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50 CFR Part 17

Endangered and Threatened Wildlife and Plants; Proposed Designation of Critical Habitat for *Cirsium loncholepis* (La Graciosa thistle), *Eriodictyon capitatum* (Lompoc yerba santa), and *Deinandra increscens* ssp. *villosa* (Gaviota tarplant); Proposed Rule

DEPARTMENT OF THE INTERIOR

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RIN 1018-AG88

Endangered and Threatened Wildlife and Plants; Proposed Designation of Critical Habitat for *Cirsium loncholepis* (La Graciosa thistle), *Eriodictyon capitatum* (Lompoc yerba santa), and *Deinandra increscens* ssp. *villosa* (Gaviota tarplant)

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), propose to designate critical habitat pursuant to the Endangered Species Act of 1973, as amended (Act), for *Cirsium loncholepis* (La Graciosa thistle), *Eriodictyon capitatum* (Lompoc yerba santa), and *Deinandra increscens* ssp. *villosa* [= *Hemizonia increscens* ssp. *villosa*] (Gaviota tarplant). Approximately 27,046 hectares (ha) (66,830 acres (ac)) in San Luis Obispo and Santa Barbara Counties, California, are proposed for designation of critical habitat. Critical habitat receives protection from destruction or adverse modification through required consultation under section 7 of the Act with regard to actions carried out, funded, or authorized by a Federal agency. Section 4 of the Act requires us to consider economic and other relevant impacts when specifying any particular area as critical habitat.

We solicit data and comments from the public on all aspects of this proposal, including data on economic and other impacts of the designation. We may revise this proposal prior to final designation to incorporate or address new information received during the comment period.

DATES: We will accept comments until January 14, 2002. Public hearing requests must be received by December 31, 2001.

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

1. You may submit written comments and information to the Field Supervisor, Ventura Fish and Wildlife Office, U.S. Fish and Wildlife Service, 2493 Portola Road, Suite B, Ventura, CA 93003.

2. You may also send comments by electronic mail (e-mail) to fw1coastaltrio@r1.fws.gov. See the Public Comments Solicited section

below for file format and other information about electronic filing.

3. You may hand-deliver comments to our Ventura Fish and Wildlife Office at the address given above.

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

FOR FURTHER INFORMATION CONTACT:

Connie Rutherford or Tim Thomas, 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).

SUPPLEMENTARY INFORMATION:**Background**

Cirsium loncholepis (La Graciosa thistle), *Eriodictyon capitatum* (Lompoc yerba santa), and *Deinandra increscens* ssp. *villosa* [= *Hemizonia increscens* ssp. *villosa*] (Gaviota tarplant) occur along the south central California coast. They are restricted to a narrow area in northern and western Santa Barbara County and southern San Luis Obispo County, in declining or altered habitats including central dune scrub, central maritime chaparral, valley needlegrass grassland, coastal freshwater wetlands, and southern bishop pine forest (Holland 1986, Schoenherr 1992).

Cirsium loncholepis

Cirsium loncholepis (La Graciosa thistle) was collected by Eastwood in 1906 near the village site of La Graciosa (razed in 1877) in Santa Barbara County (Smith 1976), near present-day Orcutt. *Cirsium loncholepis* is a short-lived, spreading, mound-like or erect and often fleshy, spiny member of the sunflower family (Asteraceae). Plants are from 10 to 100 centimeters (cm) (4 to 39 inches (in)) tall, with one or more stems. The leaves are wavy-margined. The lower leaves are 10 to 30 cm (4 to 12 in) long, with spiny petioles (leaf stalks), and are usually deeply lobed with secondary lobes or teeth. The leaf base of the middle and upper leaves forms short, spiny wings along the petiole. Flowering heads are 2 to 4 cm (0.8 to 1.6 in) wide in tight clusters at the tips of the stems. The corollas are 25 to 30 millimeters (mm) (1 to 1.2 in) long and nearly white with a purplish tube containing purple anthers. The achenes (seeds) are 3 to 4 mm (0.01 to 0.02 in) long and topped by an umbrella of long (15 to 25 mm (0.6 to 1.0 in)) awns that are ideal for wind dispersal. This species distribution overlaps *C. brevistylum* (Indian thistle), a taller plant species with the upper portion covered with cobwebby hairs. The

leaves of *C. brevistylum* are shallowly lobed, whereas the leaves of *C. loncholepis* are deeply lobed with secondary lobes (Keil and Turner 1993). Another species of thistle that is widespread in montane wetland areas in California, *C. scariosum*, occurs in the Mount Pinos region—one of the headwaters of the Santa Maria River. Keil is currently studying the taxonomic relationship between this species and *C. loncholepis* (Keil, California Polytechnic University, San Luis Obispo, California, pers. comm. 2001).

Cirsium loncholepis was originally thought to have a life span of only 1 to 2 years (Morey 1989). However, more recent observations indicate that this species is monocarpic (flowers and fruits once, then dies). While some individuals may flower and die within 1 year, other individuals may exist as a rosette for 2, 3, or more years before sending up flowering stalks (Hendrickson 1990; Mary Lea, California Polytechnic University, San Luis Obispo (CPU), pers. comm. 2001). A census of several populations at Guadalupe Dunes indicates that the species exhibits a typical “inverse J” distribution of age and size classes, with populations comprised of many young, small individuals and very few old, large individuals. The causes of seedling mortality include foraging by rabbits and gophers (Hendrickson 1990; J. Langford, consultant, *in litt.* 2001). Large individuals produce more flowering heads and more seeds per head (average = 473 seeds per plant) than smaller individuals (average = 168 seeds per plant), and therefore contribute disproportionately to the future seedbank of the population. The number of years an individual persists before flowering may be related to stress, with more stressed individuals flowering sooner. In one population currently under study at the Guadalupe Dunes, the source of new seedlings was almost entirely from the previous year's seeds, and only a small portion was derived from the resident seed bank (Lea 2001). Because most recruitment is from the previous year's seeds rather than the seedbank, long-term viability of populations may be more difficult to maintain in smaller populations, which produce fewer seeds, than in larger ones. In addition, low seed viability rates have been reported by several workers (Lea 2001, Fross in Levine-Fricke-Recon 1998).

In general, thistle taxa with heads similar to *Cirsium loncholepis* are pollinated by bees (both native and the introduced honeybee), butterflies, flies, and beetles (D. Keil, CPU, *in litt.* 2001). Carrion beetles and black ants have also

been observed visiting heads of *C. loncholepis* (M. Lea, pers. comm. 2001). The variety and abundance of pollinators indicate that this species is a generalist (utilizes a wide variety of pollinators). The distribution of individual plants within populations is often an elongated pattern that is consistent with seed dispersal caused by the prevailing coastal winds.

