland habitat for foraging and dispersal activities (PCE 4). The physical and biological features

essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from fire management activities along the U.S.-Mexico border (LEI 2008, p. 2). Please see the "Special Management Considerations or Protection" section of this proposed rule for a discussion of the threats to arroyo toad habitat and potential management considerations.

Desert Recovery Unit

As described in the recovery plan (Service 1999, pp. 1–119), maintaining arroyo toad populations in the following 4 critical habitat units is necessary to conserve the species in the desert recovery unit. Each of these units is isolated from each other and from any other recovery units, making the issues of inbreeding, fragmentation, and random negative impacts of great concern. However, this recovery unit also represents unique ecological conditions for arroyo toads, and likely harbors important genetic diversity.

Unit 20: Upper Santa Ana River Basin/ Cajon Wash (1,775 ac (718 ha))

This unit is located in southwestern San Bernardino County and encompasses approximately 7.9 mi (13 km) of Cajon Wash upstream from the San Bernardino National Forest boundary. The unit consists of 711 ac (288 ha) of Forest Service land and 1,065 ac (431 ha) of private land. This unit supports a population that may represent some of the last vestiges of a much greater population that historically existed along the upper Santa Ana River Basin, but was almost entirely extirpated due to urbanization of the greater Los Angeles area, and helps preserve a critical outlier segment of the genetic, phenotypic, or behavioral variation of the species. Unit 20 contains the physical and biological features that are essential to the conservation of the species, including aquatic habitat for breeding and non-breeding activities (PCEs 1, 2, and 3) and upland habitat for foraging and dispersal activities (PCE 4). The physical and biological features essential to the conservation of the species in this unit may require special management considerations or protection to address threats from recreational activities. Please see the "Special Management Considerations or Protection" section of this proposed rule for a discussion of the threats to arroyo toad habitat and potential management considerations.

Unit 21: Little Rock Creek Basin (612 ac (248 ha))

This unit is located in central Los Angeles County and encompasses: (1) Approximately 5.9 mi (9.5 km) of Little Rock Creek from the South Fork confluence downstream to the upper end of Little Rock Reservoir (in the vicinity of Rocky Point Picnic Ground), and (2) approximately 1.1 mi (1.8 km) of Santiago Creek upstream from the confluence with Little Rock Creek in the Little Rock Creek Basin. The unit consists of 612 ac (248 ha) of Forest Service land. This unit is on the periphery of the species' range in the Mojave Desert and geographically isolated from other known toad populations; therefore, it is possible that arroyo toads in this area possess unique genetic and phenotypic variation. Unit 21 contains the physical and biological features that are essential to the conservation of the species, including aquatic habitat for breeding and non-breeding activities (PCEs 1, 2, and 3) and upland habitat for foraging and dispersal activities (PCE 4). The physical and biological features essential to the conservation of the species in this unit may require special management considerations or protection to address threats from recreational activities. Please see the "Special Management Considerations or Protection" section of this proposed rule for a discussion of the threats to arroyo toad habitat and potential management considerations.

Unit 22: Upper Mojave River Basin (5,919 ac (2,395 ha))

This unit is located in San Bernardino County and consists of two subunits totaling 3,253 ac (1,316 ha) of Federal land, 2,534 ac (1,025 ha) of private land, and 132 ac (54 ha) of State land.

Subunit 22a

Subunit 22a includes: (1) Approximately 9.3 mi (18 km) of Deep Creek from near Holcomb Creek downstream to the confluence with the West Fork; (2) approximately 4 mi (6 km) of Little Horsethief Creek upstream from its confluence with Horsethief Creek; (3) approximately 4 mi (6 km) of Horsethief Creek from approximately 1 mi (1.6 km) above the Little Horsethief Creek confluence downstream to the West Fork confluence; (4) approximately 6 mi (10 km) of the West Fork of the Mojave River from Highway 173 downstream to Mojave River Forks Dam; (5) approximately 1 mi (1.6 km) of the Mojave River below Mojave River Forks Dam; (6) approximately 1.4 mi (2.2 km) of Grass Valley Creek upstream

from the confluence with the West Fork; and (7) approximately 2.8 mi (4.5 km) of Kinley Creek upstream from the Deep Creek confluence. The subunit consists of 3,209 ac (1,299 ha) of Federal land and 2,474 ac (1,001 ha) of private land. This subunit supports the largest population of the species on the desert side of the San Bernardino Mountains and is important for maintaining the range of genetic and phenotypic diversity of the species. Subunit 22a contains the physical and biological features that are essential to the conservation of the species, including aquatic habitat for breeding and non-breeding activities (PCEs 1, 2, and 3) and upland habitat for foraging and dispersal activities (PCE 4). The physical and biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from nonnative species, urban development, and recreation. Please see the "Special Management Considerations or Protection" section of this proposed rule for a discussion of the threats to arroyo toad habitat and potential management considerations.

Subunit 22c

Subunit 22c includes approximately 1 mi (1.6 km) of the upper West Fork of the Mojave River, above Silverwood Lake, from near the 3,613 ft (1,462 m) elevation benchmark downstream to the upper end of the lake. The subunit consists of 43 ac (17 ha) of Federal land, 132 ac (54 ha) of county land, and 60 ac (24 ha) of private land. This subunit contains Summit Valley, which encompasses the lower portions of Horsethief Creek and the West Fork of the Mojave River, a broad, flat, alluvial valley that supports a substantial arroyo toad population (Ramirez 2003, pp. 16–17). Additionally, the downstream portion of this subunit contains the driest conditions of any unit proposed for arroyo toad critical habitat (Teale Data Center 1998, p. 1; CIMS 2000, p. 1), which suggests that this population may possess unique physiological adaptations, such as a reduced rate of evaporative water loss, and is important for maintaining the range of genetic and phenotypic diversity of the species. Subunit 22c contains the physical and biological features that are essential to the conservation of the species, including aquatic habitat for breeding and non-breeding activities (PCEs 1, 2, and 3) and upland habitat for foraging and dispersal activities (PCE 4). The physical and biological features essential to the conservation of the species in this subunit may require

special management considerations or protection to address threats from nonnative species, urban development, and recreation. Please see the "Special Management Considerations or Protection" section of this proposed rule for a discussion of the threats to arroyo toad habitat and potential management considerations.

Unit 23: Whitewater River Basin (1,355 ac (548 ha))

This unit is located in northern Riverside County and encompasses approximately 6.4 mi (10 km) of the Whitewater River from near Red Dome downstream to the Colorado River Aqueduct. The unit consists of 783 ac (317 ha) of Bureau of Land Management land and 572 ac (231 ha) of private land. This unit supports an isolated desert population on the easternmost periphery of the species' range in the Colorado Desert that may possess unique phenotypic and genetic variation that are distinct from other desert populations in the Mojave Desert (including Units 21 and 22 discussed above). Unit 23 contains the physical and biological features that are essential to the conservation of the species, including aquatic habitat for breeding and non-breeding activities (PCEs 1, 2, and 3) and upland habitat for foraging and dispersal activities (PCE 4). The physical and biological features essential to the conservation of the species in this unit may require special management considerations or protection to address threats from unsuitable water flow for breeding and off-highway vehicular traffic. Please see the "Special Management Considerations or Protection" section of this proposed rule for a discussion of the threats to arroyo toad habitat and potential management considerations. We are considering the exclusion of approximately 538 ac (218 ha) of private lands in Unit 23 within the Coachella Valley MSHCP from the final revised critical habitat designation under section 4(b)(2) of the Act (see "Application of Section 4(b)(2) of the Act" section of this proposed revised rule for a detailed discussion).

Effects of Critical Habitat Designation

Section 7 Consultation

Section 7(a)(2) of the Act requires Federal agencies, including the Service, to ensure that actions they fund, authorize, or carry out are not likely to destroy or adversely modify critical habitat. Decisions by the Fifth and Ninth Circuit Courts of Appeal have invalidated our definition of "destruction or adverse modification"

(50 CFR 402.02) (see *Gifford Pinchot Task Force v. U.S. Fish and Wildlife Service*, 378 F.3d 1059 (9th Cir. 2004) and *Sierra Club v. U.S. Fish and Wildlife Service et al.*, 245 F.3d 434, 442F (5th Cir. 2001)), and we do not rely on this regulatory definition when analyzing whether an action is likely to destroy or adversely modify critical habitat. Under the statutory provisions of the Act, we determine destruction or adverse modification on the basis of whether, with implementation of the proposed Federal action, the affected critical habitat would remain functional (or retain the current ability for the PCEs to be functionally established) to serve its intended conservation role for the species. Section 7(a)(2) of the Act requires Federal agencies, including the Service, to evaluate their actions with respect to any species that is endangered or threatened and with respect to its critical habitat, if any is proposed or designated. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402.

Section 7(a)(4) of the Act requires Federal agencies to confer with us on any action that is likely to jeopardize the continued existence of a species proposed for listing or result in destruction or adverse modification of proposed critical habitat. Conference reports provide conservation recommendations to assist the agency in eliminating conflicts that may be caused by the proposed action. We may issue a formal conference report if requested by a Federal agency. Formal conference reports on proposed critical habitat contain an opinion that is prepared according to 50 CFR 402.14, as if critical habitat were designated. We may adopt the formal conference report as the biological opinion when the critical habitat is designated, if no substantial new information or changes in the action alter the content of the opinion (see 50 CFR 402.10(d)). The conservation recommendations in a conference report or opinion are advisory.

If a species is listed or critical habitat is designated, section 7(a)(2) of the Act requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of such a species or to destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency (action agency) must enter into consultation with us. As a result of this consultation, we document compliance with the requirements of section 7(a)(2) of the Act through our issuance of:

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

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

An exception to the concurrence process referred to in (1) above occurs in consultations involving National Fire Plan projects. In 2004, the U.S. Forest Service and the Bureau of Land Management reached agreements with the Service to streamline a portion of the section 7 consultation process (BLM-ACA 2004, pp. 1–8; FS-ACA 2004, pp. 1–8). The agreements allow the U.S. Forest Service and the Bureau of Land Management the opportunity to make “not likely to adversely affect” determinations for projects implementing the National Fire Plan. Such projects include prescribed fire, mechanical fuels treatments (thinning and removal of fuels to prescribed objectives), emergency stabilization, burned area rehabilitation, road maintenance and operation activities, ecosystem restoration, and culvert replacement actions. The U.S. Forest Service and the Bureau of Land Management will insure staff is properly trained and both agencies will submit monitoring reports to the Service to determine if the procedures are being implemented properly and effects on endangered species and their habitats are being properly evaluated. As a result we do not believe the alternative consultation processes being implemented as a result of the National Fire Plan will differ significantly from those consultations being conducted by the Service.

If we issue a biological opinion concluding that a project is likely to jeopardize the continued existence of a listed species and/or destroy or adversely modify critical habitat, we also provide reasonable and prudent alternatives to the project, if any are identifiable. We define “reasonable and prudent alternatives” 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,
- Can be implemented consistent with the scope of the Federal agency’s legal authority and jurisdiction,
- Are economically and technologically feasible, and
- Would, in the Director’s opinion, avoid jeopardizing the continued existence of the listed species or destroying or adversely modifying critical habitat.

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

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

Federal activities that may affect the arroyo toad or its designated critical habitat will require section 7(a)(2) consultation under the Act. Activities on State, Tribal, local, or private lands requiring a Federal permit (such as a permit from the U.S. Army Corps of Engineers under section 404 of the Clean Water Act (33 U.S.C. 1251 *et seq.*) or a permit under section 10 of the Act from the Service) or involving some other Federal action (such as funding from the Federal Highway Administration, Federal Aviation Administration, or the Federal Emergency Management Agency) will also be subject to the section 7(a)(2) consultation process. Federal actions not affecting listed species or critical habitat, and actions on State, Tribal, local, or private lands that are not federally funded, authorized, or permitted, do not require section 7(a)(2) consultations.

Application of the “Adverse Modification” Standard

The key factor related to the adverse modification determination is whether, with implementation of the proposed Federal action, the affected critical habitat would continue to serve its intended conservation role for the species, or would retain its current ability for the PCEs to be functionally established. Activities that may destroy or adversely modify critical habitat are those that alter the physical and biological features (PCEs) to an extent that appreciably reduces the conservation value of critical habitat for the arroyo toad.

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

Activities that, when carried out, funded, or authorized by a Federal agency, may adversely affect critical habitat and, therefore, should result in consultation for the arroyo toad include, but are not limited to, the following:

(1) Actions that alter water chemistry or temperature. Such activities include, but are not limited to: Release of chemicals, biological pollutants, or heated effluents into the surface water or into connected groundwater at a point source or by dispersed release (non-point source). These activities can alter water conditions beyond the tolerances of the arroyo toad and result in direct or cumulative adverse effects to these individuals and their life cycles.

(2) Actions that increase sediment deposition within the stream channel or disturb upland foraging and dispersal habitat. Such activities include, but are not limited to: Excessive sedimentation from livestock overgrazing, road construction, commercial or urban development, channel alteration, timber harvest, off-highway vehicle or recreational use, and other watershed and floodplain disturbances. These activities could eliminate or reduce the habitat necessary for the growth and reproduction of the arroyo toad by increasing the sediment deposition to levels that would adversely affect their ability to complete their life cycles.

(3) Actions that alter channel morphology or geometry. Such activities include, but are not limited to: Flood control and water diversion structures, such as dams and reservoirs, that regulate stream flows and trap sediments, direct groundwater extraction, channelization, impoundment, road and bridge construction, development, mining, dredging, and destruction of riparian vegetation. These activities may lead to changes to the hydrologic functioning of the stream and alter the timing, duration, water flows, and levels that would degrade or eliminate the arroyo toad and its habitat. These actions can also lead to increased sedimentation and degradation in water quality to levels that are beyond the tolerances of the arroyo toad and provide habitat for

nonnative species that prey on arroyo toads.

(4) Actions that eliminate upland foraging, aestivating, or dispersal habitat for the arroyo toad. Such activities include, but are not limited to: Road construction, commercial or urban development, timber harvest, off-highway vehicle or recreational use, and other watershed and floodplain disturbances. These actions could affect the species' habitat through erosion, siltation, soil compaction, water quality degradation from urban runoff containing contaminants, fertilizers and pesticides, and the spread of introduced nonnative plants.

(5) Actions that lead to introducing, spreading, or augmenting nonnative aquatic species in stream segments used by arroyo toad. Possible actions include, but are not limited to: Introduction of chytrid fungus or other diseases, fish stocking for sport, nonnative aquatic plant species for aesthetics, or other related actions. These activities could affect the growth and reproduction of the arroyo toad by subjecting eggs, larvae, tadpoles, and adult arroyo toads to increased predation pressure or limit the amount of habitat available for the species, which would adversely affect the arroyo toad's ability to complete its life cycle.

Note that the scale of these activities is a crucial factor in determining whether, in any instance, they would directly or indirectly alter critical habitat to the extent that the value of the critical habitat would be appreciably diminished in providing for the physical or biological features essential to the conservation of the arroyo toad.

We consider all of the units and subunits proposed as critical habitat to contain features essential to the conservation of the arroyo toad. All units are within the geographical area occupied by the species at the time it was listed, and are currently occupied by arroyo toads. To ensure that their actions do not jeopardize the continued existence of the arroyo toad, Federal agencies already consult with us on activities in areas currently occupied by the arroyo toad, or in unoccupied areas if the species may be affected by their actions.

Exemptions

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

The Sikes Act Improvement Act of 1997 (Sikes Act) (16 U.S.C. 670a) required each military installation that includes land and water suitable for the conservation and management of natural resources to complete an integrated natural resources

management plan (INRMP) by November 17, 2001. An INRMP integrates implementation of the military mission of the installation with stewardship of the natural resources found on the base. Each INRMP includes:

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

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

The National Defense Authorization Act for Fiscal Year 2004 (Pub. L. 108–136) amended the Endangered Species Act to limit areas eligible for designation as critical habitat. Specifically, section 4(a)(3)(B)(i) of the Act (16 U.S.C. 1533(a)(3)(B)(i)) now provides: “The Secretary shall not designate as critical habitat any lands or other geographical areas owned or controlled by the Department of Defense, or designated for its use, that are subject to an integrated natural resources management plan prepared under section 101 of the Sikes Act (16 U.S.C. 670a), if the Secretary determines in writing that such plan provides a benefit to the species for which critical habitat is proposed for designation.”

We consult with the military on the development and implementation of INRMPs for installations with federally listed species. INRMPs developed by military installations located within the range of the arroyo toad and which contain those features essential to the species' conservation were analyzed for exemption under the authority of section 4(a)(3)(B) of the Act.

Approved INRMPs

Fort Hunter Liggett Military Reservation, MCB Camp Pendleton, and Fallbrook Naval Weapons Station have approved INRMPs. The U.S. Army Reserve and Marine Corps (on both MCB Camp Pendleton and Fallbrook Naval Weapons Station) committed to working closely with us and California Department of Fish and Game (as well as California Department of Parks and Recreation (California State Parks) with

regards to lands leased by MCB Camp Pendleton) to continually refine the existing INRMPs as part of the Sikes Act's INRMP review process. Based on our review of the INRMPs for these military installations, and in accordance with section 4(a)(3)(B)(i) of the Act, we have determined that the lands within these installations identified as meeting the definition of critical habitat are subject to the INRMPs, and that conservation efforts identified in these INRMPs will provide a benefit to the arroyo toad (see the following sections that detail this determination for each installation). Therefore, lands within these installations are exempt from critical habitat designation under section 4(a)(3)(B) of the Act. We are not including approximately 19,686 ac (7,967 ha) of habitat on Fort Hunter Liggett, MCB Camp Pendleton, and Fallbrook Naval Weapons Station in this proposed revised critical habitat designation because of this exemption.