Alice Eastwood first collected this species in 1906 and gave the location as "La Graciosa." The town of Orcutt is likely built near the site of an old community named La Graciosa, and historic maps show the area dotted with extensive wetlands many of which no longer exist (Hendrickson 1990). However, Clifton Smith (1976) suggested that the name derived from marshes at the mouth of San Antonio Creek, named Laguna Graciosa, where the Anza expedition camped in the late 1700s. Smith's theory is plausible, since a recent occurrence of the thistle is found at the headwaters of San Antonio Creek, at Cañada de las Flores, 15 miles inland. Nevertheless, the theory that the probable type locality is near Orcutt is more accepted because maps available at the time Eastwood made her collection do not show the name Graciosa at the mouth of San Antonio Creek (Hendrickson 1990).

The Santa Maria River Valley is a broad floodplain that is bounded by Orcutt Creek along its southwestern edge, and by the Santa Maria River along its northeastern edge. Between the present-day city of Santa Maria and the coast 12 miles to the west, the valley floor is dotted with small settlements and a few oil fields, but the vast majority of the land has been converted to agriculture. A member of the Gaspar de Portola expedition to Monterey in 1769 notes that the expedition had problems getting through the Santa Maria valley because of all the marshes (Companys 1983 in Hendrickson 1990). As has been typical along the central coast of California, however, many of the valley's wetlands were drained or filled to maximize agricultural production; old maps show lakes such as Lake Guadalupe which no longer exist. *Cirsium loncholepis* most likely had a more widespread distribution in this area, but may have been eliminated by conversion to agriculture before it could be collected. However, even with such conversion, current aerial photos and topographic maps show the persistence of numerous small marshes, wetlands, and drainages in this area; some of these may still harbor small populations of the thistle.

Historical collections also indicate that *Cirsium loncholepis* also used to

occur along the Santa Ynez River, somewhere between the towns of Surf and Lompoc, on Vandenberg Air Force Base. Collections of the plant had been made in 1949 and 1958; however, by 1988 when extensive surveys were launched to relocate this location, none could be found (Hendrickson 1990). Over the years, habitat for the thistle in the floodplain for the river has been altered. According to Smith's notes, agricultural fields have been plowed to the banks of the drainage, willows have been bulldozed, and herbicides were sprayed to eradicate bull thistle (Hendrickson 1990). Because this area historically supported the southernmost documented occurrence of *Cirsium loncholepis* and because some habitat still remains today, it is considered an important area to use for reestablishment attempts (Morey 1990). However, since plants have not been documented in this area for over 40 years, we are not including it in this critical habitat proposal.

One population of *Cirsium loncholepis* was recently reported from moist openings in coastal scrub habitat in a coastal drainage in southern Monterey County on lands managed by Los Padres National Forest. However, the identity of the population as *C. loncholepis* has been questioned. In addition, the habitat characteristics do not resemble those found at other sites that support this species (T. Thomas, *in litt.* 2001).

Cirsium loncholepis is currently occupies back dune and coastal wetlands of southern San Luis Obispo County and northern Santa Barbara County, from the Pismo Dunes Lake area and from one inland location at the head of Canada de las Flores, about 20 miles to the southeast. The Guadalupe Dune complex, in which the majority of the species occurs, is the largest coastal dune system in California, covering approximately 47 square kilometers (km) (18 square miles (mi)), but extends inland less than 3.2 km (2 (mi)). The Department of the Interior, recognizing the biological and physical diversity of the area (Schoenherr 1992), added the Guadalupe Dune region to the National Natural Landmark system in 1980. Subsequently, 1,033 ha (2,552 ac) of this area was designated as the Guadalupe-Nipomo Dunes National Wildlife Refuge in 2000.

The prevailing coastal winds are from the northwest, and active dune and swale systems are aligned with these winds. Deflation areas (swale areas between two parallel dunes) behind the foredunes are often at or near the water table, creating wetlands and back-dune lakes. *Cirsium loncholepis* is found in

wet soils surrounding the dune lakes and in the moist dune swales, where it is often growing in a mat of low-growing herbaceous plants including *Juncus* species (spp.) (rush), *Carex praegracilis* (sedge), *Distichlis spicata* (salt grass), *Cynodon dactylon* (Bermuda grass), *Trifolium wormskioldii* (clover), *Anemopsis californica* (yerba mansa), *Potentilla anserina* (silverweed), and *Lotus corniculatus* (birdfoot trefoil) (J. Langford, *in litt.* 2001). At other dune swales where *Salix* spp. (willow) thickets have become established, *Cirsium loncholepis* is found scattered in openings among the willow, *Toxicodendron diversilobum* (poison oak), *Rubus* spp. (blackberry), and *Baccharis pilularis* (coyote brush) (Hendrickson 1990). At Cañada de las Flores, the most interior site for the thistle, the plants have been found primarily around gently sloping hillside seeps within a grassland community, and with fewer plants found at the edge of willows around a seep bordering an oak woodland community (Hendrickson 1990).

Soils where *Cirsium loncholepis* are found are somewhat variable, but always include a large component of sand. Coastal populations occur on dune sands, Oceano sands, Camarillo sandy loams, riverwash, and sandy alluvial soils at elevations less than 30.4 meters (m) (100 feet (ft)) (Hendrickson 1990; California Natural Diversity Data Base (CNDDDB) 2001). Occasionally, individuals have been found on dune slopes or ridges, rather than in the more typical dune swale habitat; more stable dunes have been shown to act as reservoirs of moisture, and these individuals may be tapping into this moisture (Tim Thomas, Service, *in litt.* 2001). An inland population, at the headwaters of Cañada de las Flores, occurs on Camarillo sandy loam at an elevation of 182.9 m (600 ft) (CNDDDB 2001).

There are approximately 17 known locations for *Cirsium loncholepis*. The populations in the dune systems are generally small and isolated. As of the last rangewide survey effort in 1990, many of these populations had fewer than 60 plants each and showed a low reproductive vigor (Hendrickson 1990); by 1998, five of these populations had fewer than 10 individuals each (John Chesnut, consultant, *in litt.* 1998; CNDDDB 2001). Historically, only one population has had a substantial number of plants, fluctuating between 6,000 and 54,000 individuals. However, it is located at the mouth of the Santa Maria River in the floodplain, where it was significantly disrupted by flooding in 1998; in 2000, only approximately

100 individuals were observed in the floodplain (J. Langford, pers. comm. 2001).