Fort Hunter Liggett Military Reservation

Fort Hunter Liggett was established in 1940 as Hunter Liggett Military Reservation, when the Army purchased lands belonging to William Randolph Hearst and other private landowners. The installation was used intensively to prepare troops for World War II, the Korean and Vietnam conflicts, and the Cold War, as a training ground for the 7th Infantry Division formerly stationed at Fort Ord, and as a Test and Experimentation Command Center. Fort Hunter Liggett occupies approximately 163,000 ac (66,000 ha) of varied habitats within the Santa Lucia Mountains in southern Monterey County. Currently, the installation is used for training by the 40th Mechanized Infantry Division of the California Army National Guard; reserve units from several branches of the Armed Forces; active components of the Army Rangers, Special Forces, Navy Seabees, and Marines; and other government agencies.

The Fort Hunter Liggett INRMP is a planning document that guides the management and conservation of natural resources under the installation's control. The INRMP was prepared to ensure that natural resources are managed in support of the Fort Hunter Liggett military training mission and that all activities are consistent with Federal stewardship requirements. The Fort Hunter Liggett INRMP was completed in 2005, followed by a revised and updated version in 2007, to address conservation and management of its natural resources, including conservation measures for the arroyo toad (U.S. Army Reserve Command 2007, pp. 171–174).

The INRMP is Fort Hunter Liggett's adaptive plan for managing natural resources to support and be consistent with the military mission while protecting and enhancing the biological integrity of lands under its use (U.S. Army 2004, p. iv). Fort Hunter Liggett is committed to an ecosystem management approach for its natural resources program by integrating all components of natural resource management into a comprehensive and coordinated effort. An integrated approach to ecosystem management will help protect the biological diversity found at Fort Hunter Liggett.

The INRMP identifies the following management and protection measures for the arroyo toad: (1) Implement monitoring that will meet the Service's criteria to demonstrate population status of arroyo toads on Fort Hunter Liggett; (2) reduce public and military vehicle encroachment into sandy riverine habitat, particularly during the breeding season for the arroyo toad; (3) minimize adverse effects to arroyo toads from roads and borrow sites (sites where soil and other material is removed for construction purposes); (4) gain an understanding of the timing of arroyo toad upland use, extent of upland use and distance traveled from breeding sites, characteristics of preferred upland habitat to include micro- and macro-habitats and substrate of burrowing sites, and use of rodent burrows; (5) identify threat posed by noxious weeds and reduce noxious weed presence to improve native habitat and site diversity; (6) obtain geomorphology information that will provide a foundation for development of management strategies for arroyo toad habitat and a better idea of habitat sustainability for arroyo toads; (7) identify threat posed by nonnative beavers in the San Antonio River in arroyo toad breeding habitat and outlying areas and implement control if threats warrant; (8) reduce bullfrog abundance in areas most likely to benefit arroyo toads; (9) prevent introduction and spread of disease at Fort Hunter Liggett; (10) maintain a viable population of arroyo toads and suitable habitat on Fort Hunter Liggett; (11) evaluate current management goals and actions and adapt to meet species management requirements; (12) integrate species management and conservation with Fort Hunter Liggett training and maintenance activities; (13) provide for adaptive management in accordance with the Fort Hunter Liggett INRMP; and (14) monitor mortality in order to augment the Service's ability to determine effects of Fort Hunter Liggett

activities on arroyo toad and identify mortality factors at Fort Hunter Liggett.

Based on the above considerations, and in accordance with section 4(a)(3)(B)(i) of the Act, we have determined that conservation efforts identified in the 2005 INRMP and 2007 updated INRMP for Fort Hunter Liggett provide a benefit to the arroyo toad and features essential to its conservation, and will benefit arroyo toads occurring in habitats on the installation. This includes habitat located in the Salinas River Basin (Service 1999, p. 14). Therefore, lands subject to the INRMP for the Fort Hunter Liggett Military Reservation are exempt from critical habitat designation under section 4(a)(3)(B) of the Act, and we are not including approximately 6,453 ac (2,612 ha) of habitat in this proposed revised critical habitat designation because of this exemption.

Marine Corps Base (MCB) Camp Pendleton

MCB Camp Pendleton is the Marine Corps' premier amphibious training installation and its only west coast amphibious assault training center. The installation has been conducting air, sea, and ground assault training since World War II. MCB Camp Pendleton occupies over 125,000 ac (50,586 ha) of coastal southern California in the northwest corner of San Diego County. Aside from nearly 10,000 ac (4,047 ha) that is developed, most of the installation is largely undeveloped land that is used for training. MCB Camp Pendleton is situated between two major metropolitan areas: Los Angeles, 82 miles (132 kilometers) to the north, and San Diego, 38 miles (61 kilometers) to the south. Nearby communities include Oceanside to the south, Fallbrook to the east, and San Clemente to the northwest. Aside from a portion of the installation's border that is shared with the San Mateo Wilderness Area and the Fallbrook Naval Weapons Station, surrounding land use is urban development, rural residential development, and agricultural farming and ranching. The largest single leaseholder on the installation is California State Parks, which includes a 50-year real estate lease granted on September 1, 1971, for 2,000 ac (809 ha) that encompasses San Onofre State Beach.

The MCB Camp Pendleton INRMP is a planning document that guides the management and conservation of natural resources under the installation's control. The INRMP was prepared to assist installation staff and users in their efforts to conserve and rehabilitate natural resources consistent

with the use of MCB Camp Pendleton to train Marines and set the agenda for managing natural resources on MCB Camp Pendleton. MCB Camp Pendleton completed its INRMP in 2001, followed by a revised and updated version in 2007 to address conservation and management recommendations within the scope of the installation's military mission, including conservation measures for the arroyo toad (MCB Camp Pendleton 2007, Appendix F, Section F.1, pp. F1–F5). Additionally, according to the 2007 INRMP, California State Parks is required to conduct its natural resources management consistent with the philosophies and supportive of the objectives of the revised 2007 INRMP (MCB Camp Pendleton 2007, Chapter 2, p. 31).

The arroyo toad receives programmatic protection from training and other installation activities within the riparian component of its habitat, as outlined and required in the Riparian Ecosystem Conservation Plan (MCB Camp Pendleton 2007, Appendix C). Management and protection measures for the arroyo toad identified in Appendix C of the INRMP include, but are not limited to, the following: (1) Eliminating nonnative, invasive species (such as *Arundo donax*) on the installation and off the installation in partnership with upstream landowners to enhance ecosystem value; (2) providing viable riparian corridors and promoting connectivity of native riparian habitats; (3) maintaining natural floodplain processes and extent of these areas by avoiding and minimizing further permanent loss of floodplain habitats; (4) maintaining to the extent practicable stream and river flows needed to support riparian habitat; (5) monitoring and maintaining groundwater levels and basin withdrawals to avoid loss and degradation of habitat quality; (6) restoring areas to their original condition after disturbance, such as following project construction or fire damage; and (7) promoting increased arroyo toad populations in watersheds through perpetuation of natural ecosystem processes and programmatic instruction application for avoidance and minimization of impacts (MCB Camp Pendleton 2007, Appendix C, pp. C5–C8).

Current environmental regulations and restrictions apply to all threatened and endangered species on the installation (including the arroyo toad) and are provided to all users of ranges and training areas to guide activities and protect the species and its habitat. First, specific conservation measures are applied to arroyo toad and its habitat

that include: (1) Controlling nonnative animal species (such as bullfrogs) and nonnative plant species (such as *Arundo donax* and *Rorippa* spp. (watercress)); and (2) restricting military-related traffic use within riparian areas to existing roads, trails, and crossings. Second, MCB Camp Pendleton's environmental security staff review projects and enforce existing regulations and orders that, through their implementation, avoid and minimize impacts to natural resources, including the arroyo toad and its habitat. Third, MCB Camp Pendleton provides training to personnel on environmental awareness for sensitive resources on the base, including the arroyo toad and its habitat. As a result of these regulations and restrictions, activities occurring on MCB Camp Pendleton are currently conducted in a manner that minimizes impacts to arroyo toad habitat.

MCB Camp Pendleton's INRMP also benefits the arroyo toad through ongoing monitoring and research efforts. The installation conducts annual monitoring to track arroyo toad populations and has conducted a study to examine arroyo toad use of habitat dominated by *Arundo donax* (although analysis of this study is not yet complete). Data are provided to all necessary personnel through MCB Camp Pendleton's GIS database on sensitive resources and in their published resource atlas. Additionally, MCB Camp Pendleton collaborated with the U.S. Geological Survey's Biological Resources Division to develop and implement a rigorous, science-based monitoring protocol for arroyo toad populations throughout the installation, including surveying for presence of eggs and larvae (Atkinson *et al.* 2003, pp. 4–5).

We are consulting with the Marine Corps under section 7 of the Act to programmatically address potential upland impacts to the arroyo toad (and several other species) as a result of military training and other activities on MCB Camp Pendleton. Upon completion of this consultation, we expect additional measures that benefit the arroyo toad will be incorporated into the INRMP for MCB Camp Pendleton. This consultation is currently in progress, and we did not rely on any proposed measures in our consideration of the INRMP under section 4(a)(3)(B) of the Act. However, upland habitat conservation measures being considered include, but are not limited to: (1) Implementing programmatic measures to avoid and minimize impacts to upland habitats adjacent to riparian habitats occupied by arroyo toads, and (2) compensating for impacts to upland

habitats used by arroyo toads by implementing ongoing installation-wide upland habitat enhancement programs (such as nonnative vegetation control, erosion control, and upland habitat restoration).

Based on the above considerations, and in accordance with section 4(a)(3)(B)(i) of the Act, we have determined that conservation efforts identified in the 2007 INRMP for MCB Camp Pendleton provide a benefit to the arroyo toad and its habitat. This includes habitat located in the following areas: San Mateo Creek, San Onofre Creek, and Santa Margarita River Basins (names of areas used follow those used in the recovery plan (Service 1999, pp. 25–27). Therefore, lands subject to the INRMP for MCB Camp Pendleton, which includes the lands leased from the Department of Defense by other parties, are exempt from critical habitat designation under section 4(a)(3)(B) of the Act, and we are not including approximately 13,010 ac (5,265 ha) of habitat in this proposed revised critical habitat designation because of this exemption.

Fallbrook Naval Weapons Station

The Naval Weapons Station Seal Beach, Detachment Fallbrook (Fallbrook Naval Weapons Station), is the primary west coast supply point of ordinance for the U.S. Marine Corps and the large deck amphibious assault ships of the Pacific Fleet. The Fallbrook Naval Weapons Station also has the only west coast maintenance facility for air-launched missiles for the Pacific Fleet. The installation encompasses approximately 8,852 acres (3,582 ha) and is located within the southern foothills of the Santa Ana Mountains of northern San Diego County, adjacent to the city of Fallbrook, California. It is bounded to the north, west, and much of the south by MCB Camp Pendleton, with the Santa Margarita River forming the common border on the north between the two properties. Other than training lands on MCB Camp Pendleton, surrounding land use includes semi-rural agricultural lands that include plant nurseries, avocado and citrus groves, vineyards, and limited urban development.

The Fallbrook Naval Weapons Station INRMP is a planning document that guides the management and conservation of natural resources under the installation's control. The INRMP was prepared to assist installation staff and users in their efforts to support mission operations and accommodate increased military mission requirements for national security and emergency homeland security, while meeting all

environmental compliance responsibilities. The INRMP also provides ecosystem-based management to preserve, protect, and enhance natural resources on the installation, and provides the organizational support and communication links necessary for effective planning, implementation, and administration of the installation's natural resources. The Fallbrook Naval Weapons Station completed its INRMP in 2006 (which was updated from an INRMP developed by the Naval Ordnance Center Pacific Division in 1996) to address conservation and management of its natural resources, including conservation measures for the arroyo toad (Fallbrook Naval Weapons Station 2006, Chapter 3, pp. 108–110).

The arroyo toad primarily receives protection from installation activities because no training occurs on the installation, and maintenance and potential development activities typically do not occur in arroyo toad habitat due to the steep sloping topography along the Santa Margarita River that immediately surrounds the suitable habitat. However, some impacts could occur associated with activities (such as fuel break grading, fire management, and possible infrastructure) that may impact the arroyo toad and thus require implementation of specified protection measures. The INRMP identifies the following management and protection measures for the arroyo toad: (1) Avoidance and minimization measures applied to infrastructure development and maintenance to protect the arroyo toad that are part of the National Environmental Policy Act approval process; (2) placement of riparian filter strip and buffer along firebreaks that lead into riparian zones where arroyo toads may be active; (3) avoidance of firebreak maintenance and fire suppression activities (where possible); (4) avoidance of discing for firebreaks leading to the Santa Margarita River during arroyo toad dispersal periods; (5) implementation of erosion and sediment control; (6) timing and location protections associated with prescribed burns; (7) implementation of nonnative vegetation control measures, including removal of *Arundo donax*; (8) implementation of standardized survey methods; (9) evaluation and control of nonnative bullfrogs; and (10) implementation of long-term monitoring activities, including upland sites (Fallbrook Naval Weapons Station 2006, Chapter 3, pp. 108–110).

The ongoing monitoring efforts outlined in the INRMP (as listed above) include surveys of sites at two or more locations along the Santa Margarita

River, which includes upland surveys conducted every 5 years, offset from breeding surveys by 2 years. Surveys are also conducted after major alteration of the flow regime (natural or anthropogenic). Finally, the installation conducts annual monitoring to track arroyo toad populations as part of the fire plan activities, with survey data available since 2001 (Fallbrook Naval Weapons Station 2006, Chapter 3, p. 109).

Environmental regulations and restrictions apply to all threatened and endangered species on the installation (including the arroyo toad) and are provided to all users of the installation to guide activities and protect the species and its habitat (Fallbrook Naval Weapons Station 2006, Chapter 5, p. 25). Biennial meetings are held with the Service to evaluate all management items associated with threatened and endangered species, including the arroyo toad.

Based on the above considerations, and in accordance with section 4(a)(3)(B)(i) of the Act, we have determined that conservation efforts identified in the 2006 INRMP for the Fallbrook Naval Weapons Station provide a benefit to the arroyo toad, and will benefit arroyo toads occurring on the installation, which includes habitat located in the Santa Margarita River Basin (as identified in the recovery plan (Service 1999, pp. 26–27). Therefore, lands subject to the INRMP for the Fallbrook Naval Weapons Station are exempt from critical habitat designation under section 4(a)(3)(B) of the Act, and we are not including approximately 223 ac (90 ha) of habitat in this proposed revised critical habitat designation because of this exemption.

Exclusions

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

Section 4(b)(2) of the Act states that the Secretary must designate and revise critical habitat on the basis of the best available scientific data after taking into consideration the economic impact, national security impact, and any other relevant impact of specifying any particular area as critical habitat. The Secretary may exclude an area from critical habitat if he determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless he determines, based on the best scientific data available, that the failure to designate such area as critical habitat will result in the extinction of the species. In making that determination, the legislative history is clear that the Secretary has broad discretion regarding

which factor(s) to use and how much weight to give to any factor.

Under section 4(b)(2) of the Act, we consider all relevant impacts, including economic impacts. In compliance with section 4(b)(2) of the Act, we are preparing a new analysis of the economic impacts of this proposed revision to critical habitat for the arroyo toad, to evaluate the potential economic impact of the proposed revised designation. We will announce the availability of the draft economic analysis as soon as it is completed, at which time we will seek public review and comment. At that time, copies of the draft economic analysis will be available for downloading from the Internet at <http://www.regulations.gov>, or by contacting the Ventura Fish and Wildlife Office or Carlsbad Fish and Wildlife Office directly (see **FOR FURTHER INFORMATION CONTACT**). During the development of the final revised designation, we will consider economic impacts, public comments, and other new information, and areas, including those identified for potential exclusion in this proposed rule, may be excluded from the final critical habitat designation under section 4(b)(2) of the Act and our implementing regulations at 50 CFR 424.19.

In addition to economic impacts, we consider a number of factors in a section 4(b)(2) analysis. For example, we consider whether there are lands owned by the Department of Defense where a national security impact might exist. We also consider whether landowners have developed any habitat conservation plans (HCPs) or other management plans for the area, or whether there are conservation partnerships that would be encouraged or discouraged by designation of, or exclusion from, critical habitat in an area. In addition, we look at the presence of Tribal lands or Tribal Trust resources that might be affected, and consider the government-to-government relationship of the United States with the Tribal entities. We also consider any social impacts that might occur because of the designation.

As discussed in further detail in the “Habitat Conservation Plan Lands—Exclusions under Section 4(b)(2) of the Act” and “Tribal Lands—Exclusions Under Section 4(b)(2) of the Act” sections below, we have preliminarily identified certain areas that we are considering excluding from the final revised critical habitat designation for the arroyo toad under section 4(b)(2) of the Act. However, we specifically solicit comments on the inclusion or exclusion of such areas (see Public Comments section).

Most federally listed species in the United States will not recover without the cooperation of non-Federal landowners. More than 60 percent of the United States is privately owned (National Wilderness Institute 1995, p. 2), and at least 80 percent of endangered or threatened species occur either partially or solely on private lands (Crouse *et al.* 2002, p. 720). Stein *et al.* (1995, p. 400) found that only about 12 percent of listed species were found almost exclusively on Federal lands (90 to 100 percent of their known occurrences restricted to Federal lands) and that 50 percent of federally listed species are not known to occur on Federal lands at all.