On-going threats to this species include groundwater pumping, oil field development, oil field remediation, and competition from aggressive native and non-native plants (Hendrickson 1990, California Department of Fish and Game (CDFG) 1992, 65 FR 14888). The coastal dune habitats are highly disturbed and have been invaded by non-native plant species. Invasive weeds such as *Ehrharta calycina* (veldt grass), *Ammophila arenaria* (European beach grass), *Carpobrotus edulis* (iceplant), and *Mesembryanthemum crystallinum* (crystalline iceplant) are serious threats to the natural ecological processes of coastal sandy habitats and to the viability of native species in this habitat (Smith 1976, Zedler and Scheid 1988, Schoenherr 1992). Cattle grazing in the riparian habitat at the mouth of the Santa Maria River may reduce the competition from other species (Hendrickson 1990), but the long term effects of livestock use on the habitat are unknown. The trend for *Cirsium loncholepis* has been one of decline (CDFG 1992, CNDDDB 1998). The State of California listed this species as threatened in 1990 (CDFG 1992). CDFG published a management strategy for the recovery of the thistle shortly after it was listed (Morey 1990). The strategy recommends four measures: (1) protect, maintain, and enhance existing and potential thistle habitat; (2) develop a long-term monitoring and reporting program for the existing populations; (3) conduct basic research on the ecology and biology of the species; and (4) establish additional populations of the thistle in appropriate habitat. Since the time the strategy was written, the most notable progress has been in securing protection for certain populations through acquisition and conservation easements, and research being conducted on thistle demography that was previously mentioned. Some restoration and habitat enhancement has also been undertaken at the Guadalupe Dunes as mitigation for damage that occurred to one population during the decommissioning of oil and gas facilities (Service 1998).

Cirsium loncholepis occurs on public lands owned and managed by the State of California (Pismo Dunes State Preserve and Oceano Dunes State Vehicular Recreation Area) and the Service (Guadalupe Dunes National Wildlife Refuge). The plant also occurs on privately owned lands. A portion of private land in the Dune Lakes area is under a conservation easement to the Land Conservancy of San Luis Obispo

County. The Coastal Conservancy is currently negotiating a conservation easement for a portion of a private parcel owned by Unocal Corporation. The Trust for Public Lands manages a parcel owned by the County of Santa Barbara (Rancho Guadalupe Dunes Preserve) adjacent to the Unocal parcel; it supports suitable habitat, but no plants have been documented from that location.

Eriodictyon capitatum

Eriodictyon capitatum (Lompoc yerba santa) was collected by Hoffman in 1932, near Lompoc, growing under *Pinus muricata* (bishop pine), and described the following year (Eastwood 1933). *Eriodictyon capitatum* is a shrub in the waterleaf family (Hydrophyllaceae) with narrow, sticky stems up to 3 m (10 ft) tall. The head-like inflorescence has lavender corollas that are 6 to 15 mm (0.2 to 0.6 in) long. It is distinguished from related species by its narrow, entire leaves and its head-like inflorescence. The fruits are 4-valved capsules that are 1 to 3 mm (0.03 to 0.1 in) wide, and contain up to 5 seeds (Halse 1993). However, seed set is typically much less; Elam (1994) found that flowers that were intentionally cross-pollinated produced a mean of 1.77 seeds per fruit, while flowers that were intentionally self-pollinated produced an average of 0.03 seeds per fruit.

Eriodictyon capitatum occurs in maritime chaparral with *Dendromecon rigida* (bush poppy), *Quercus berberidifolia* (California scrub oak), *Q. parvula* (scrub oak), and *Ceanothus cuneatus* (buck brush), and in southern bishop pine forests that intergrade with chaparral comprised primarily of *Arctostaphylos* spp. (manzanita) and *Salvia mellifera* (black sage) (Smith 1983). These maritime chaparral and bishop pine forests are found inland from the active dunes, where there are remnants of prehistoric uplifted dunes that have formed a weakly cemented sandstone that has weathered to produce a sandy, extremely well drained, and nearly infertile soil (Davis *et al.* 1988). This substrate has a limited distribution, occurring on the following mesas in San Luis Obispo and Santa Barbara Counties: Nipomo Mesa, Casmlia Hills, San Antonio Terrace, Burton Mesa, Lompoc Terrace, and Purisima Hills. Central coast maritime chaparral is the primary habitat that occurs on the sand hills and has been the focus of several studies (Ferren *et al.* 1984, Davis *et al.* 1988, Philbrick and Odion 1988, Davis *et al.* 1989, Odion *et al.* 1992). Seven local endemic plant species, and at least 16 other uncommon

plant species, are also components of this habitat. This community type is an exceptional biological resource due to the concentration of rare plants found within it, but most of it has been converted to other land uses, fragmented, or degraded by non-native species invasion (Davis *et al.* 1988, Odion *et al.* 1992). Central coast maritime chaparral is considered threatened and sensitive by the CDFG's Natural Heritage Division (Holland 1986). Southern bishop pine forest is scattered in the Purisima Hills and intergrades with the central coast maritime chaparral (Holland 1986).

The soils associated with *Eriodictyon capitatum* are extremely variable, but all tend to be slightly to strongly acidic. Sites on ridgetops have very shallow soils that consist of exposed parent material. Permeability ranges from low (high clay content), in the Santa Ynez Mountains, to excessively drained (Arnold sands with a low clay content) in the Solomon Hills. The Burton Mesa population occurs on an upper highly permeable soil (Tangair sands) underlain by a shale substrate of low permeability. The Pine Canyon population occurs in the bottom of the drainage in a highly gullied landscape (Tim Thomas, pers. obs.).

The four known locations of *Eriodictyon capitatum* occur in western Santa Barbara County. Based on the presence of appropriate soils and associated species, we believe that other populations may well occur on the mesas listed above, but have not yet been detected by botanists.

Two of the known locations of *Eriodictyon capitatum* are on Vandenberg Air Force Base (VAFB). The other two locations are in oil fields south of Orcutt (comprised of one group), and at the western end of the Santa Ynez Mountains (comprised of three groups), all on private land. Based on enzyme analysis, Elam (1994) determined that all of the Santa Ynez Mountains colonies, and one of the VAFB groups, were multiclonal. A clone is composed of many stems produced by the vegetative spread of a single root system. The other two VAFB groups are apparently uniclinal, while the Orcutt location was not studied due to inaccessibility. The three Santa Ynez Mountains groups ranged from 11 to 20 clones each; the single multi-clonal group on VAFB had 18 clones. *Eriodictyon capitatum* is self-incompatible (i.e., it requires pollen from genetically different plants to produce seed), and its fruits appear to be parasitized by an insect (Elam 1994). A study of one of the apparently uniclinal groups at VAFB showed that

Eriodictyon capitatum resprouted successfully from the base of the plant after a prescribed fire. However, several stems died, and no seedling recruitment occurred (a uniclonal, self-incompatible plant would be expected to produce little or no seed) (Jacks *et al.* 1984).

Fire management practices, invasive non-native plant species, low seed productivity, and naturally occurring catastrophic events pose significant threats to the long-term survival of this species. None of the colonies are actively protected. *Eriodictyon capitatum* was listed as rare by the State of California in 1979 (CDFG 1992).