Given the distribution of listed species with respect to land ownership, conservation of listed species in many parts of the United States is dependent upon working partnerships with a wide variety of entities and the voluntary cooperation of many non-Federal landowners (Wilcove and Chen 1998; p. 1407; Crouse *et al.* 2002; p. 720; James 2002, p. 271). Building partnerships and promoting voluntary cooperation of landowners are essential to our understanding the status of species on non-Federal lands, and necessary for us to implement recovery actions such as reintroducing listed species and restoring and protecting habitat.

Many private landowners, however, are wary of the possible consequences of attracting endangered species to their property. Mounting evidence suggests that some regulatory actions by the Federal Government, while well-intentioned and required by law, can (under certain circumstances) have unintended negative consequences for the conservation of species on private lands (Wilcove *et al.* 1996; pp. 5–6; Bean 2002, pp. 2–3; Conner and Mathews 2002, pp. 1–2; James 2002, pp. 270–271; Koch 2002, pp. 2–3; Brook *et al.* 2003, pp. 1639–1643). Many landowners fear a decline in their property value due to real or perceived restrictions on land-use options where threatened or endangered species are found. Consequently, harboring endangered species is viewed by many landowners as a liability. This perception results in anti-conservation incentives, because maintaining habitats that harbor endangered species represents a risk to future economic opportunities (Main *et al.* 1999, pp. 1264–1265; Brook *et al.* 2003, pp. 1644–1648).

The purpose of designating critical habitat is to contribute to the conservation of threatened and endangered species and the ecosystems upon which they depend. The outcome

of the designation, triggering regulatory requirements for actions funded, authorized, or carried out by Federal agencies under section 7(a)(2) of the Act, can sometimes be counterproductive to its intended purpose on non-Federal lands. Thus, the benefits of excluding areas that are covered by effective partnerships or other conservation commitments can often be high.

Habitat Conservation Plans—Exclusions Under Section 4(b)(2) of the Act

Section 10(a)(1)(B) of the Act authorizes us to issue permits to non-Federal entities for the take of listed species incidental to otherwise lawful activities. An incidental take permit application must be supported by a habitat conservation plan (HCP) that identifies conservation measures that the permittee agrees to implement for the species to minimize and mitigate the impacts of the requested incidental take. We may exclude from critical habitat designation non-Federal public lands

and private lands that are covered by an existing operative HCP and any applicable implementation agreement under section 10(a)(1)(B) of the Act, if we make a determination that the benefits of exclusion outweigh the benefits of inclusion as discussed in section 4(b)(2) of the Act. We are considering whether to exclude lands covered by the Western Riverside County Multiple Species HCP (Western Riverside County MSHCP), San Diego Multiple Species Conservation Program (MSCP), Coachella Valley Multiple-Species HCP (Coachella Valley MSHCP), the Southern Orange County Natural Community Conservation Plan (NCCP)/ Master Streambed Alteration Agreement/HCP (Southern Orange HCP), and the Orange County Central-Coastal Subregional NCCP/HCP (Orange County Central-Coastal NCCP/HCP) (see the “Habitat Conservation Plan Lands—Exclusions Under Section 4(b)(2) of the Act” section below).

If the Secretary decides to exercise his discretion under section 4(b)(2) of the

Act, the following areas of habitat are being considered for possible exclusion from final revised critical habitat for the arroyo toad: 6,386 ac (2,583 ha) in the Western Riverside County MSHCP (Units 9 and 13); 8,942 ac (3,620 ha) in the San Diego MSCP—City and County of San Diego’s Subarea Plans (Subunits 16a, 17b, 17d, 18a, 18c, and 19b); 538 ac (218 ha) in the Coachella Valley MSHCP (Unit 23); 1,497 ac (606 ha) in the Orange County Central-Coastal NCCP/HCP; and 4,407 ac (1,784 ha) in the Southern Orange HCP (Subunit 10a and Subunit 11a).

Table 3 below provides approximate areas (in acres and hectares) of lands that meet the definition of critical habitat but are exempt from designation under section 4(a)(3) of the Act (see “Application of Section 4(a)(3) of the Act” section above) or the Service is considering for possible exclusion under section 4(b)(2) of the Act from the final revised critical habitat rule.

TABLE 3—EXEMPTIONS AND POTENTIAL EXCLUSIONS FROM PROPOSED REVISED CRITICAL HABITAT FOR THE ARROYO TOAD

	Acres	Hectares
Exemptions Under Section 4(a)(3) of the Act		
Military Lands:		
Fort Hunter Liggett Military Reservation	6,453	2,612
Marine Corps Base, Camp Pendleton	13,010	5,265
Fallbrook Naval Weapons Station	223	90
Total	19,686	7,967
Potential Exclusions Considered Under Section 4(b)(2) of the Act		
Habitat Conservation Plans:		
Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP)	6,386	2,583
City of San Diego and County of San Diego Subarea Plans under the San Diego Multiple Species Conservation Program (MSCP)	8,942	3,620
Coachella Valley Multiple Species Habitat Conservation Plan (Coachella Valley MSHCP)	538	218
Southern Orange Natural Community Conservation Plan/Master Streambed Alteration Agreement/Habitat Conservation Plan (Southern Orange HCP)	4,407	1,784
Orange County-Coastal Subregional Habitat Conservation Plan/Natural Community Conservation Plan (Orange County Central-Coastal NCCP/HCP)	1,497	606
Total	21,770	8,811
Tribal Lands:		
Rincon Band of Luiseño Mission Indians Tribal Lands	1,155	467
Pala Band of Luiseño Mission Indians	2,385	963
Sycuan Band of the Kumeyaay Nation Tribal Lands	391	158
Capitan Grande Band of Diegueno Mission Indians	92	37
Mesa Grande Band of Diegueno Mission Indians	23	9
Total	4,046	1,634

Values in table may not sum due to rounding.

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

The Western Riverside County MSHCP is a large-scale, multi-jurisdictional HCP encompassing about 1.26 million ac (510,000 ha) in western Riverside County (including lands within Units 9 and 13). The Western Riverside County MSHCP addresses 146 listed and unlisted "covered species," including the arroyo toad. Participants in the Western Riverside County MSHCP include 14 cities; the County of Riverside, including the Riverside County Flood Control and Water Conservation Agency (County Flood Control), Riverside County Transportation Commission, Riverside County Parks and Open Space District, and Riverside County Waste Department; California State Parks; and the California Department of Transportation. The Western Riverside County MSHCP was designed to establish a multi-species conservation program that minimizes and mitigates the expected loss of habitat and the incidental take of covered species. On June 22, 2004, the Service issued a single incidental take permit (Service 2004, p. 140) under section 10(a)(1)(B) of the Act to 22 permittees under the Western Riverside County MSHCP for a period of 75 years. For the reasons discussed under the "Application of Section 4(b)(2) of the Act" section of this rule, if the Secretary decides to exercise his discretion under section 4(b)(2) of the Act, we are considering the possible exclusion of non-Federal lands that meet the definition of critical habitat within the Western Riverside County MSHCP from the final designation. Specifically, we are considering the exclusion of 6,386 ac (2,583 ha) in Units 9 and 13.

The Western Riverside County MSHCP will establish approximately 153,000 ac (61,917 ha) of new conservation lands (Additional Reserve Lands) to complement the approximately 347,000 ac (140,426 ha) of pre-existing natural and open space areas (Public/Quasi-Public lands). These Public/Quasi-Public lands include those under Federal ownership, primarily Forest Service and Bureau of Land Management lands, and also permittee-owned or controlled open-space areas (such as wildlife habitat within State and County parks). Collectively, the Additional Reserve Lands and Public/Quasi-Public lands form the overall Western Riverside County MSHCP Conservation Area. The configuration of the 153,000 ac (61,916 ha) of Additional Reserve Lands is not mapped or

precisely identified ("hard-lined") in the Western Riverside County MSHCP, but rather is based on textual descriptions of the type of habitat conservation necessary to meet the conservation goals for all covered species within the bounds of the approximately 310,000-ac (125,453-ha) Criteria Area as implementation of the Western Riverside County MSHCP takes place. We internally mapped a "Conceptual Reserve Design" that illustrates existing Public/Quasi-Public lands and predicts the geographic distribution of the Additional Reserve Lands based on our interpretation of the textual descriptions of habitat conservation necessary to meet conservation goals.

Specific conservation objectives in the Western Riverside County MSHCP for the arroyo toad include conserving 9,695 ac (3,914 ha) of occupied habitat or suitable habitat for the species in the Western Riverside County MSHCP Conservation Area (Service 2004, p. 163). This acreage goal can be attained through acquisition or other dedications of land assembled from within the Criteria Area (the Additional Reserve Lands) and through coordinated management of existing Public/Quasi-Public lands. (See paragraph below for discussion of amount of habitat expected to be conserved on Additional Reserve Lands.) Preservation and management of arroyo toad habitat under the Western Riverside County MSHCP will contribute to the conservation and ultimate recovery of this species. The arroyo toad is threatened primarily by: Alterations of stream hydrology and geomorphology; development; agriculture, including livestock grazing; recreational activities; and nonnative species (Service 2004, pp. 156–158). The Western Riverside County MSHCP removes or reduces threats to this species and its PCEs by placing large blocks of occupied and unoccupied habitat into preservation throughout the Conservation Area. Areas identified for preservation and conservation include nine of the known occurrences along portions of San Juan Creek, Los Alamos Creek, San Jacinto River, Indian Creek, Bautista Creek, Wilson Creek, Temecula Creek, Arroyo Seco, and Vail Lake. The Western Riverside County MSHCP will maintain ecological processes within the MSHCP Conservation Area given existing constraints and activities covered under the MSHCP along portions of San Juan Creek, San Jacinto River, Indian Creek, Bautista Creek, Wilson Creek, Temecula Creek, Arroyo Seco, and Vail Lake. Additionally, the Western Riverside

County MSHCP requires surveys for the arroyo toad as part of the project review process for public and private projects where suitable habitat is present within defined survey areas (see Amphibian Species Survey Area Map, Figure 6–3 of the Western Riverside County MSHCP, Volume I in Dudek and Associates, Inc. 2003). For locations with positive survey results, 90 percent of those portions of the property that provide long-term conservation value for the species will be avoided until it is demonstrated that the conservation objectives for the species are met (see Additional Survey Needs and Procedures, Western Riverside County MSHCP, Volume 1, section 6.3.2 in Dudek and Associates, Inc. 2003). Once the species-specific objectives are met, avoided areas would be evaluated to determine whether they should be released for development or included in the MSHCP Conservation Area.

The survey requirements, avoidance and minimization measures, and management for the arroyo toad—and its PCEs) provided for in the Western Riverside County MSHCP are expected to benefit this species on public and private lands covered by the plan. We are considering the exclusion of approximately 6,386 ac (2,583 ha) of private lands in Units 9 and 13 within the Western Riverside County MSHCP Plan Area from the final revised critical habitat designation under section 4(b)(2) of the Act. Projects in the areas proposed as critical habitat that occur on these lands are subject to approval by Western Riverside County MSHCP permittees, therefore the conservation requirements of the MSHCP would apply. At this time, approximately 43 ac (38 ha) within Units 9 and 13 have been acquired for conservation under the Western Riverside County MSHCP. Our Conceptual Reserve Design indicates that another 68 percent (4,359 ac (1,764 ha)) of the lands in Units 9 and 13 that we are considering for exclusion will likely be acquired for conservation as Additional Reserve Lands. Of the remaining 31 percent of lands in Units 9 and 13 that we are considering for exclusion, 1,814 ac (728 ha), or 91 percent, of these lands are within the Western Riverside County MSHCP survey area for the arroyo toad and are subject to the Additional Survey Needs and Procedures Policy described above.

The Western Riverside County MSHCP incorporates processes that allow for Service oversight and participation in program implementation. These processes include: (1) Consultation with the Service on a long-term management and monitoring plan; (2) submission of

annual monitoring reports; (3) annual status meetings with the Service; and (4) submission of annual implementation reports to the Service (Service 2004, pp. 18–23).

In summary, we are considering exclusion of 6,386 ac (2,583 ha) of arroyo toad habitat on private lands in Units 9 and 13 that meet the definition of critical habitat for arroyo toad within the Western Riverside County MSHCP under section 4(b)(2) of the Act. The 1994 final listing rule for arroyo toad identified the following primary threats to the arroyo toad: habitat degradation, predation, and small population size (59 FR 64866). The implementation of the Western Riverside County MSHCP helps to address these threats through a regional planning effort, and outlines species-specific objectives and criteria for the conservation of the arroyo toad. We will analyze the benefits of inclusion and exclusion of this area from proposed revised critical habitat under section 4(b)(2) of the Act. We encourage any public comment in relation to our consideration of the areas in Units 9 and 13 for inclusion or exclusion (see Public Comments section above).

San Diego Multiple Species Conservation Plan (MSCP—City and County of San Diego's Subarea Plans

The MSCP is a framework HCP that has been in place for more than a decade. The plan area encompasses approximately 582,243 ac (235,626 ha) (County of San Diego 1997, p. 1–1; City of San Diego 1998, pp. 2–1, and 4–2 to 4–4) and provides for conservation of 85 federally listed and sensitive species (“covered species”) through the establishment and management of approximately 171,920 ac (69,574 ha) of preserve lands within the Multi-Habitat Planning Area (City of San Diego) and Pre-Approved Mitigation Areas (County of San Diego). The MSCP was developed in support of applications for incidental take permits for several federally listed species by 12 participating jurisdictions and many other stakeholders in southwestern San Diego County. Under the umbrella of the MSCP, each of the 12 participating jurisdictions is required to prepare a subarea plan that implements the goals of the MSCP within that particular jurisdiction. Separate Subarea Plans for the County of San Diego and the City of San Diego have been completed and include evaluations of the arroyo toad. For the reasons discussed under the “Application of Section 4(b)(2) of the Act” section of this rule, if the Secretary decides to exercise his discretion under section 4(b)(2) of the Act, we are

considering the possible exclusion of lands that meet the definition of critical habitat within the City of San Diego Subarea Plan and County of San Diego Subarea Plan. Specifically, we are considering the exclusion of 8,942 ac (3,620 ha) in Subunits 16a, 17b, 17d, 18a, 18c, and 19b.

Upon completion of preserve assembly, approximately 171,920 ac (69,574 ha) of the 582,243-ac (235,626-ha) MSCP plan area will be preserved (City of San Diego 1998, pp. 2–1, and 4–2 to 4–4). The City of San Diego's preserve is delineated by mapped preserve boundaries referred to as “hardline” boundaries (the Multi-Habitat Planning Area). The County of San Diego has both “hardline” boundaries as well as preserve areas that do not have “hardline” boundaries. In areas where the “hardlines” are not defined, the County's subarea plan identifies areas where mitigation activities should be focused to assemble its preserve areas (the Pre-Approved Mitigation Areas). Those areas of the MSCP preserve that are already conserved, as well as those areas that are designated for inclusion in the preserve under the plan, are referred to as the “preserve area” in this proposed revised critical habitat designation. When the preserve is completed, the public sector (Federal, State, and local government, and the general public) will have contributed 108,750 ac (44,010 ha) (63.3 percent) to the preserve, of which 81,750 ac (33,083 ha) (48 percent) was existing public land when the MSCP was established and 27,000 ac (10,927 ha) (16 percent) will have been acquired. At completion, the private sector will have contributed 63,170 ac (25,564 ha) (37 percent) to the preserve as part of the development process, either through avoidance of impacts or as compensatory mitigation for impacts to biological resources outside the preserve. Federal and State governments, local jurisdictions and special districts, and managers of privately owned lands currently and in the future will manage and monitor their lands in the preserve for species and habitat protection (City of San Diego 1998, pp. 2–1, and 4–2 to 4–4).

Private lands within the Multi-Habitat Planning Area and Pre-Approved Mitigation Areas are subject to special restrictions on development, and lands that are dedicated to the preserve must be legally protected and permanently managed to conserve the covered species. Public lands owned by the City, County, State of California, and the Federal Government that are identified for conservation under the MSCP must

also be protected and permanently managed to protect the covered species.

Numerous processes are incorporated into the MSCP that allow our oversight of the MSCP implementation. For example, the MSCP imposes annual reporting requirements and provides for our review and approval of proposed subarea plan amendments and preserve boundary adjustments and for Service review and comment on projects during the California Environmental Quality Act review process. We also chair the MSCP Habitat Management Technical Committee and the Monitoring Subcommittee (City of San Diego 1998, pp. 5–11 to 5–23). Each MSCP subarea plan must account annually for the progress it is making in assembling conservation areas. We must receive annual reports that include, both by project and cumulatively, the habitat acreage destroyed and conserved within the subareas. This accounting process ensures that habitat conservation proceeds in rough proportion to habitat loss and in compliance with the MSCP subarea plans and the plans' associated implementing agreements.

The subarea plans under the MSCP contain requirements to monitor and adaptively manage arroyo toad habitat and provide for the conservation of this species' PCEs. The framework and area-specific management plans are comprehensive and address a broad range of management needs at the preserve and species levels that are intended to reduce the threats to covered species and thereby contribute to the recovery of the species. These plans include the following: (1) Fire management, which includes deferring to the California Department of Forestry and Fire Protection for management activities; (2) public access control; (3) fencing and gates; (4) ranger patrol; (5) trail maintenance; (6) visitor, interpretive, and volunteer services; (7) hydrological management; (8) signage and lighting; (9) trash and litter removal; (10) access road maintenance; (11) enforcement of property or homeowner requirements; (12) removal of invasive species; (13) nonnative predator control; (14) species monitoring; (15) habitat restoration; (16) management for diverse age classes of covered species; (17) use of herbicides and rodenticides; (18) biological surveys; (19) research; and (20) species management conditions (City of San Diego 1998, pp. 6–7).

Specific conservation objectives for the arroyo toad in the subarea plans under the MSCP include preservation of all known (breeding) locations of this species and minimization of impacts to uplands areas within the MSCP planning area. Additionally, impacts to

the species will be minimized within the preserve through required implementation of area-specific management directives, which must address maintenance of arroyo toad populations through control of nonnative predators, protection and maintenance of sufficient suitable low-gradient sandy stream habitat (including appropriate water quality) to meet breeding requirements, and preservation of sheltering and foraging habitat within 0.62 mi (1 km) of breeding habitat that supports or is likely to support the arroyo toad (City of San Diego 1997, p. 142; Service 1997, pp. 80, 102).

At this time, 10 years into the implementation of the City and County of San Diego's subarea plans, approximately 1,622 ac (656 ha), or 19 percent, of lands that we are considering for exclusion have been conserved. An additional 2,891 ac (1,170 ha), or 34 percent, are targeted for conservation in accordance with the subarea plans inside the Pre-Approved Mitigation Areas and Multi-Habitat Planning Area. Similarly, although some areas placed in conservation are not yet fully managed, such management will occur over time as the subarea plans continue to be implemented.

In summary, we are considering exclusion of 8,942 ac (3,620 ha) of arroyo toad habitat on non-Federal lands in Subunits 16a, 17b, 17d, 18a, 18c, and 19b that meet the definition of critical habitat for arroyo toad within the City of San Diego's Subarea Plan and the County of San Diego's Subarea Plan under section 4(b)(2) of the Act, of which 19 percent (1,593 ac (644 ha)) have been conserved. The 1994 final listing rule for arroyo toad identified the following primary threats to the arroyo toad: habitat degradation, predation, and small population size (59 FR 64866). The implementation of both subarea plans helps to address these threats through a regional planning effort rather than through a project-by-project approach, and outlines species-specific objectives and criteria for the conservation of the arroyo toad. We will analyze the benefits of inclusion and exclusion of the areas within the jurisdictions of each subarea plan from critical habitat under section 4(b)(2) of the Act. We encourage any public comment in relation to our consideration of the areas in Subunits 16a, 17d, 18a, 18c, and 19b for inclusion or exclusion (see Public Comments section above).

Coachella Valley Multiple Species Habitat Conservation Plan (Coachella Valley MSHCP)

The Coachella Valley MSHCP is a large-scale, multi-jurisdictional habitat conservation plan encompassing about 1.1 million ac (445,156 ha) in the Coachella Valley of Riverside County (including lands within Unit 23). An additional 69,000 ac (27,923) of Indian Reservation lands are not included in the Coachella Valley MSHCP, but are within the plan area boundary. The Coachella Valley MSHCP addresses 27 listed and unlisted "covered species," including arroyo toad. Participants in the Coachella Valley MSHCP include eight cities (Cathedral City, Coachella, Indian Wells, Indio, La Quinta, Palm Desert, Palm Springs, and Rancho Mirage); the County of Riverside, including the Riverside County Flood Control and Water Conservation District, Riverside County Parks and Open Space District, Riverside County Waste Management District; the Coachella Valley Association of Governments; Coachella Valley Water District; Imperial Irrigation District; California Department of Transportation; California State Parks; Coachella Valley Mountains Conservancy; and the Coachella Valley Conservation Commission (the created joint powers regional authority). The Coachella Valley MSHCP was designed to establish a multiple species habitat conservation program that minimizes and mitigates the expected loss of habitat and the incidental take of covered species. On October 1, 2008, the Service issued a single incidental take permit (TE-104604-0) under section 10(a)(1)(B) of the Act to 19 permittees under the Coachella Valley MSHCP for a period of 75 years. For the reasons discussed under the "Application of Section 4(b)(2) of the Act" section of this rule, if the Secretary decides to exercise his discretion under section 4(b)(2) of the Act, we are considering the possible exclusion of lands that meet the definition of critical habitat within the Coachella Valley MSHCP. Specifically, we are considering the exclusion of 538 ac (218 ha) in Unit 23.

The Coachella Valley MSHCP will establish an approximately 721,457-ac (291,964-ha) Reserve System comprised of 557,100 ac (225,451 ha) of Existing Conservation Lands, up to 29,990 ac (12,137 ha) of Complementary Conservation, and up to 8,777 ac (3,552 ha) of Public and Quasi-Public lands. The permittees will mitigate for the impacts of the take on covered species by conserving 96,400 ac (39,012 ha) (7,500 ac (3,035 ha) of existing local

permittee lands and 88,900 ac (35,977 ha) of new conservation) of habitat and perpetually managing 125,590 ac (50,825 ha) within the Reserve System. The location and configuration of the 88,900 ac (35,977 ha) of new local permittee mitigation lands and the 21,390 ac (8,656 ha) that will be acquired through State and Federal contributions are not precisely mapped, but will be assembled from the 21 conservation areas identified in the Coachella Valley MSHCP. Within each conservation area, 90 percent of each natural community within each jurisdiction will be conserved and no more than 10 percent of the habitat will be lost. In general, the design of the overall Reserve System was intended to capture core habitats, ecological processes, and biological corridors and linkages. The permittees' collection and use of development mitigation fees, landfill tipping fees, and other funding specified in the Coachella Valley MSHCP and related documents will be used to acquire, protect, and manage the Reserve System in perpetuity. The permittees, the State, and Service will work cooperatively to enter into a Memorandum of Understanding or other appropriate agreements with Federal, State, and non-governmental organization land managers to cooperatively manage the Existing Conservation Lands in conformance with the MSHCP. In addition, the Coachella Valley MSHCP includes measures to avoid and minimize impacts on covered species resulting from covered activities.

The Coachella Valley MSHCP plan area includes about 2,095 ac (846 ha) of suitable arroyo toad habitat (Dudek and CVAG 2007, pp. 9–88) of which approximately 1,301 ac (526 ha) contain the physical and biological features essential to the conservation of the species. Of suitable habitat, 2,082 ac (841 ha) are identified in the Coachella Valley MSHCP as "Core Habitat" for the species. Core Habitat is defined as areas of habitat that: (1) Are of sufficient size to support a self-sustaining population for the species; (2) are not fragmented in a way to cause separation into isolated populations; (3) have functional essential ecological processes; and (4) have effective biological corridors or linkages to other habitats, where feasible, to allow gene flow among populations (Dudek and CVAG 2007, p. xxxi). Specific conservation goals, conservation objectives, and required measures for the arroyo toad in the Coachella Valley MSHCP include protection of 2,007 ac (810 ha) of arroyo toad habitat comprised of 2,004 ac (809

ha) (96 percent) of Core Habitat along with 3 ac (1 ha) of Other Conserved Habitat (land that is permanently protected and managed for the benefit of the species) (Dudek and CVAG 2007, pp. xxxi, 9–88). Of the habitat identified for protection in the Reserve System, approximately 1,301 ac (525 ha) are on Bureau of Land Management lands (Existing Conservation Lands) and are anticipated to be managed pending a Memorandum of Understanding with the Bureau of Land Management (Service 2008, p. 176). The remaining 706 ac (285 ha) will be acquired from willing sellers on private lands (Dudek and CVAG 2007, pp. 9–87). We are considering for exclusion approximately 538 ac (218 ha) of non-Federal lands that meet the definition of critical habitat for the arroyo toad within the Coachella Valley MSHCP. Of these lands, approximately 483 ac (195 ha), or 90 percent, are within Core Habitat areas.

The Coachella Valley MSHCP Reserve System will protect and manage Core Habitat areas for the arroyo toad in perpetuity. The Coachella Valley MSHCP provides for management and monitoring programs to ensure the conservation of this species, including control of activities that adversely impact water quality and the hydrological regime, disturbance from recreational activity in sensitive areas, control of invasive species where necessary, and restoration and enhancement of degraded habitat as necessary (Dudek and CVAG 2007, pp. 9–89). Additionally, the Coachella Valley MSHCP includes an educational program for residents and visitors in Whitewater Canyon to inform them about the arroyo toad and its conservation needs (Dudek and CVAG 2007, pp. 9–89).

At this time, approximately 481 ac (195 ha), or 89 percent, of lands that we are considering for exclusion have been acquired for conservation under the Coachella Valley MSHCP. In addition, 45 ac (18 ha) that meet the definition of critical habitat are not identified as either Core or Other Conserved Habitat by the Coachella Valley MSHCP, but fall within Conservation Areas under the Coachella Valley MSHCP. We anticipate that 41 ac (17 ha), or 90 percent, of these lands will be conserved under the Coachella Valley MSHCP.

In summary, we are considering exclusion of 538 ac (218 ha) of arroyo toad habitat on non-Federal lands in Unit 23 that meets the definition of critical habitat for arroyo toad within the Coachella Valley MSHCP under section 4(b)(2) of the Act, of which 89 percent (481 ac (195 ha)) have been

conserved. The 1994 final listing rule for arroyo toad identified the following primary threats to the arroyo toad: habitat degradation, predation, and small population size (59 FR 64866). The implementation of the Coachella Valley MSHCP helps to address these threats through a regional planning effort, and outlines species-specific objectives and criteria for the conservation of the arroyo toad. We will analyze the benefits of inclusion and exclusion of this area from critical habitat under section 4(b)(2) of the Act. We encourage any public comment in relation to our consideration of the areas in Unit 23 for inclusion or exclusion (see Public Comments section above).

Orange County Central–Coastal Subregional Habitat Conservation Plan/ Natural Community Conservation Plan (Orange County Central–Coastal NCCP/HCP)

The Orange County Central–Coastal NCCP/HCP in central Orange County (Unit 8) was developed in cooperation with numerous local and State jurisdictions and agencies, and participating landowners, including the cities of Anaheim, Costa Mesa, Irvine, Orange, and San Juan Capistrano; Southern California Edison; Transportation Corridor Agencies; The Irvine Company; California Department of Parks and Recreation; Metropolitan Water District of Southern California; and Orange County. Approved in 1996, the Orange County Central–Coastal NCCP/HCP provides for the establishment of approximately 38,738 ac (15,677 ha) of reserve lands for 39 covered species within the 208,713-ac (84,463-ha) planning area. We issued an incidental take permit under section 10(a)(1)(B) of the Act that provides conditional incidental take authorization for the arroyo toad for all areas within the Orange County Central–Coastal Subregion, except the North Ranch Policy Plan Area. This take authorization only applies to smaller arroyo toad populations, reintroduced populations, or populations that have expanded due to NCCP/HCP reserve management. It also requires implementation of a mitigation plan to relocate toads to protected areas within reserves, when necessary. For the reasons discussed under the “Application of Section 4(b)(2) of the Act” section of this rule, we are considering the possible exclusion of lands that meet the definition of critical habitat within the Orange County Central–Coastal NCCP/HCP. Specifically, we are considering the exclusion of 1,497 ac (606 ha) in Unit 8.

The North Ranch Policy Plan Area was excluded from take authorization provided under the Orange County Central–Coastal NCCP/HCP due to a lack of detailed biological information and specific conservation commitments at the time of adoption of the NCCP/HCP. We have since determined that arroyo toad habitat within the North Ranch Policy Plan Area meets the definition of critical habitat for the arroyo toad in that it has the features essential to the conservation of the species and because it helps support a viable Santa Ana Mountain arroyo toad population. In 2002, the owner, The Irvine Company, granted a conservation easement to The Nature Conservancy over a portion of the North Ranch Policy Plan Area and has taken steps to conserve this area, including a \$10 million management endowment. Approximately 761 ac (308 ha), or 51 percent, of lands that we are considering for exclusion fall within the conservation easement.

The Orange County Central–Coastal NCCP/HCP’s reserve system includes approximately 592 ac (240 ha), or 40 percent, of lands that we are considering for exclusion. The Orange County Central–Coastal NCCP/HCP provides for monitoring of covered species, including the arroyo toad, and adaptive management for covered species and their habitat within this reserve system. Adaptive management activities may include a program to control nonnative predators, such as bullfrogs, clawed frogs, and nonnative fishes. To date, monitoring related to arroyo toad has consisted of reserve-wide herpetofauna surveys conducted from 1997 through 2001 and management activities with potential to benefit arroyo toad, which include ongoing control of invasive nonnative vegetation in the upland environment throughout the reserve system.

The Orange County Central–Coastal NCCP/HCP requires the implementation of a mitigation plan if a planned activity results in take of arroyo toads. The mitigation plan will: (1) Address design modifications and other on-site measures that are consistent with the project’s purposes, minimize impacts, and provide appropriate protections for the arroyo toad; (2) provide for arroyo toad relocation to a location acceptable to the Service and California Department of Fish and Game, coupled with compensatory habitat management/enhancement activities at the relocation site; and (3) provide for monitoring and adaptive management of arroyo toads and their habitat.

In summary, we are considering exclusion of 1,497 ac (606 ha) of arroyo

toad habitat on permittee-owned or controlled lands in Unit 8 that meets the definition of critical habitat for arroyo toad within the Orange County Central-Coastal Subregional NCCP/HCP under section 4(b)(2) of the Act.

Approximately 51 percent (761 ac (308 ha)) of these lands are conserved within the North Ranch Policy Plan Area and another 40 percent (592 ac (240 ha)) are conserved within this NCCP/HCP's reserve system. The 1994 final listing rule for arroyo toad identified the following primary threats to the arroyo toad: habitat degradation, predation, and small population size (59 FR 64866). The implementation of the Orange County Central-Coastal Subregional NCCP/HCP helps to address these threats through a regional planning effort, and outlines species-specific objectives and criteria for the conservation of the arroyo toad. We will analyze the benefits of inclusion and exclusion of this area from critical habitat under section 4(b)(2) of the Act. We encourage any public comment in relation to our consideration of the areas in Unit 8 for inclusion or exclusion (see Public Comments section above).

Southern Orange County Natural Community Conservation Plan/Master Streambed Alteration Agreement/Habitat Conservation Plan (Southern Orange HCP)

The Southern Orange HCP is a large-scale multi-jurisdictional HCP encompassing approximately 86,021 ac (34,811 ha) in southern Orange County (including lands within Subunit 10a and Subunit 11a). The Southern Orange HCP was developed by the County of Orange (County), Rancho Mission Viejo, and the Santa Margarita Water District (Water District) to address impacts to 32 species, including the arroyo toad, resulting from residential and associated infrastructure development. On January 10, 2007, the Service issued incidental take permits (Service 2007, p. 431) under section 10(a)(1)(B) of the Act to the three permittees for a period of 75 years. For the reasons discussed under the "Application of Section 4(b)(2) of the Act" section of this rule, we are considering the possible exclusion of lands that meet the definition of critical habitat within the Southern Orange HCP. Specifically, we are considering the exclusion of 4,407 ac (1,784 ha) in Subunit 10a and Subunit 11a.

The Southern Orange HCP will establish approximately 30,426 ac (12,313 ha) of habitat reserve (Service 2007, p. 19). The HCP provides for a large, biologically diverse and permanent habitat reserve that will protect: (1) Large blocks of natural

vegetation communities that provide habitat for the covered species; (2) "important" and "major" populations of the covered species in key locations; (3) wildlife corridors and habitat linkages that connect the large habitat blocks and covered species populations to each other, the Cleveland National Forest, and the adjacent Orange County Central-Coastal NCCP/HCP; and (4) the underlying hydrogeomorphic processes that support the major vegetation communities providing habitat for the covered species (Service 2007, p. 10).

Habitat for the arroyo toad was modeled during the Southern Orange HCP process. Specific conservation goals in the Southern Orange HCP for the arroyo toad include the conservation and management of 1,322 ac (534 ha) of HCP-modeled habitat within Rancho Mission Viejo (Service 2007, p. 59), of which approximately 1,208 ac (489 ha), or 28 percent, meet the definition of critical habitat. An additional 2,297 ac (943 ha), or 52 percent, of lands that we are considering for exclusion fall outside of the HCP-modeled habitat, but entirely within Southern Orange HCP's habitat reserve. Thus, Southern Orange HCP's habitat reserve encompasses 3,505 ac (1415 ha), or 80 percent, of lands that we are considering for exclusion. While not all habitat in the reserve will be conserved, the habitat reserve will contain habitat to support all of the known populations in Rancho Mission Viejo and County lands, including San Juan Creek, Talega Canyon, Bell Canyon, and Lower Cristianitos Creek/Lower Gabino Canyon (Service 2007, p. 62). Following implementation of the HCP, all of the known populations will be conserved as follows:

- (1) Almost all of the documented breeding habitat will be conserved;
- (2) Only a small portion (a maximum of 28 of 650 ac (11 of 263 ha), or 4 percent) of HCP-modeled habitat for arroyo toad in the San Mateo Creek watershed (Subunit 11a) will be impacted. The conservation and management of all breeding habitat and remaining upland habitat is anticipated to maintain the populations in Talega Creek and lower Cristianitos Creek/lower Gabino Canyon;
- (3) Implementation of the HCP will impact a substantial portion (402 of 1,074 ac (163 of 435 ha), or 37 percent) of HCP-modeled upland habitat for arroyo toad along San Juan Creek (Subunit 10a) on Rancho Mission Viejo. However, the conservation and management of breeding habitat and remaining upland habitat in San Juan Creek combined with the already-conserved habitat in Bell Canyon

(Subunit 10a) on County land and restoration of 24 ac (10 ha) of breeding habitat in upper San Juan Creek on County land is anticipated to maintain the population along San Juan Creek; and

(4) The population in Bell Canyon and the portion of the population in upper San Juan Creek (Subunit 10a) are already conserved on County land and will be cooperatively managed by the County (Service 2007, p. 67).