Deinandra increscens ssp. *villosa*

Deinandra increscens ssp. *villosa* (Gaviota tarplant) is a member of the sunflower family. Tanowitz (1982) described this plant from collected material, as well as a specimen gathered from Gaviota in 1902 by Elmer, as *Hemizonia increscens* ssp. *villosa*. Recent studies on the evolution of a related group of the tarplants of North America have resulted in the reinstatement of the genus name *Deinandra* for *Hemizonia increscens* ssp. *villosa* (Baldwin 1999). *Deinandra increscens* ssp. *villosa* is a yellow-flowered, variable gray-green, soft, hairy annual that is 30 to 90 cm (12 to 35 in) tall with stems branching near the base. The lower leaves are 5 to 8.6 cm (2 to 3.4 in) long. The inflorescence is rounded to flat-topped with mostly 13-ray flowers and 18 to 31 usually sterile, disk flowers. The seeds produced by the ray flowers (achenes) are three-angled and about 2 mm (xx in); the seeds of this genus lack the long set of awns that assist in wind dispersal, as are found in many other members of the sunflower family (Keil 1993). The seeds most likely are dispersed by adhesion of the sticky bracts clasping the ray achenes to animal fur or feathers (Baldwin 2001). Two other subspecies, *D. increscens* ssp. *increscens* and *D. increscens* ssp. *foliosa*, differ from *D. increscens* ssp. *villosa* by their stiff-bristly, deep green foliage; however, chemical composition is the best means to differentiate these species (Keil 1993; Katherine Rindlaub, biological consultant, *in litt.* 1998). There are occasional observations of 13-rayed *Deinandra increscens* ssp. *increscens* that are reported as *Deinandra increscens* ssp. *villosa* (K. Rindlaub, *in litt.* 1998).

Deinandra increscens ssp. *villosa* has a highly localized distribution in western Santa Barbara County, where it is associated with needlegrass grasslands comprised of native *Nassella* spp. (needlegrass), the non-native *Avena* spp. (wild oats) and *Bromus diandrus*

(ripgut brome), and other herbs and grasses. The grasslands intergrade with coastal sage scrub composed of *Artemisia californica* (California sagebrush), *Baccharis pilularis* (coyote bush), *Hazardia squarrosa* (sawtooth golden bush), and *Eriogonum fasciculatum* (California buckwheat) (CNDDDB 2001).

Until several years ago, populations of *Deinandra increscens* ssp. *villosa* were only known from marine terraces in the vicinity of Gaviota. However, populations have recently been observed at approximately seven new locations ranging westward from Gaviota along the coast and in the Santa Ynez Mountains to Point Arguello (M. Meyer, CDFG, pers. comm. 2001; Hendrickson, Ferren, and Klug 1998). This species is found on sandy soils associated with marine terraces and uplifted marine sediments, ranging from 46 m (150 ft) in elevation along the lowest terraces to 305 m (1000 ft), where it occurs on sandy ridgelines in the Santa Ynez Mountains. One disjunct population occurs on a marine terrace just south of Point Sal on VAFB (C. Gillespie, botanist, VAFB, pers. comm. 2001).

Soil characteristics have been studied most extensively near the Gaviota population. There, the plant is restricted to Conception and Milpitas-Positas soils, which consist of acidic, fine, sandy loams (All American Pipeline Company (AAPC) 1990). A subsurface clay layer 2.5 to 90 cm (1 to 36 in) deep may serve as a reservoir of soil moisture in an area otherwise characterized by summer drought (Howald 1989). However, *Deinandra increscens* ssp. *villosa* consistently occurs where the depth to clay is only 2.5 to 5 cm (1 to 2 in) (K. Rindlaub, *in litt.* 1998).

Deinandra increscens ssp. *villosa* blooms from June through September. Pollinators observed on the flowers include several species of flies, bees, skippers, and butterflies (Tanowitz in Howald 1989). As is typical of annual plant species, the number of individuals present from one year to the next varies dramatically, most likely depending on climatic conditions such as amount of rainfall, timing of rainfall, and temperature regimes during critical stages of germination and seedling growth. There are some years when patches may contain few to no individuals (Howald 1989). In 1995 and 1997, the species was not abundant at the locations known at the time (K. Rindlaub, *in litt.* 1998).

The narrow coastal terrace at Gaviota is bisected lengthwise by Highway 101, a railroad, and several pipelines. Most of the habitat for *Deinandra increscens*

ssp. *villosa* lies on the north side of the highway on private lands owned by the petroleum industry; CDFG is in the process of acquiring an 86 ha (35 ac) parcel to establish a tarplant preserve. A few colonies occur on the south side of Highway 101 on land owned by California Department of Parks and Recreation. Most of the other populations west of Gaviota are located on private land; certain petroleum companies have leased land for their facilities and access to them at Government Point, just east of Point Conception. Two populations, one near Point Arguello and one near Point Sal, are located on VAFB (CNDDDB 2001; C. Gillespie, pers. comm. 2001).

Deinandra increscens ssp. *villosa* is threatened by destruction of individual plants, habitat loss, and habitat degradation from the development and decommissioning of oil and gas facilities, including pipelines, and competition with non-native weeds. Within the last 5 years, two aggressive non-native grasses, *Ehrharta calycina* (velvet grass) and *Phalaris aquaticus* (harding grass), have invaded the Gaviota site and pose a serious threat to *D. increscens* ssp. *villosa* and the remaining coastal prairie habitat at this site (K. Rindlaub, consultant, pers. comm. 2001; M. Meyer, CDFG, pers. comm. 2001). Until recently, the overall trend for this species has been characterized as one of decline (CDFG 1992); this was based primarily on impacts occurring on the Gaviota populations. The populations in the vicinity of Point Conception and Government Point were discovered in the year 2000. The populations in this area face similar threats to those in the Gaviota area, specifically from activities associated with the decommissioning of oil and gas facilities, and from alteration of habitat due to the spread of iceplant (M. Meyer, pers. comm. 2001). However, some of the populations found within the last 3 years are in remote areas in the Santa Ynez Mountains and do not appear to be threatened at this time.

Deinandra increscens ssp. *villosa* was listed as endangered by the State of California in 1990 (CDFG 1992). In 1989 when the species was first proposed for state listing, CDFG recommended several recovery and management actions including: 1) research on the reproductive biology and habitat requirements so that essential habitat can be more clearly defined and protection requirements can be formulated; 2) working with Santa Barbara County and private landowners to establish a long-term monitoring program and protected status for the tarplant; and 3) working with Santa

Barbara County and private landowners to assure that future impacts to the tarplant are avoided or adequately mitigated (Howald 1989). In their role as the lead permitting agency for the California Environmental Quality Act, the County has worked with CDFG and the petroleum industry over the past decade to develop a strategy to mitigate for impacts to the tarplant resulting from oil and gas activities in the Gaviota area. This has resulted in establishment of a tarplant preserve with CDFG as the landowner, and mitigation bank established to assist in the funding of habitat restoration efforts on the preserve.