In addition to the creation of a habitat reserve, the following conservation measures specified in the Southern Orange HCP will contribute to the protection and management of arroyo toad habitat:

(1) Potential impacts to arroyo toads associated with construction activities on Rancho Mission Viejo will be avoided and minimized through preparation of Biological Resources Construction Plans in coordination with the Service;

(2) Potential impacts to arroyo toad habitat from grazing activities will be addressed through implementation of the Grazing Management Plan, which includes the management of grazing activities and restoration of upland habitat with native grasses and coastal sage scrub;

(3) Implementation of the Invasive Species Control Plan on Rancho Mission Viejo will result in removal of nonnative plant species that degrade aquatic habitats and removal of aquatic predators of the arroyo toad;

(4) Through Water Quality Management Plans, flow duration (which influences channel morphology) and water quality will be maintained such that hydrologic conditions of concern such as erosion or sedimentation or pollutants of concern will be addressed; and

(5) A detailed monitoring program for the arroyo toad that includes monitoring conducted both at a species-specific level and also at a habitat-landscape level will be developed in coordination with the Service (Service 2007, pp. 62–64).

In summary, we are considering exclusion of 4,407 ac (1,784 ha) of arroyo toad habitat on permittee-owned or controlled lands in Subunit 10a and Subunit 11a that meets the definition of critical habitat for arroyo toad within the Southern Orange HCP under section 4(b)(2) of the Act. Although not all lands proposed as critical habitat that are targeted for preservation and management within the Southern Orange HCP have been officially dedicated to the preserve system, we believe that all conservation anticipated under the Southern Orange HCP will

occur. The 1994 final listing rule for arroyo toad identified the following primary threats to the arroyo toad: habitat degradation, predation, and small population size (59 FR 64866). The implementation of the Southern Orange HCP helps to address these threats through a regional planning effort, and outlines species-specific objectives and criteria for the conservation of the arroyo toad. We will analyze the benefits of inclusion and exclusion of this area from critical habitat under section 4(b)(2) of the Act. We encourage any public comment in relation to our consideration of the areas in Subunit 10a and Subunit 11a for inclusion or exclusion (see Public Comments section above).

Tribal Lands—Exclusions Under Section 4(b)(2) of the Act

In accordance with the Secretarial Order 3206, “American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act” (June 5, 1997); the President’s memorandum of April 29, 1994, “Government-to-Government Relations with Native American Tribal Governments” (59 FR 22951); Executive Order 13175; and the relevant provision of the Departmental Manual of the Department of the Interior (512 DM 2), we believe that fish, wildlife, and other natural resources on tribal lands are better managed under tribal authorities, policies, and programs than through Federal regulation wherever possible and practicable. Based on this philosophy, we believe that, in most cases, designation of tribal lands as critical habitat provides very little additional benefit to threatened and endangered species. Conversely, such designation is often viewed by tribes as unwarranted and an unwanted intrusion into tribal self-governance, thus compromising the government-to-government relationship essential to achieving our mutual goals of managing for healthy ecosystems upon which the viability of threatened and endangered species populations depend. We will take into consideration our partnerships and existing conservation actions that tribes have or are currently implementing when conducting our exclusion analysis in the final revised critical habitat designation. We will also take into consideration conservation actions that are planned (such as a Memorandum of Understanding addressing arroyo toad conservation that is under development between the Service, Bureau of Indian Affairs, and affected tribes (as discussed in detail below)) as part of our on-going commitment to the government-to-

government relationship with tribes. If the Secretary decides to exercise his discretion under section 4(b)(2) of the Act, we are considering lands covered by the tribes identified below for possible exclusion from final critical habitat.

Considered Exclusion for Several Tribal Lands

We are considering the exclusion of 4,046 ac (1,636 ha) of arroyo toad habitat proposed in Units 14, 16, 17, and 18 under section 4(b)(2) of the Act. These areas overlap with tribal lands that are owned or managed by the following tribes: (1) Rincon Band of Luiseño Mission Indians; (2) Pala Band of Luiseño Mission Indians; (3) Sycuan Band of the Kumeyaay Nation; (4) the Mesa Grande Band of Diegueno Mission Indians; and (5) the Barona Group of Capitan Grande Band of Mission Indians and the Viejas (Baron Long) Group of Capitan Grande Band of Mission Indians, which jointly manage the Capitan Grande Band of Diegueno Mission Indians Reservation (Capitan Grande Reservation). Conservation afforded (or currently being developed) for the arroyo toad and its habitat on each of these tribe’s lands is addressed in the following paragraphs.

The Rincon Band of Luiseño Mission Indians of the Rincon Reservation (Rincon Band of Luiseño Mission Indians) encompasses approximately 4,026 ac (1,625 ha) in northern San Diego County (Unit 14), which includes approximately 910 ac (368 ha) of arroyo toad habitat proposed as critical habitat. Additionally, a total of 245 ac (99 ha) of off-reservation lands (such as fee-owned) are owned or managed by the Tribe and contain arroyo toad habitat proposed as critical habitat. The Rincon Band of Luiseño Mission Indians developed a management plan for the arroyo toad in 2005 that provides guidelines for the protection and management of arroyo toad habitat within a 97-ac (39-ha) Habitat Management Plan area, which is within the area proposed as critical habitat. Specific tasks that will be implemented include: (1) Removal and monitoring of nonnative species within the plan area that pose a threat to the arroyo toad; (2) removal and monthly monitoring of trash and debris within the plan area; (3) maintenance and monitoring of oil and grease traps at the edge of facility parking lots; (4) assessment and monthly monitoring of vehicle, livestock, and other incursions (such as trespassing) into the plan area; (5) reporting of unauthorized activities within the plan area to the Service; (6) development of an arroyo toad

education program; and (7) placement of signs at regular intervals along the plan area boundary.

The Pala Band of Luiseño Mission Indians of the Pala Reservation (Pala Band of Luiseño Mission Indians) encompasses approximately 12,429 ac (5,018 ha) in northern San Diego County (Unit 14), which includes approximately 1,662 ac (673 ha) of arroyo toad habitat proposed as critical habitat. Additionally, a total of 723 ac (293 ha) of off-reservation lands (such as fee-owned) are owned or managed by the Tribe and contain arroyo toad habitat proposed as critical habitat. The Reservation is located in the Middle San Luis Rey River basin approximately 6 miles (9.7 km) east of Interstate 15 on California Highway 76. The town of Pala is located along California Highway 76 in approximately the center of the Reservation. The Reservation was established for the Cupeno and Luiseño Indians, who considered themselves to be one “people”—Pala. The Pala Band of Luiseño Mission Indians developed a Master Plan in 2005 that is currently being implemented to guide management and land use on the Reservation. Additionally, the Tribe has developed a management plan to address resource management and conservation of the arroyo toad, which outlines the following conservation goals to benefit the species: (1) Maintenance of designated open space and waterways for the arroyo toad along Pala Creek and the San Luis Rey River; (2) encouraging allottees (owners of individual allotments within reservation lands) to locate new construction away from inland allotment areas; (3) replacing the Lilac Extension vehicle crossing of the San Luis Rey River with a bridge; (4) reducing off-highway vehicle activity by establishing a designated area for these activities outside of arroyo toad habitat; (5) purchasing adjacent property known to be occupied by arroyo toads and placing occupied areas in reserve; (6) discouraging development of six allotments within the San Luis Rey River; and (7) removal of nonnative species within arroyo toad habitat corridors.

The Sycuan Band of the Kumeyaay Nation own reservation lands that encompass approximately 806 ac (325 ha) in southern San Diego County (Unit 18), which includes approximately 22 ac (9 ha) of arroyo toad habitat proposed as critical habitat. Additionally, a total of 369 ac (149 ha) of off-reservation lands (such as fee-owned) are owned or managed by the Tribe and contain arroyo toad habitat proposed as critical habitat. The Sycuan Band of the

Kumeyaay Nation has two land management plans in place relevant to their reservation that provide direct and indirect benefits to the arroyo toad and its habitat on the reservation: an Interim Land Use Master Plan that was adopted by the Sycuan General Council on January 10, 2002 (BRG 2002), and the Sycuan Tribal Environmental Plan that was approved by the Tribal Council in June 2003 (Sycuan 2003). The Land Use Master Plan provides recommended land use planning for the reservation and additional surrounding properties that are to be brought into Trust, and is based on preservation of sensitive environmental and tribal resources (BRG 2002, p. 1). The Sycuan Tribal Environmental Plan includes policies, procedures, and guidance that are in compliance with the Tribal Environmental Policy Act (Sycuan 2003, p. 1). The Sycuan Tribal Environmental Plan outlines procedures for environmental planning, project implementation, and operations that minimize adverse considerations where potential negative impacts to human health and the environment could occur. Additionally, the Sycuan Tribal Environmental Plan promotes environmental protection through responsible management practices that will benefit conservation of threatened and endangered species, including the arroyo toad and its habitat. Conservation measures are organized into the following three categories that are outlined in more detail within the "Sycuan Conservation Strategy and Conservation Measures Plan" (Conservation Plan) portion of the Sycuan Tribal Environmental Plan: (1) Conservation area site selection, design, and management; (2) land cover type conservation measures; and (3) species-specific conservation measures (which protect and restore populations and habitat of each covered species) (Sycuan 2003, p. 5). The overall Conservation Plan includes the following types of conservation measures for arroyo toad and other covered species: (1) Protection of existing habitat for compliance and species recovery; (2) enhancement of existing habitat; (3) restoration to create new habitat; (4) management of habitat to maintain and preserve ecological functions; avoidance and minimization of direct impacts on individuals and habitat of covered species; (5) population enhancement measures that directly or indirectly increase abundance of covered species; and (6) research necessary to improve conservation measure effectiveness (Sycuan 2003, pp. 5–6).

The Mesa Grande Reservation, which is owned and managed by the Mesa Grande Band of Diegueno Mission Indians, is situated in the hills above Sutherland Reservoir near the mountain community of Santa Ysabel, which is approximately 35 miles northeast of San Diego, San Diego County. The Reservation encompasses approximately 1,818 ac (734 ha) of land in Unit 16, which includes approximately 23 ac (9 ha) of arroyo toad habitat proposed as critical habitat. Although an arroyo toad management plan currently does not exist for the Mesa Grande Reservation, the Service, Bureau of Indian Affairs, and Tribe are currently coordinating to discuss management of the arroyo toad and its habitat on the Reservation.

The Capitan Grande Reservation lands fall within the Capitan Grande Canyon where the San Diego River once ran, which is approximately 35 miles (56 km) east of San Diego, San Diego County. The Reservation encompasses approximately 15,619 ac (6,306 ha) of land in Unit 17, which includes approximately 92 ac (37 ha) of arroyo toad habitat proposed as critical habitat. Following an 1875 Presidential Executive Order, a number of small reservations (including the Capitan Grande Reservation) was formed. It was from this reservation that the following two tribes were formed: Barona Group of Capitan Grande Band of Mission Indians of the Barona Reservation, and the Viejas (Baron Long) Group of Capitan Grande Band of Mission Indians of the Viejas Reservation. Both the Barona Group of Capitan Grande Band of Mission Indians and the Viejas Group of Capitan Grande Band of Mission Indians jointly manage the Capitan Grande Reservation. Although an arroyo toad management plan currently does not exist for the Capitan Grande Reservation, the Service, Bureau of Indian Affairs, and both Tribes are currently coordinating to discuss management of the arroyo toad and its habitat on the Reservation.

In summary, we are considering exclusion of the following lands under section 4(b)(2) of the Act: 1,155 ac (467 ha) in Unit 14 within the Rincon Band of Luiseño Mission Indians Reservation and other associated tribal lands owned/managed by the Rincon Band of Luiseño Mission Indians; 2,385 ac (963 ha) in Unit 14 within the Pala Band of Luiseño Mission Indians Reservation and other associated tribal lands owned/managed by the Pala Band of Luiseño Mission Indians; 391 ac (158 ha) in Unit 18 within the Sycuan Band of the Kumeyaay Nation's Reservation and other associated tribal lands owned/managed by the Sycuan Band of the

Kumeyaay Nation; 92 ac (37 ha) in Unit 17 within the Capitan Grande Reservation; and 23 ac (9 ha) in Unit 16 within the Mesa Grande Reservation. We are seeking public comment on whether the conservation needs of the arroyo toad can be achieved by limiting the designation to non-Tribal lands and the appropriateness of the inclusion or exclusion of these lands from the final revised critical habitat designation (see Public Comments section).

Peer Review

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

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

Public Hearings

Section 4(b)(5) of the Act provides for one or more public hearings on this proposal, if we receive any requests for hearings. We must receive your request for a public hearing within 45 days after the date of this **Federal Register** publication. Send your request to the addresses listed in **FOR FURTHER INFORMATION CONTACT**. We will schedule public hearings on this proposal, if any are requested, and announce the dates, times, and places of those hearings, as well as how to obtain reasonable accommodations, in the **Federal Register** and local newspapers at least 15 days before the first hearing.

Required Determinations

Regulatory Planning and Review—Executive Order 12866

The Office of Management and Budget (OMB) determines whether this rule is significant under Executive Order (E.O.) 12866. OMB bases its determination upon the following four criteria:

(1) Whether the rule will have an annual effect of \$100 million or more on the economy or adversely affect an economic sector, productivity, jobs, the environment, or other units of the government.

(2) Whether the rule will create inconsistencies with other Federal agencies' actions.

(3) Whether the rule will materially affect entitlements, grants, user fees, loan programs, or the rights and obligations of their recipients.

(4) Whether the rule raises novel legal or policy issues.

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

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

An analysis of the economic impacts of the 2004 proposed critical habitat designation was made available to the public on February 14, 2005 (70 FR 7459), and finalized in the final rule to designate critical habitat published in the **Federal Register** on April 13, 2005 (70 FR 19562). In our economic analysis of that designation (70 FR 19562, p. 19613), we evaluated small business entities in three categories: Land development, fruit and nut farms, and cattle ranching. On the basis of our analysis we determined that the designation of critical habitat for the arroyo toad would result in: (1) An annual impact of less than one percent (17 projects and therefore businesses, assuming one project per business) of land development small businesses and that those businesses could realize an impact of approximately 20 percent of total annual sales; (2) an annual impact to less than one percent (one farm) of small fruit and nut farms and that that farm would realize an impact of less than three percent of total annual sales; (3) an annual impact of less than one percent of cattle ranches (one ranch) and that the ranch would realize an impact of less than approximately \$100,000 of total annual sales; (4) an annual impact of less than one percent of small viticulture firms (one firm) and

that the firm would realize an impact of less than approximately five percent of total annual sales; and (5) an annual impact of less than one percent of small governments as a percent of the county total and small governments would realize an impact of less than one percent of annual government budget. Based on these data, the impacts on small business, small governments, and small nonprofits were expected to be negligible (Economic & Planning, Inc. 2005, pp. A-5—A-18). However, the economic analysis prepared for the 2005 critical habitat designation does not accurately reflect the full range of potential economic impacts that may result from this proposed revision to arroyo toad critical habitat.

We will prepare a new economic analysis for this proposed revised critical habitat designation for the arroyo toad. At this time, we lack current economic information necessary to provide an updated factual basis for the required RFA finding with regard to this proposed revision to critical habitat. Therefore, we defer the RFA finding until completion of the draft economic analysis prepared under section 4(b)(2) of the Act and E.O. 12866. The draft economic analysis will provide the required factual basis for the RFA finding. Upon completion of the draft economic analysis, we will announce its availability in the **Federal Register** and reopen the public comment period for the proposed revised designation. We will include with this announcement, as appropriate, an initial regulatory flexibility analysis or a certification that the rule will not have a significant economic impact on a substantial number of small entities accompanied by the factual basis for that determination. We have concluded that deferring the RFA finding until completion of the draft economic analysis is necessary to meet the purposes and requirements of the RFA. Deferring the RFA finding in this manner will ensure that we make a sufficiently informed determination based on adequate economic information and provide the necessary opportunity for public comment.

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

In accordance with the Unfunded Mandates Reform Act, we make the following findings:

1. This rule will not produce a Federal mandate. In general, a Federal mandate is a provision in legislation, statute, or regulation that would impose an enforceable duty upon State, local, or Tribal governments, or the private sector, and includes both "Federal

intergovernmental mandates" and "Federal private sector mandates." These terms are defined in 2 U.S.C. 658(5)–(7). "Federal intergovernmental mandate" includes a regulation that "would impose an enforceable duty upon State, local, or [T]ribal governments" with two exceptions. It excludes "a condition of Federal assistance." It also excludes "a duty arising from participation in a voluntary Federal program," unless the regulation "relates to a then-existing Federal program under which \$500,000,000 or more is provided annually to State, local, and [T]ribal governments under entitlement authority," if the provision would "increase the stringency of conditions of assistance" or "place caps upon, or otherwise decrease, the Federal Government's responsibility to provide funding," and the State, local, or Tribal governments "lack authority" to adjust accordingly. At the time of enactment, these entitlement programs were: Medicaid; AFDC work programs; Child Nutrition; Food Stamps; Social Services Block Grants; Vocational Rehabilitation State Grants; Foster Care, Adoption Assistance, and Independent Living; Family Support Welfare Services; and Child Support Enforcement. "Federal private sector mandate" includes a regulation that "would impose an enforceable duty upon the private sector, except (i) a condition of Federal assistance; or (ii) a duty arising from participation in a voluntary Federal program."

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

2. Based in part on an analysis conducted for the previous designation of critical habitat and extrapolated to

this designation, we do not expect this rule to significantly or uniquely affect small governments. Small governments will be affected only to the extent that any programs having Federal funds, permits, or other authorized activities must ensure that their actions will not adversely affect the critical habitat. Therefore, a Small Government Agency Plan is not required. However, as we conduct our economic analysis for the revised rule, we will further evaluate this issue and revise this assessment if appropriate.

Takings—Executive Order 12630

In accordance with E.O. 12630 (“Government Actions and Interference with Constitutionally Protected Private Property Rights”), we have analyzed the potential takings implications of designating revised critical habitat for the arroyo toad in a takings implications assessment. The takings implications assessment concludes that this designation of revised critical habitat for the arroyo toad does not pose significant takings implications for lands within or affected by the revised designation.

Federalism—Executive Order 13132

In accordance with E.O. 13132 (Federalism), the proposed rule does not have significant Federalism effects. A Federalism assessment is not required. In keeping with Department of the Interior and Department of Commerce policy, we requested information from, and coordinated development of, this proposed revised critical habitat designation with appropriate State resource agencies in California. The designation may have some benefit to these governments because the areas that contain the features essential to the conservation of the species are more clearly defined, and the primary constituent elements of the habitat necessary to the conservation of the species are specifically identified. This information does not alter where and what federally sponsored activities may occur. However, it may assist these local governments in long-range planning (rather than having them wait for case-by-case section 7 consultations to occur).

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

destruction or adverse modification of critical habitat rests squarely on the Federal agency.

Civil Justice Reform—Executive Order 12988

In accordance with Executive Order 12988 (Civil Justice Reform), it has been determined that the rule does not unduly burden the judicial system and meets the requirements of sections 3(a) and 3(b)(2) of the Order. We have proposed to revise critical habitat in accordance with the provisions of the Act. This proposed 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 arroyo toad.

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

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

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

It is our position that, outside the jurisdiction of the Circuit Court of Appeals of the United States for the Tenth Circuit, we do not need to prepare environmental analyses as defined by NEPA (42 U.S.C. 4321 et seq.) in connection with designating critical habitat under the Act. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244). This position was upheld by the Circuit Court of Appeals of the United States for the Ninth Circuit (*Douglas County v. Babbitt*, 48 F.3d 1495 (9th Cir. 1995), cert. denied 516 U.S. 1042 (1996)).

Clarity of the Rule

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

1. Be logically organized;
2. Use the active voice to address readers directly;
3. Use clear language rather than jargon;
4. Be divided into short sections and sentences; and

5. Use lists and tables wherever possible.

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

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), E.O. 13175, and the Department of the Interior’s manual at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with recognized Federal tribes on a government-to-government basis. In accordance with Secretarial Order 3206 of June 5, 1997 (American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act), we readily acknowledge our responsibilities to work directly with tribes in developing programs for healthy ecosystems, to acknowledge that tribal lands are not subject to the same controls as Federal public lands, to remain sensitive to Indian culture, and to make information available to tribes.

We are currently coordinating with affected Tribes regarding this proposed revised critical habitat designation, and have included Tribal lands in this revised proposal. We are requesting public comment on the appropriateness of including or excluding these lands in the final revised critical habitat rule. We will continue to coordinate with the Tribal governments during the designation process.

Energy Supply, Distribution, or Use—Executive Order 13211

E.O. 13211 requires agencies to prepare Statements of Energy Effects when undertaking certain actions. Based on an analysis conducted for the previous designation of critical habitat and extrapolated to this designation, along with a further analysis of the additional areas included in this revision, we have determined that this proposed rule to revise critical habitat for the arroyo toad 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. However, we will further

evaluate this issue as we conduct our economic analysis, and review and revise this assessment as warranted.

References Cited

A complete list of all references cited in this rulemaking is available on <http://www.regulations.gov> and upon request from the Field Supervisor, Ventura Fish and Wildlife Office, or the Field Supervisor, Carlsbad Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT**).

Author(s)

The primary authors of this notice are staff from the Ventura Fish and Wildlife Office and the Carlsbad Fish and

Wildlife Office (see **FOR FURTHER INFORMATION CONTACT**).

List of Subjects in 50 CFR Part 17

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

Proposed Regulation Promulgation

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

PART 17—ENDANGERED AND THREATENED WILDLIFE AND PLANTS

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

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

2. In § 17.11(h), revise the entry for “Toad, arroyo (= arroyo southwestern)” under “Amphibians” in the List of Endangered and Threatened Wildlife to read as follows:

§ 17.11 Endangered and threatened wildlife.

* * * * *

(h) * * *

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
* * * * *							
AMPHIBIANS							
* * * * *							
Toad, arroyo (= arroyo southwestern).	<i>Anaxyrus californicus</i>	U.S.A. (CA), Mexico ..	Entire	E	568	17.95(d)	NA
* * * * *							

3. In § 17.95(d), revise the entry for “Arroyo Toad (*Bufo californicus*)” to read as follows:

§ 17.95 Critical habitat—fish and wildlife.

* * * * *

(d) *Amphibians*.

* * * * *

Arroyo Toad (*Anaxyrus californicus*)

(1) Critical habitat units are depicted for Los Angeles, Orange, Riverside, San Bernardino, San Diego, Santa Barbara, and Ventura Counties, California, on the maps below.

(2) Within these areas, the primary constituent elements for the arroyo toad consist of four components:

(i) Rivers or streams with hydrologic regimes that supply water to provide space, food, and cover needed to sustain eggs, tadpoles, metamorphosing juveniles, and adult breeding toads.

Breeding pools must persist a minimum of 2 months for the completion of larval development. However, due to the dynamic nature of southern California riparian systems and flood regimes, the location of suitable breeding pools may vary from year to year. Specifically, the conditions necessary to allow for successful reproduction of arroyo toads are:

(A) Breeding pools with areas less than 12 in (30 cm) deep;

(B) Areas of flowing water with current velocities less than 1.3 ft per second (40 cm per second); and

(C) Surface water that lasts for a minimum of 2 months during the breeding season (*i.e.*, a sufficient wet period in the spring months to allow arroyo toad larvae to hatch, mature, and metamorphose).

(ii) Riparian and adjacent upland habitats, particularly low-gradient (typically less than 6 percent) stream segments and alluvial streamside terraces with sandy or fine gravel substrates that support the formation of shallow pools and sparsely vegetated sand and gravel bars for breeding and rearing of tadpoles and juveniles; and adjacent valley bottomlands that include areas of loose soil where toads can burrow underground, to provide foraging and living areas for juvenile and adult arroyo toads.

(iii) A natural flooding regime, or one sufficiently corresponding to natural, characterized by intermittent or near perennial flow that contributes to the persistence of shallow pools into at least mid-summer, and that maintains areas of open, sparsely vegetated, sandy stream channels and terraces by periodically scouring riparian vegetation; and also that modifies stream channels and terraces and redistributes sand and sediment, such

that breeding pools and terrace habitats with scattered vegetation are maintained.

(iv) Stream channels and adjacent upland habitats that allow for movement to breeding pools, foraging areas, overwintering sites, upstream and downstream dispersal, and recolonization of areas that contain suitable habitat.

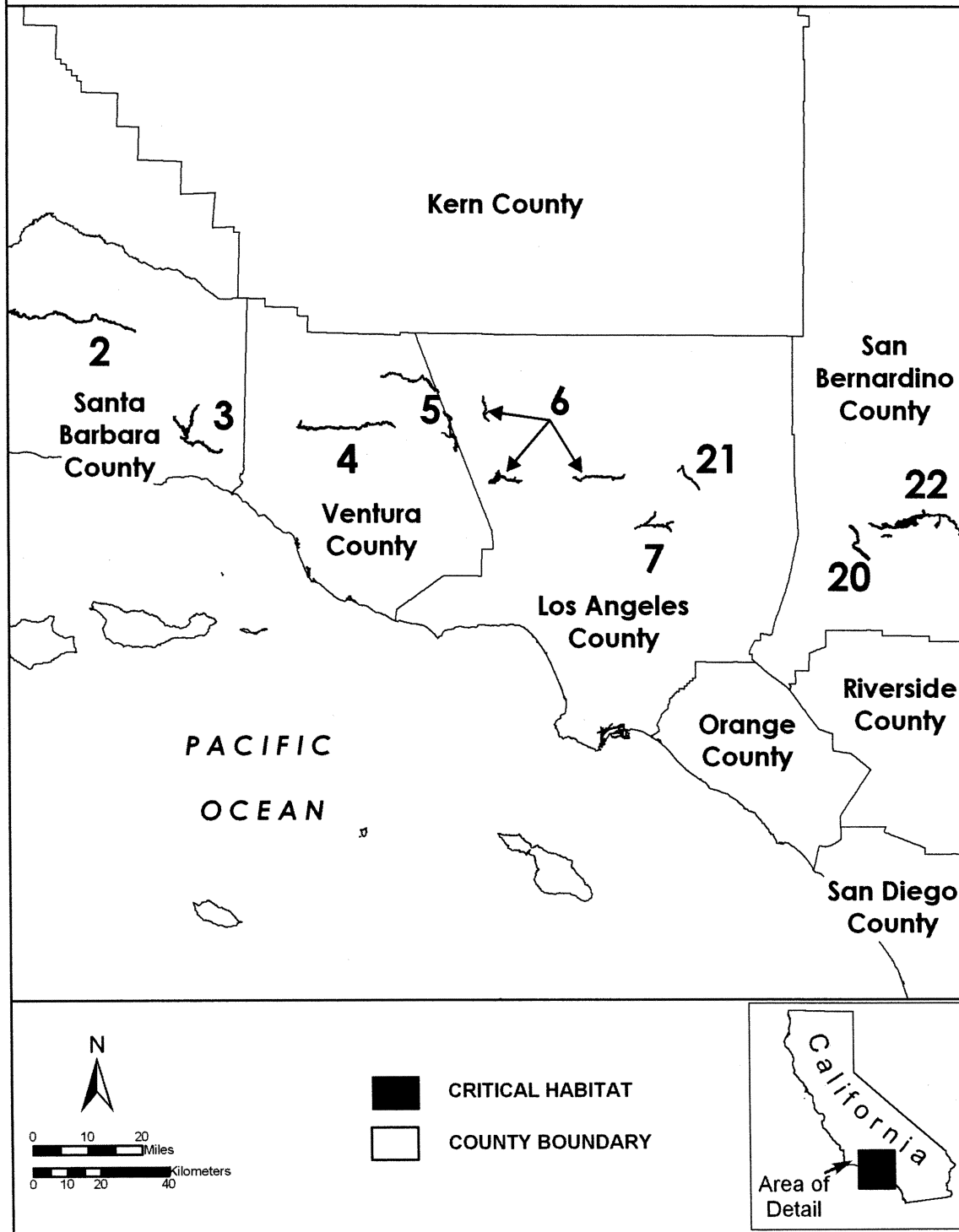
(3) Critical habitat does not include manmade structures existing on the effective date of this rule and not containing one or more of the primary constituent elements, such as buildings, aqueducts, airports, and roads, and the land on which such structures are located.

(4) *Critical habitat map units*. Data layers defining map units were created on a base of USGS 7.5' quadrangles using USDA National Agricultural Imagery Program (NAIP) county-wide MrSID compressed mosaics of 1 meter resolution and natural color aerial photography from summer 2005. Critical habitat units were then mapped using Universal Transverse Mercator (UTM) zone 10, North American Datum (NAD) 1983 coordinates.

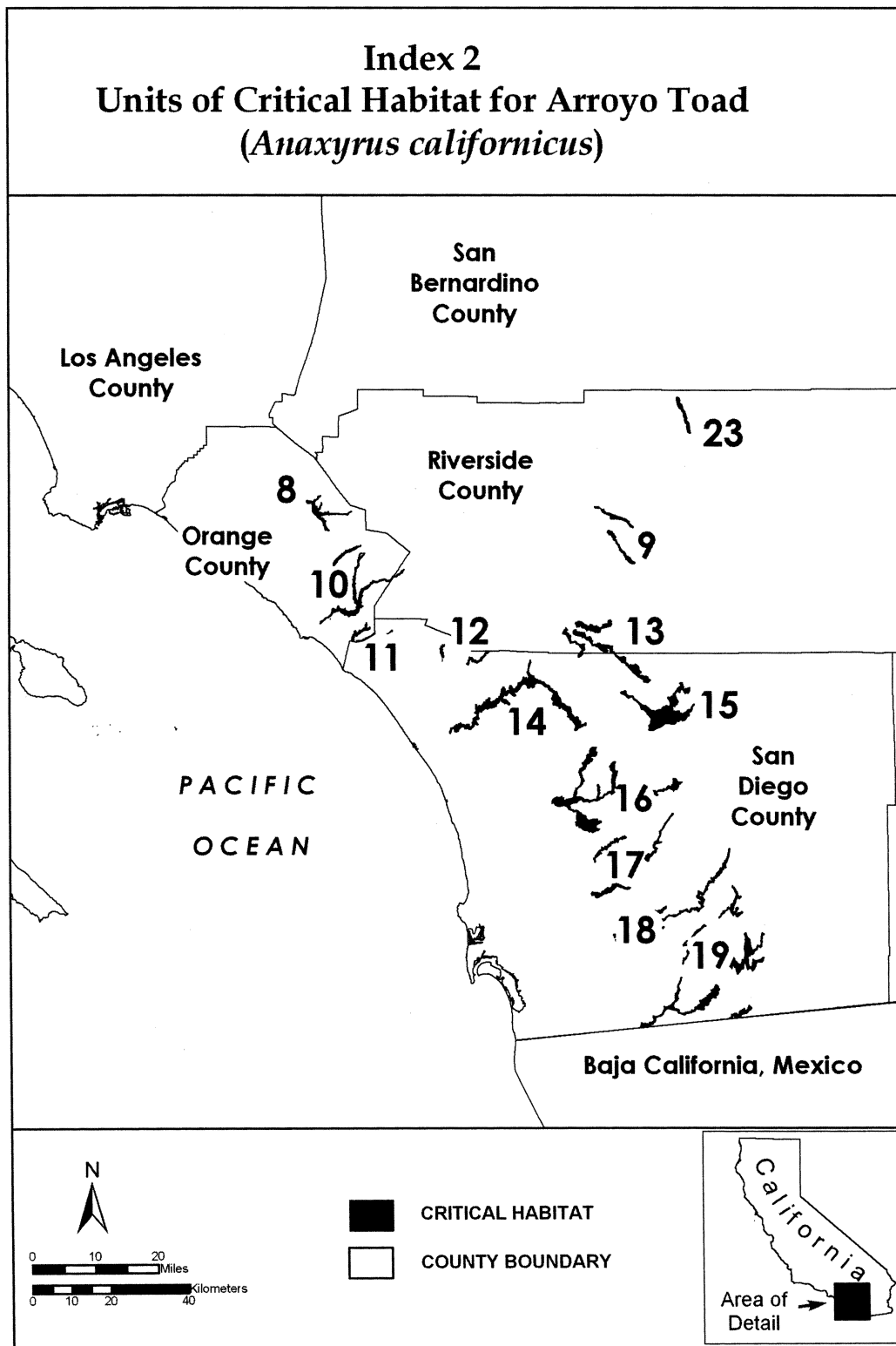
(5) Note: Index map 1 of Units of Critical Habitat for Arroyo Toad (*Anaxyrus californicus*) follows:

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Index 1
Units of Critical Habitat for Arroyo Toad
(*Anaxyrus californicus*)



(6) Note: Index map 2 of Units of Critical Habitat for Arroyo Toad (*Anaxyrus californicus*) follows:

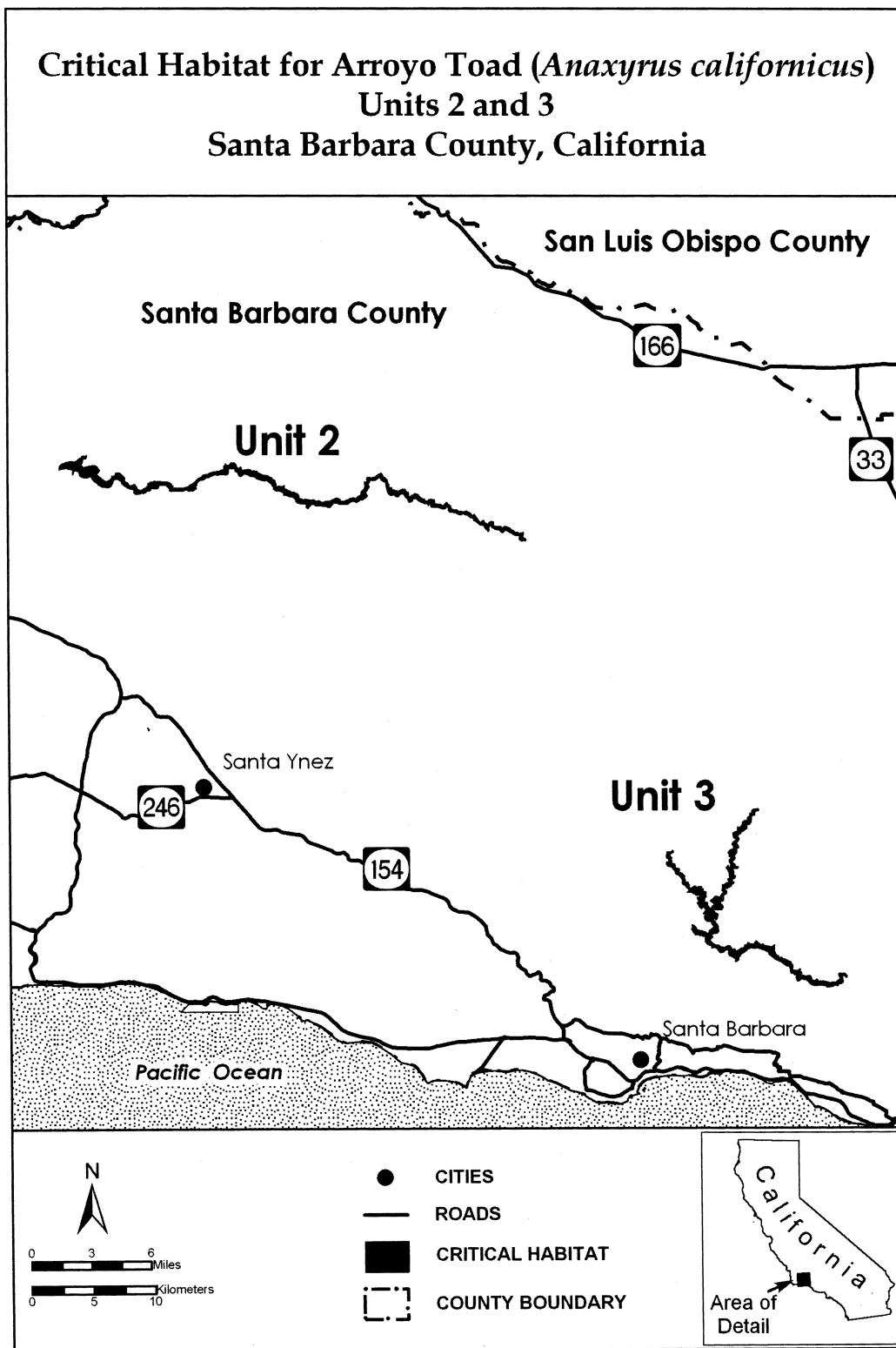


(7) Units 2 and 3, Santa Barbara County, California.