At least two decommissioning efforts will be undertaken in the near future in areas where the tarplant has been found within the last three years. These include the decommissioning of Texaco's Hollister Ranch facility pipelines that stretch from Gaviota west to Saint Augustine, and Unocal's facilities at Government Point just east of Point Conception. The County will be working with CDFG, the Service, and the California Coastal Commission to ensure appropriate measures are taken to conserve the tarplant as well as other federally listed wildlife species that occur in these areas.

Previous Federal Action

Federal action on these plants began as a result of section 12 of the Act (16 U.S.C. 1531 *et seq.*), which directed the Secretary of the Smithsonian Institution to prepare a report on those plants considered to be endangered, threatened, or extinct in the United States. This report (House Document No. 94-51) was presented to Congress on January 9, 1975, and included *Cirsium loncholepis* and *Eriodictyon capitatum* as endangered. We published a notice in the July 1, 1975, **Federal Register** (40 FR 27823) of our acceptance of the Smithsonian Institution report as a petition within the context of section 4(c)(2) (petition provisions are now found in section 4(b)(3) of the Act), and our intention to review the status of the plant species named therein.

On June 16, 1976, we published a proposal in the **Federal Register** (41 FR 24523) to determine approximately 1,700 vascular plant species to be endangered species pursuant to section 4 of the Act. *Cirsium loncholepis* and *Eriodictyon capitatum* were included in that **Federal Register** publication. Comments received in relation to the 1976 proposal were summarized in an April 26, 1978, **Federal Register** publication (43 FR 17909). The Endangered Species Act Amendments

of 1978 required that all proposals more than two years old be withdrawn. A one year grace period was given to those proposals already more than two years old. On December 10, 1979 (44 FR 70796), we published a notice of withdrawal of the June 16, 1976, proposal along with four other proposals that had expired.

We published an updated Notice of Review (NOR) for plants on December 15, 1980 (45 FR 82480). This notice included *Cirsium loncholepis* and *Eriodictyon capitatum* as category 1 candidate species. Category 1 candidates were those species for which we had on file substantial information on biological vulnerability and threats to support preparation of listing proposals, but issuance of the proposed rule was precluded by other pending listing activities of higher priority. On November 28, 1983, we published a supplement to the 1980 NOR (48 FR 53640), in which *C. loncholepis* was included as a category 2 candidate. Category 2 species were those species for which information in our possession indicated that proposing to list as endangered or threatened was possibly appropriate, but for which sufficient data on biological vulnerability and threats were not available to support proposed rules.

The NOR for plants was again revised on September 27, 1985 (50 FR 39526). In this notice, *Eriodictyon capitatum* was included as a category 1 candidate, and *Cirsium loncholepis* remained a category 2 candidate. On February 21, 1990 (55 FR 6184), and September 30, 1993 (58 FR 51144), revised NORs were published that included *Cirsium loncholepis*, *Eriodictyon capitatum*, and *Deinandra increscens ssp. villosa* as category 1 candidates. On February 28, 1996, the Notice of Review of Plant and Animal Taxa that are Candidates for Listing as Endangered or Threatened Species (61 FR 7596) discontinued the designation of category 2 species as candidates. The notice included as candidates only those species meeting the former definition of category 1, and included *Cirsium loncholepis*, *Eriodictyon capitatum*, and *Deinandra increscens ssp. villosa*.

A proposed rule to list *Cirsium loncholepis*, *Eriodictyon capitatum*, *Deinandra increscens ssp. villosa*, and a fourth species, *Lupinus nipomensis*, as endangered was published in the **Federal Register** on March 30, 1998 (63 FR 15164). The final rule listing *Cirsium loncholepis*, *Eriodictyon capitatum*, *Deinandra increscens ssp. villosa*, and *Lupinus nipomensis* as endangered species was published on March 20, 2000 (65 FR 14888).

Section 4(a)(3) of the Act, as amended, and our implementing regulations (50 CFR 424.12) require that, to the maximum extent prudent and determinable, the Secretary designate critical habitat at the time the species is determined to be endangered or threatened. Our regulations (50 CFR 424.12(a)(1)) state that designation of critical habitat is not prudent when one or both of the following situations exist: (1) the species is threatened by taking or other human activity, and identification of critical habitat can be expected to increase the degree of threat to the species, or (2) such designation of critical habitat would not be beneficial to the species. At the time *Cirsium loncholepis*, *Eriodictyon capitatum*, and *Deinandra increscens ssp. villosa* were listed, we found that designation of critical habitat for these taxa was prudent but not determinable, and that designation of critical habitat would occur once we had gathered the necessary data.

On June 17, 1999, our failure to issue final rules for listing *Cirsium loncholepis*, *Eriodictyon capitatum*, and *Deinandra increscens ssp. villosa* and six other plant species as endangered or threatened, and our failure to make a final critical habitat determination for the 9 species was challenged in *Southwest Center for Biological Diversity and California Native Plant Society v. Babbitt* (Case No. C99-2992 (N.D.Cal.)). On May 22, 2000, the judge signed an order for the Service to propose critical habitat for the species by September 30, 2001. Plaintiffs agreed to two brief extensions of this due date until November 2, 2001.

Critical Habitat

Critical habitat is defined in section 3(5)(A) of the Act as—(i) the specific areas within the geographic area occupied by a species, at the time it is listed in accordance with the Act, on which are found those physical or biological features (I) essential to the conservation of the species and (II) that may require special management considerations or protection; and (ii) specific areas outside the geographic area occupied by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. Areas outside the geographic area currently occupied by the species shall be designated as critical habitat only when a designation limited to its present range would be inadequate to ensure the conservation of the species.

Conservation is defined in section 3(3) of the Act as the use of all methods and procedures which are necessary to

bring any endangered or threatened species to the point at which listing under the Act is no longer necessary. Regulations under 50 CFR 424.02(j) define special management considerations or protection to mean any methods or procedures useful in protecting the physical and biological features of the environment for the conservation of listed species.

In order to be included in a critical habitat designation, the habitat must first be "essential to the conservation of the species." Critical habitat designations identify, to the extent known using the best scientific and commercial data available, habitat areas that provide essential life cycle needs of the species (i.e., areas on which are found the primary constituent elements, as defined at 50 CFR 424.12(b)).

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

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

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

commercial data has demonstrated that some unoccupied areas are essential for the conservation of the species, and accordingly, we have included within this designation some areas currently unoccupied by the species.

Our Policy on Information Standards Under the Endangered Species Act, published in the **Federal Register** on July 1, 1994 (59 FR 34271), provides criteria, establishes procedures, and provides guidance to ensure that our decisions represent the best scientific and commercial data available. It requires our biologists, to the extent consistent with the Act and with the use of the best scientific and commercial data available, to use primary and original sources of information as the basis for recommendations to designate critical habitat. When determining which areas are critical habitat, a primary source of information should be the listing package for the species. Additional information may be obtained from a recovery plan, articles in peer-reviewed journals, conservation plans developed by states and counties, scientific status surveys and studies, and biological assessments, unpublished materials, and expert opinion or personal knowledge.

Methods

As required by the Act and regulations (section 4(b)(2) and 50 CFR 424.12) we used the best scientific information available to determine areas that contain the physical and biological features that are essential for the conservation of *Cirsium loncholepis*, *Eriodictyon capitatum*, and *Deinandra increscens* ssp. *villosa*. This information included information from the CNDDDB (CNDDDB 2001), soil survey maps (U.S. Soil Conservation Service 1971 and 1983) aerial photographs available through TerraServer (<http://terraserver.homeadvisor.msn.com>), recent biological surveys and reports, additional information provided by interested parties, and discussions with representatives of CDFG, the County of Santa Barbara Planning Department, and other botanical experts. We also conducted site visits at several locations managed by local, State or Federal agencies, including VAFB, Guadalupe-Nipomo Dunes National Wildlife Refuge, Gaviota State Beach, Oceano Dunes State Vehicle Recreation Area, and Pismo Dunes State Preserve; we have also visited the portion of Guadalupe Dunes owned by the Unocal Corporation.

Because *Cirsium loncholepis*, *Eriodictyon capitatum*, and *Deinandra increscens* ssp. *villosa* were federally listed in the year 2000, the Service has

not yet had the opportunity to develop recovery plans for these taxa. As mentioned earlier, CDFG developed a management strategy document for the thistle. Because *Eriodictyon capitatum* has been state-listed since 1979 and the other two taxa have been state-listed since 1990, the conservation needs of these taxa have been considered during the review of individual projects by the two counties, as lead CEQA agencies, and CDFG.

Certain areas, such as the Gaviota Coast, have been the target of broader planning efforts because the presence of *Deinandra increscens* ssp. *villosa* overlaps in large part with the Gaviota Consolidated Planning Area, which is a designation conferred by the County of Santa Barbara Planning and Development Energy Division (SBPDED) on areas where multiple oil and gas facilities already exist and additional oil and gas production and processing could occur (L. Perez, SBPDED, pers. comm 2001). One result of collaboration between numerous agencies and the oil and gas industry in this planning area has been the establishment of the Gaviota Tarplant Reserve.

The stretch of coast between Pismo Dunes State Preserve and Point Sal has recently been the focus of a regional conservation planning effort spearheaded by The Nature Conservancy (TNC) (TNC n.d.). They consider this area, referred to as the Guadalupe-Nipomo Dunes, to be one of only four out of the thirteen dune areas in California that remain relatively natural and undisturbed. Their vision document includes a four-point plan that calls for: (1) Protection of specific parcels that support floodplain habitat, the Unocal Guadalupe Oil Field, the dune scrub lands east of the State Vehicular Recreation Area, and areas where dune margins interface with agricultural and ranching lands. This area overlaps in large part with one of the proposed critical habitat units in this rule. Other measures call for: (2) ensuring the health of the dune ecosystem through eradication of non-native species, restoration of damaged areas, management of sensitive resources, and maintaining ecologic processes such as sand movement; (3) enhancement of visitor services; and (4) community outreach and education programs (TNC n.d.).

Recently, the U.S. Congress directed the National Park Service to initiate a feasibility study for the Gaviota coast to determine whether the area, or a portion of it, is eligible and suitable to be managed as a unit of the National Park System according to specific criteria, including the determination as to

whether the resources in the area are nationally significant (<http://www.nps.gov/pwro/gaviota/>). The stretch of coast being studied ranges from Coal Oil Point (east of Gaviota) west to Point Arguello and continuing north to the northern boundary of Vandenberg Air Force Base; this area overlaps with all or a portion of seven of the nine units being proposed for critical habitat designation in this rule. The results of the feasibility study will be available in early 2002.

These numerous initiatives and planning efforts all recognize the sensitivity of the coastal habitats and the sensitive resources along this portion of the central California coast. Due to the historic loss of the habitats that supported *Cirsium loncholepis*, *Eriodictyon capitatum*, and *Deinandra increscens* ssp. *villosa*, we believe that future conservation and recovery of these taxa depends not only on protecting them in the limited areas that they currently occupy, but also on providing the opportunity to increase their distribution by designating currently unoccupied habitat within their historic ranges.

Some of the critical habitat units being proposed for *Cirsium loncholepis* and *Deinandra increscens* ssp. *villosa* include areas that are currently unoccupied by the taxa. Determining the specific areas that these taxa occupy is difficult for several reasons: (1) The methods for mapping the current distributions of *Cirsium loncholepis* and *Deinandra increscens* ssp. *villosa* can be variable, depending on the scale at which groups of individuals are recorded (e.g., many small groups versus one large group); and (2) depending on the climate and other annual variations in habitat conditions, the extent of the distributions may either shrink and temporarily disappear, or, if there is a residual seedbank present, enlarge and cover a more extensive area. Therefore, the inclusion of currently unoccupied habitat interspersed with patches of occupied habitat in the critical habitat units reflects the dynamic nature of the habitat and the life history characteristics of these taxa. For *Cirsium loncholepis*, we have also included a larger area of currently unoccupied habitat in the Pismo-Orcutt unit, extending from the known coastal locations of the species inland to Orcutt. This unoccupied habitat is essential to the conservation of the species because it provides connectivity between the known locations on the coast and the Cañada de las Flores location further inland and potentially suitable habitat

for introductions needed for recovery of the species.

Primary Constituent Elements

In accordance with section 3(5)(A)(i) of the Act and regulations at 50 CFR 424.12, in determining which areas to propose as critical habitat, we consider those physical and biological features (primary constituent elements) that are essential to the conservation of the species and that may require special management considerations or protection. These include, but are not limited to: space for individual and population growth, and for normal behavior; food, water, air, light, minerals or other nutritional or physiological requirements; cover or shelter; sites for breeding, reproduction, or rearing of offspring; germination or seed dispersal; and habitats that are protected from disturbance or are representative of the historic geographical and ecological distributions of a species. All areas proposed as critical habitat for *Cirsium loncholepis*, *Eriodictyon capitatum*, and *Deinandra increscens* ssp. *villosa* are within each species' historic range and contain one or more of the physical or biological features (primary constituent elements) identified as essential for the conservation of each species.