(i) [Reserved for textual description of units.]

(ii) Note: Map of Critical Habitat for Arroyo Toad (*Anaxyrus californicus*),

Units 2 and 3, Santa Barbara County, California, follows:

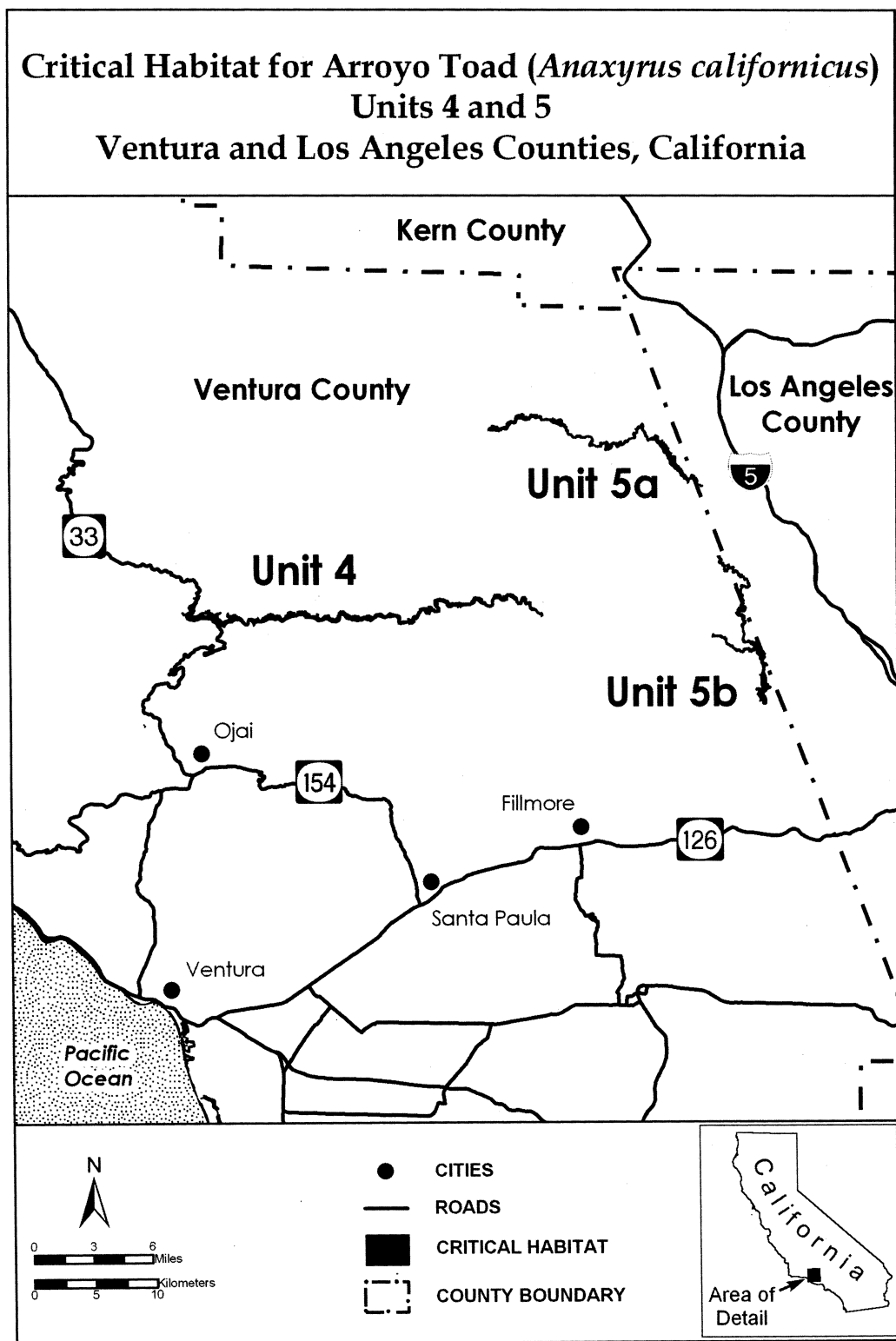


(8) Units 4 and 5, Ventura and Los Angeles Counties, California.

(i) [Reserved for textual description of units.]

(ii) Note: Map of Critical Habitat for Arroyo Toad (*Anaxyrus californicus*),

Units 4 and 5, Ventura and Los Angeles Counties, California, follows:

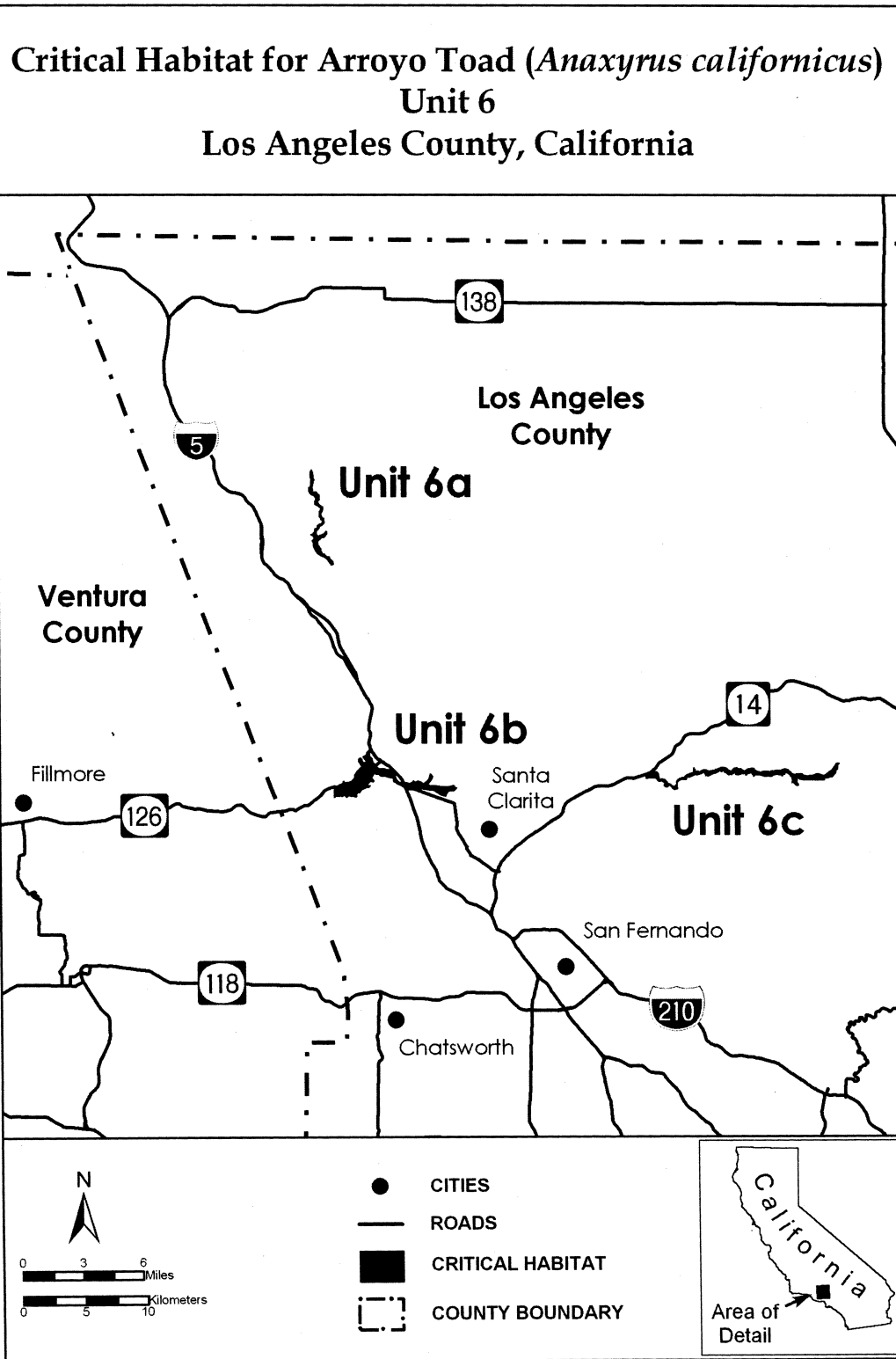


(9) Unit 6, Los Angeles County, California.

(i) [Reserved for textual description of units.]

(ii) Note: Map of Critical Habitat for Arroyo Toad (*Anaxyrus californicus*),

Unit 6, Los Angeles County, California, follows:

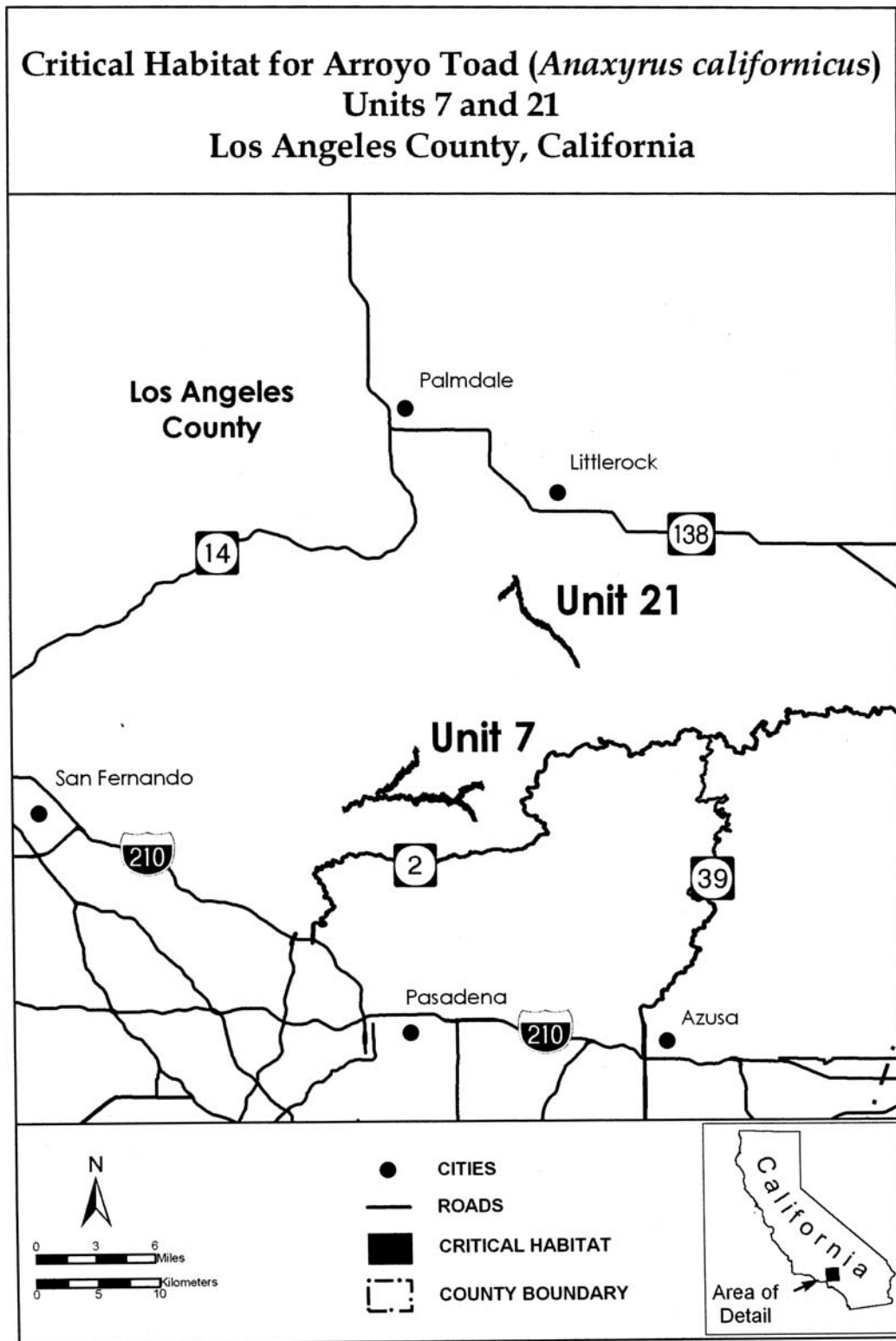


(10) Units 7 and 21, Los Angeles County, California.

(i) [Reserved for textual description of units.]

(ii) Note: Map of Critical Habitat for Arroyo Toad (*Anaxyrus californicus*),

Units 7 and 21, Los Angeles County, California, follows:

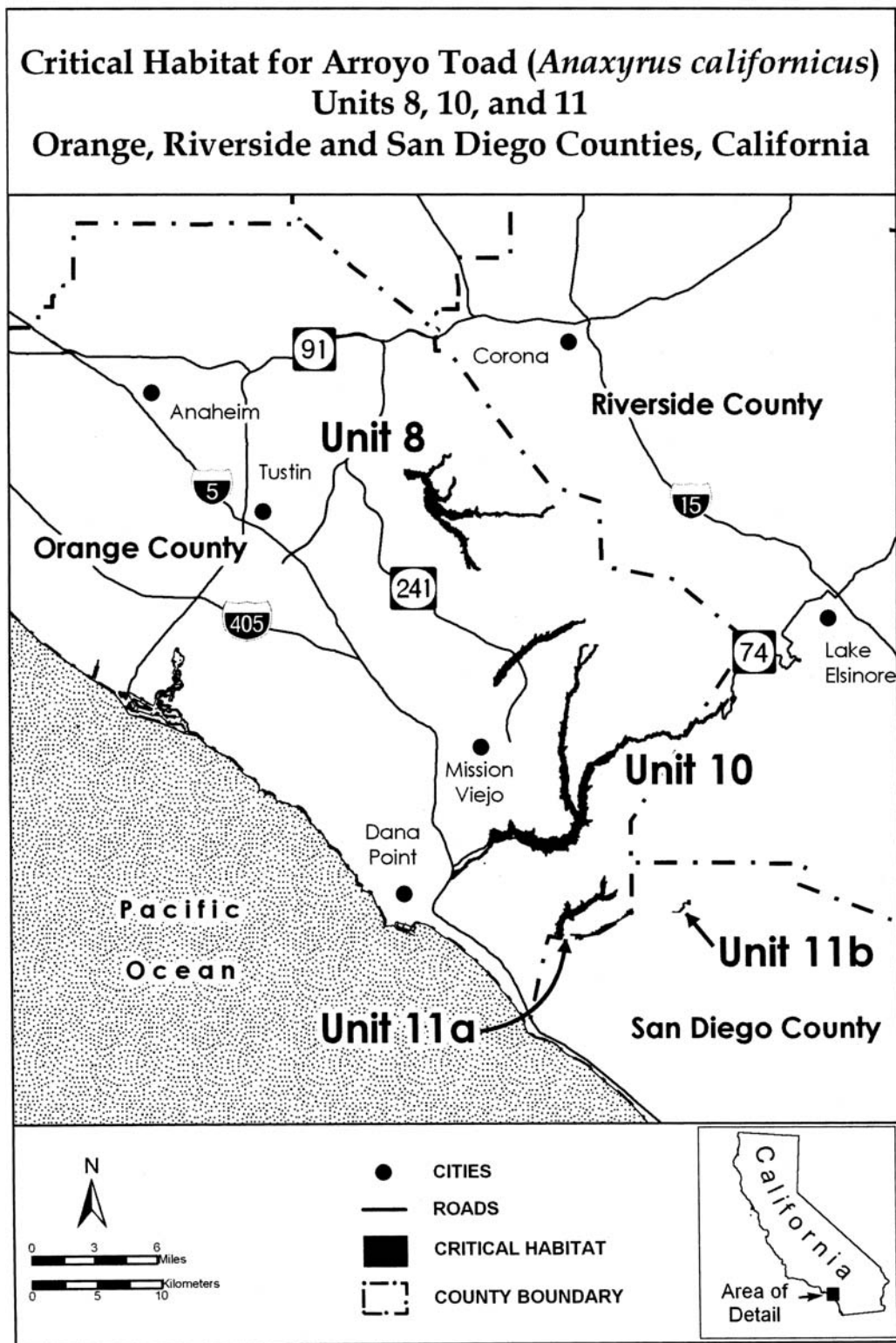


(11) Units 8, 10, and 11, Orange, Riverside, and San Diego Counties, California.