The proposed critical habitat is designed to provide sufficient habitat to maintain self-sustaining populations of *Cirsium loncholepis*, *Eriodictyon capitatum*, and *Deinandra increscens* ssp. *villosa* throughout each species' range, and provide those habitat components essential for the conservation of each species. Habitat components that are essential for *Cirsium loncholepis* are found in, but not limited to, coastal dune, coastal scrub, and wetland communities where physical processes, such as occasional soil disturbance and the pattern of prevailing coastal winds, support natural dune dynamics in coastal areas, or occasional floodplain depositional events in inland areas. Habitat components that are essential for *Eriodictyon capitatum* are found in vegetation communities classified as maritime chaparral and in southern bishop pine forests that intergrade with chaparral where physical processes, such as occasional naturally-occurring or controlled fires, support patch dynamics within the pine forest and chaparral communities. Habitat components that are essential for *Deinandra increscens* ssp. *villosa* are found in needlegrass grassland and coastal sage scrub communities with a clay layer found below the sandy soil surface.

Based on our knowledge to date, the primary constituent elements of critical habitat for *Cirsium loncholepis* consist of, but are not limited to:

(1) Moist sandy soils associated with dune swales, margins of dune lakes and marshes, and river margins from the Guadalupe Dune complex along the coast and inland to Cañada de las Flores;

(2) Plant communities that support associated species including, coastal dune, coastal scrub, and wetland communities, particularly where the following associated species are found: *Juncus* spp. (rush), *Scirpus* spp. (tule), *Salix* spp. (willow), *Toxicodendron diversilobum* (poison oak), *Distichlis spicata* (salt grass), and *Baccharis pilularis* (coyote brush); and

(3) Hydrologic processes, particularly the maintenance of a stable groundwater table that supports the soil moisture regime that appears to be favored by *Cirsium loncholepis*.

Eriodictyon capitatum

Based on our knowledge to date, the primary constituent elements of critical habitat for *Eriodictyon capitatum* consist of, but are not limited to:

(1) Soils with a large component of sand and that tend to be acidic;

(2) Plant communities that support associated species, including maritime chaparral, particularly where the following associated species are found: *Dendromecon rigida* (bush poppy), California scrub oak, *Quercus parvula* (Santa Cruz Island oak), and *Ceanothus cuneatus* (buck brush); and in southern bishop pine forests that intergrade with chaparral *Arctostaphylos* spp. (manzanita) and *Salvia mellifera* (black sage); and

(3) Habitat directly adjacent upslope and downslope from known populations, as this species appears to spread primarily through vegetative reproduction.

Threats to the habitat of *Eriodictyon capitatum* include: incompatible fire management practices; invasive nonnative plant species; low seed productivity; and naturally occurring catastrophic events (65 FR 14888). Some of the sites proposed for critical habitat may be degraded by the presence of non-native species, such as *Ehrhardta calicina* (veldt grass), that may compete with native vegetation. This fast-spreading species is difficult to control, particularly after an area has been denuded by wildfire. Controlling veldt grass poses a special management need within proposed critical habitat for *Eriodictyon capitatum*. The areas we are proposing to designate as critical habitat provide some or all of the habitat

components essential for the conservation of *Eriodictyon capitatum*.

Deinandra increscens ssp. villosa

Based on our knowledge to date, the primary constituent elements of critical habitat for *Deinandra increscens ssp. villosa* are:

(1) Sandy soils associated with coastal terraces adjacent to the coast or uplifted marine sediments at interior sites up to 5.6 km (3.5 mi) inland from the coast; and

(2) Plant communities that support associated species, including needlegrass grassland and coastal sage scrub communities, particularly where the following associated species are found: needlegrass species, California sagebrush, coyote bush, sawtooth golden bush, and California buckwheat.

Threats to the habitat of *Deinandra increscens ssp. villosa* include: habitat loss and degradation from the development of oil and gas facilities; including pipelines; competition with nonnative weeds; and naturally occurring catastrophic events (65 FR 14888). The presence of non-native species which compete for resources available for growth and reproduction of *Deinandra increscens ssp. villosa* may pose a special management need for the areas proposed as critical habitat for this species. Portions of these units being proposed for critical habitat may be degraded by the presence of non-native species such as veldt grass, ripgut, and harding grass, that may compete with native vegetation. This is particularly true for the sites where most of the coastal populations are found, particularly in the vicinity of Gaviota, as they have been subject to more human disturbance than the inland sites. The areas we are proposing to designate as critical habitat provide some or all of the habitat components essential for the conservation of *Deinandra increscens ssp. villosa*.

Special Management Considerations or Protections

Special management considerations or protections may be needed to maintain the primary constituent elements for the three taxa within the units being proposed as critical habitat. In some cases, protection of existing habitat and current ecologic processes may be sufficient to ensure that populations of the plants are maintained at those sites, and have the ability to reproduce and disperse in surrounding habitat. In other cases, however, active management may be needed to maintain the primary constituent elements for the three taxa. We have outlined below the most likely kinds of special

management and protection that these three taxa may require. Not all of these will apply to each plant taxon.

1. Existing soil conditions may need to be protected by avoiding activities that cause the erosion of soils from areas with slopes; on flat areas, maintaining an intact soil profile may be necessary to maintain edaphic features such as a perched water table atop a clay layer, or a horizon of permeable sandy soils on the surface layer.

2. In near-coastal areas (dunes) the supply and movement of sand along the coast must be maintained to create the mosaic of wetlands, swales, and marshes that are needed for *Cirsium loncholepis*.

3. Existing hydrologic conditions may need to be protected by avoiding activities that cause a change in surface or subsurface water flows upon which the plant taxa depend.

4. The quality of water must also be maintained to keep it free from deleterious levels of herbicides or chemical or organic contaminants.

5. The associated plant communities must be maintained to ensure that the habitat needs of pollinators and dispersal agents are maintained. For some grassland areas, it may be important to maintain openings between coastal scrub communities that might otherwise encroach upon grassland patches that support *Deinandra increscens ssp. villosa*. Along the coast, the growth of willow thickets may encroach upon the margins of dune swales and wetlands, and shade out *Cirsium loncholepis*.

6. In all plant communities where these taxa occur, invasive, non-native species such as harding grass and veldt grass need to be actively managed. Once these grasses have become established, they cannot be removed without great expenditure of time and effort.

7. Certain areas where these taxa occur may need to be fenced to protect them from accidental or intentional trampling by humans and livestock.

Criteria Used to Identify Critical Habitat

The proposed critical habitat units for *Cirsium loncholepis*, *Eriodictyon capitatum*, and *Deinandra increscens ssp. villosa* were delineated by creating data layers in a geographic information system (GIS) format of the areas of known occurrences of the three taxa using information from the CNDDDB (CNDDDB 2001), aerial photographs available through TerraServer (<http://terraserver.homeadvisor.msn.com>), recent biological surveys and reports, representatives of CDFG, the County of Santa Barbara Planning Department, and

discussions with botanical experts. These data layers were created on a base of USGS 7.5' quadrangles obtained from the State of California's Stephen P. Teale Data Center. We defined the boundaries for the proposed critical habitat units using roads and known landmarks and, where necessary, township, range, and section numbers from the public land survey.