(i) [Reserved for textual description of units.]

(ii) Note: Map of Critical Habitat for Arroyo Toad (*Anaxyrus californicus*),

Units 8, 10, and 11, Orange, Riverside, and San Diego Counties, California, follows:

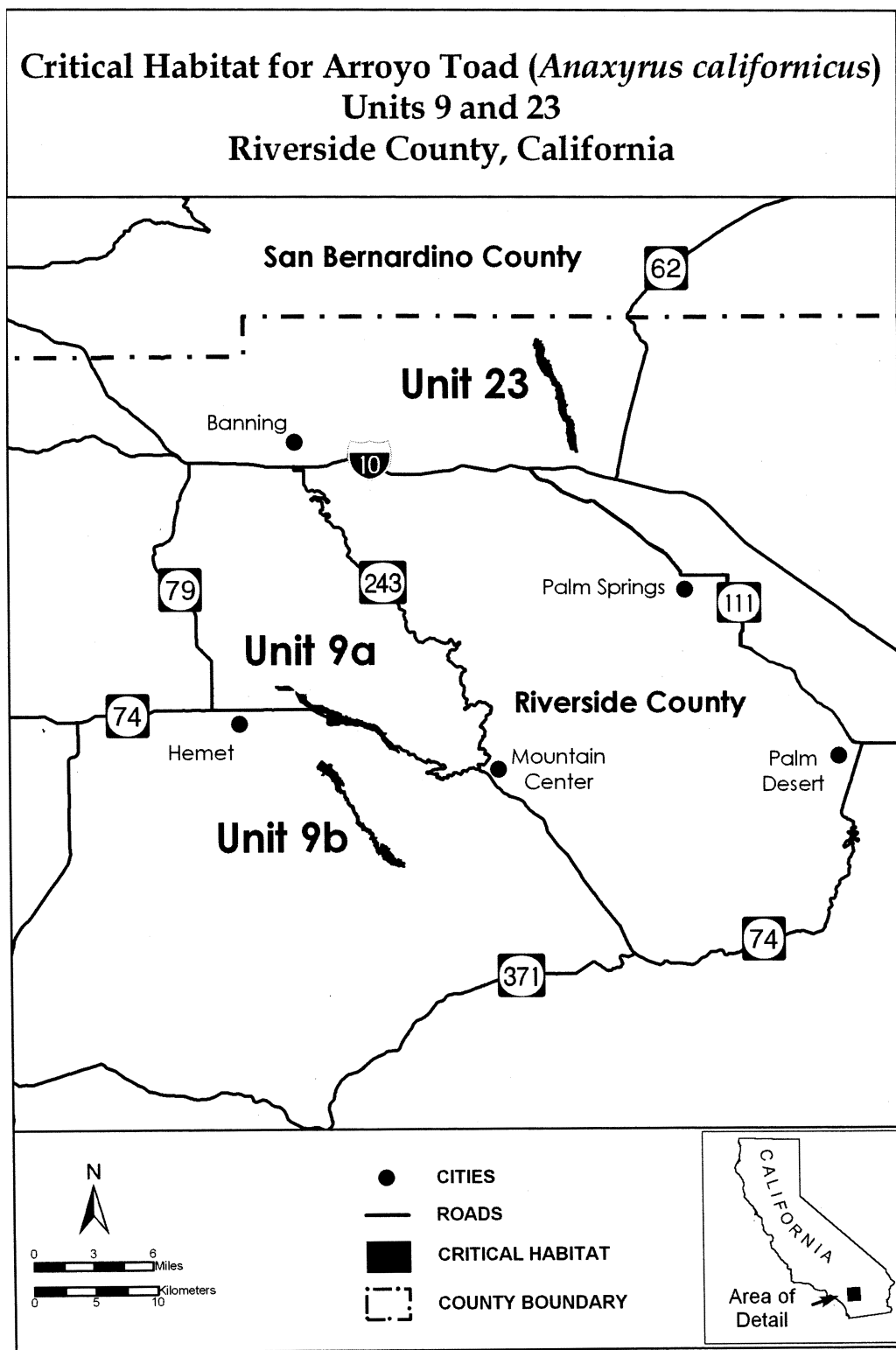


(12) Units 9 and 23, Riverside County, California.

(i) [Reserved for textual description of units.]

(ii) Note: Map of Critical Habitat for Arroyo Toad (*Anaxyrus californicus*),

Units 9 and 23, Riverside County, California, follows:

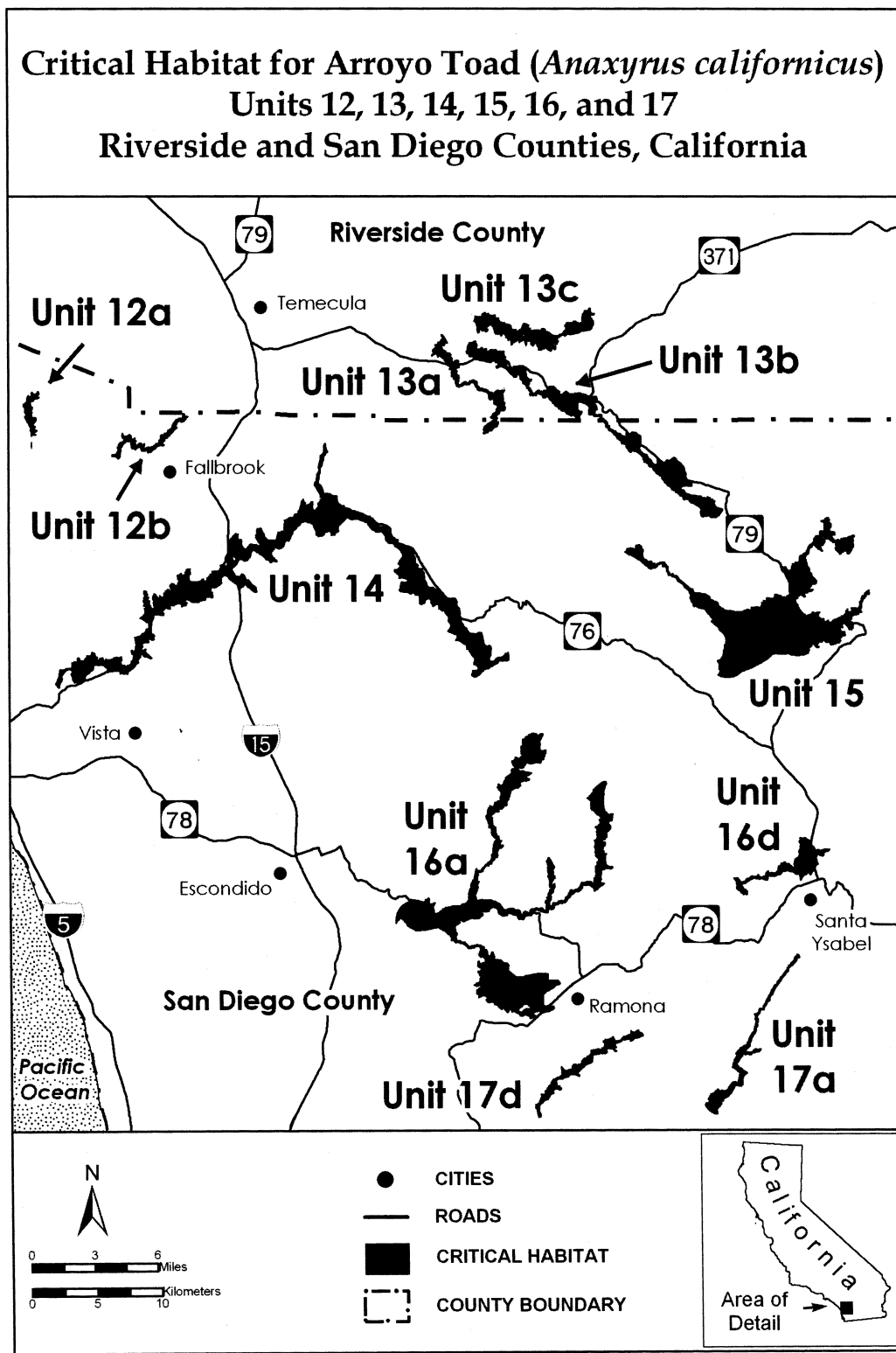


(13) Units 12, 13, 14, 15, 16, and 17, Riverside and San Diego Counties, California.

(i) [Reserved for textual description of units.]

(ii) Note: Map of Critical Habitat for Arroyo Toad (*Anaxyrus californicus*),

Units 12, 13, 14, 15, 16, and 17, Riverside and San Diego Counties, California, follows:

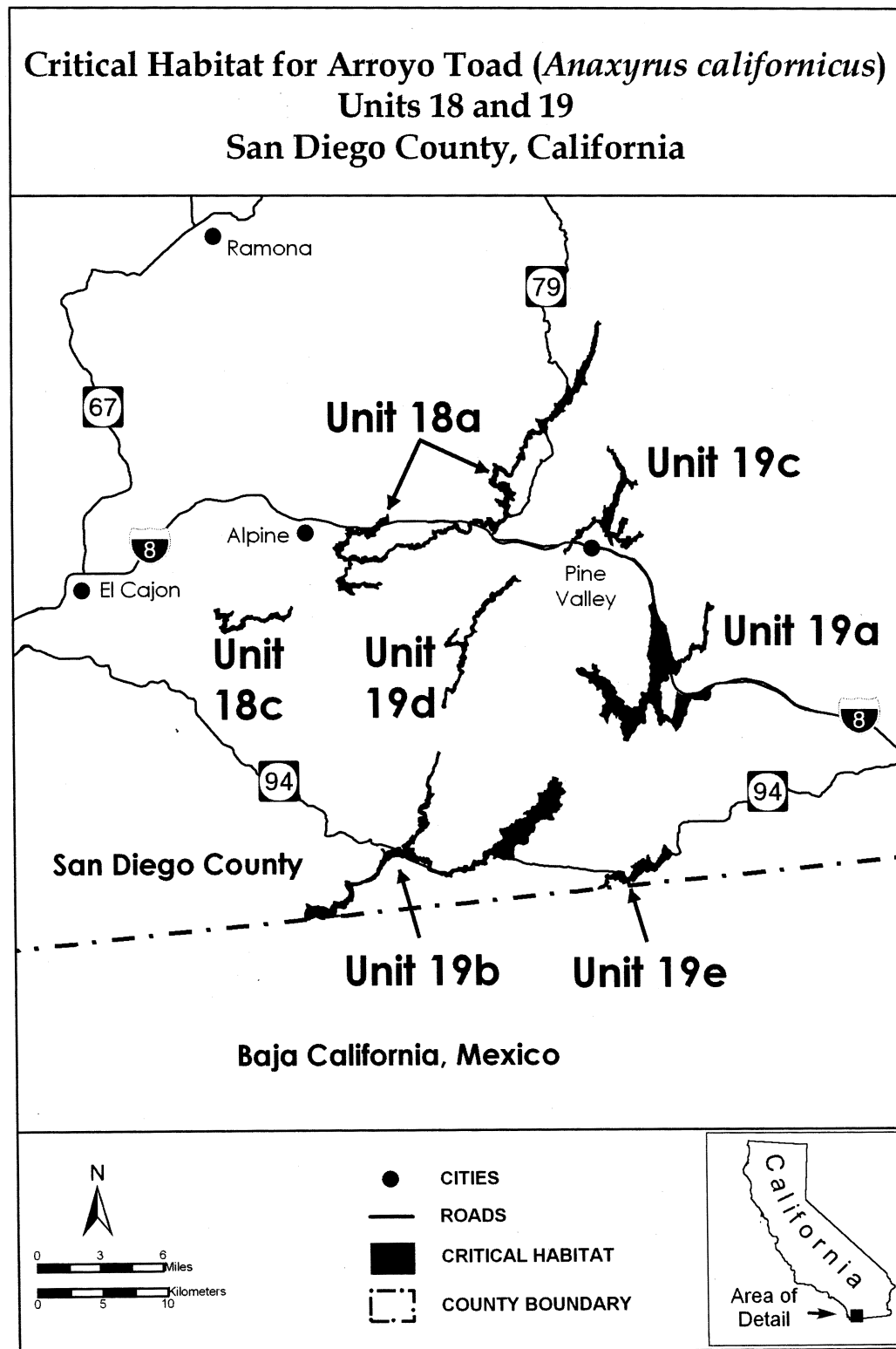


(14) Units 18 and 19, San Diego County, California.

(i) [Reserved for textual description of units.]

(ii) Note: Map of Critical Habitat for Arroyo Toad (*Anaxyrus californicus*),

Units 18 and 19, San Diego County, California, follows:

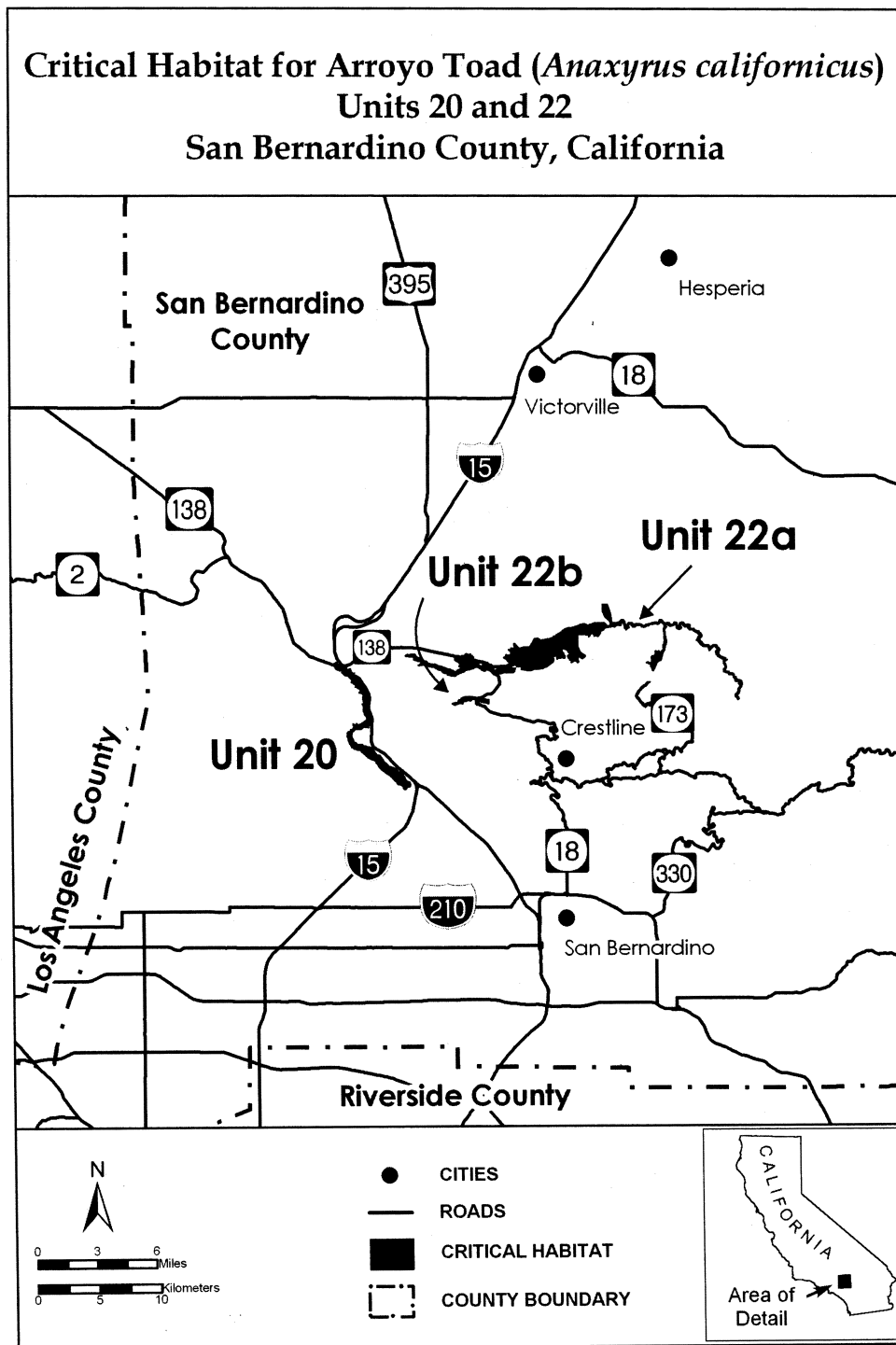


(15) Units 20 and 22, San Diego County, California.

(i) [Reserved for textual description of units.]

(ii) Note: Map of Critical Habitat for Arroyo Toad (*Anaxyrus californicus*),

Units 20 and 22, San Diego County, California, follows:



Dated: September 28, 2009.

Thomas L. Strickland,
Assistant Secretary for Fish and Wildlife and
Parks.

[FR Doc. E9-24076 Filed 10-9-09; 8:45 am]

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