We also considered the status of habitat conservation plan (HCP) efforts in proposing areas as critical habitat. Section 10(a)(1)(B) of the Act authorizes us to issue permits for the take of listed wildlife species incidental to otherwise lawful activities. An incidental take permit application must be supported by an HCP that identifies conservation measures that the permittee agrees to implement for the species to minimize and mitigate the impacts of the permitted incidental take. Although "take" of listed plants is not prohibited by the Act, listed plant species may also be covered in an HCP for wildlife species. Subsection 4(b)(2) of the Act allows us to exclude from critical habitat designation areas where the benefits of exclusion outweigh the benefits of designation, provided the exclusion will not result in the extinction of the species. At the time we prepared this proposed rule, there were no approved HCPs covering any of these three species within the areas being proposed for critical habitat.

The Air Force has developed an Integrated Natural Resources Management Plan (INRMP) for VAFB. The INRMP is intended to provide an adaptive management approach to natural resource issues on the base (Tetra Tech, Inc. 1997). Although the INRMP calls for annual monitoring of *Eriodictyon capitatum*, it does not provide any specific measures to ensure the conservation and recovery of this species. The INRMP calls for surveys for *Cirsium loncholepis*, which has not been seen on the base since 1958; *Deinandra increscens ssp. villosa* is not discussed in the plan. The INRMP is currently being revised. However, because measures to provide for the conservation of these species are not currently in place, we are not excluding from the proposed critical habitat unit those portions of the base that support *Eriodictyon capitatum*, or those portions of the Point Sal and Point Arguello-Gaviota units that support *Deinandra increscens ssp. villosa*.

Critical habitat includes habitat throughout the species' current ranges in the United States (Santa Barbara and San Luis Obispo counties, California). Lands proposed are under Federal, State, local, and private ownership.

Federal lands include areas owned and managed by Vandenberg Air Force Base and the Service. State lands include areas owned and managed by the California Department of Parks and Recreation and the California Department of Fish and Game. Local lands include parks owned by the County of Santa Barbara. Private lands include areas that are being managed for conservation by private landowners, as well as those that are being managed for agriculture, ranchlands, or oil production. We are proposing to designate critical habitat on lands that are considered essential to the conservation of each of the three species. Each of the critical habitat units is considered to be occupied by either seeds as part of the seed bank or standing plants, and contain habitat that includes the specific soils, hydrology, and plant communities that are associated with each of the three species.

Throughout this designation, in selecting areas of proposed critical habitat, we made an effort to avoid developed areas, such as housing developments, and other areas that are unlikely to contribute to the conservation of *Cirsium loncholepis*, *Eriodictyon capitatum*, and *Deinandra*

increscens ssp. *villosa*. However, due to mapping and time constraints, we did not map critical habitat in sufficient detail to exclude all developed areas or other lands unlikely to contain the primary constituent elements essential for the conservation of these taxa. Areas within the boundaries of the mapped units, such as buildings, roads, parking lots, railroads, airport runways and other paved areas, lawns, and other urban landscaped areas will not contain any of the primary constituent elements. Federal actions limited to these areas, therefore would not trigger a section 7 consultation, unless they affect the species or primary constituent elements in adjacent critical habitat.

Proposed Critical Habitat Designation

The proposed critical habitat areas described below include all of the primary constituent elements described above and constitute our best assessment at this time of the areas needed for the conservation of each of the three taxa:

Cirsium loncholepis

Critical habitat being proposed for *Cirsium loncholepis* includes two units that currently sustain the species. Protection of this proposed critical habitat is essential for the conservation

of the species because the geographic range that *Cirsium loncholepis* occupies has been reduced to so few sites that the species is threatened with extinction. The areas being proposed as critical habitat contain the appropriate dune, wetland, marsh, and riparian habitat that supports *Cirsium loncholepis*, including the sandy soils, the associated plant communities, and a groundwater table that maintains wet soil conditions. We propose to designate approximately 17,934 ha (44,315 acres) of land as critical habitat for *Cirsium loncholepis*. Approximately 6 percent of this area consists of Federal lands, while State lands comprise approximately 5 percent, County lands comprise approximately 1 percent, and private lands comprise approximately 88 percent of the proposed critical habitat (Table 1). Both of the two units being proposed for *Cirsium loncholepis* support standing plants or seedbank of the species. In addition to these areas, both units contain additional habitat that is needed to maintain the ecologic processes that support the primary constituent elements, and habitat that is needed to allow expansion of existing populations and to maintain connectivity through pollinators and dispersal agents between the two units.

TABLE 1.—APPROXIMATE PROPOSED CRITICAL HABITAT UNIT AREAS FOR *Cirsium loncholepis* IN HECTARES (HA) (ACRES) BY LAND OWNERSHIP ¹

Unit Name	State	Private	County and other local jurisdictions	Federal	Total
Pismo-Orcutt	869 ha (2,148 ac)	14,592 ha (36,058 ac)	240 ha (592 ac)	1,033 (2,553 ac)	16,734 ha (41,351 ac)
Cañada de las Flores	0 ha (0 ac)	1,200 ha (2,964 ac)	0 ha (0 ac)	0 ha (0 ac)	1,200 ha (2,964 ac)
Total	869 ha (2,148 ac)	15,792 ha (39,022 ac)	240 ha (592 ac)	1,033 ha (2,553 ac)	17,934 ha (44,315 ac)

¹ Approximate hectares have been converted to acres (1 ha = 2.47 ac).

A brief description of each critical habitat unit is given below:

Pismo-Orcutt Unit

The Pismo-Orcutt Unit consists of coastal dunes, swales, and wetlands extending from Grover City south to Mussel Point, just north of Point Sal, and then extends inland across the Santa Maria Valley to the area of Orcutt. This unit includes a portion of the Pismo Dunes State Preserve, Oceano Dunes State Vehicular Recreation Area, the Guadalupe Dunes National Wildlife Refuge, Rancho Guadalupe Dunes Preserve, and privately owned lands. In the vicinity of Orcutt, some of the private lands included in this unit have been designated as open space by the

County of Santa Barbara (1998). The coastal portion of this unit contains almost all the known populations of *Cirsium loncholepis*, including the largest population known to exist anywhere on privately owned lands, the Unocal parcel near the mouth of the Santa Maria River, as well as numerous smaller populations that are scattered along the coast north to Grover City. Maintaining all of these populations is important for this species to survive through a variety of natural and environmental changes as well as stochastic events. The more interior portions of this unit are primarily within the lower portion of the Santa Maria River valley (below 80 ft in elevation) and have been placed in

agricultural production. However, fragments of numerous small marshes, wetlands, and drainages can still be found interspersed with agricultural fields. The prevailing winds from the stretch of coast between Pismo Beach and the mouth of the Santa Maria River blow southeast across the lower Santa Maria River Valley in the direction of Orcutt and beyond to Cañada de las Flores. This intervening habitat is therefore important to maintain connectivity between the coastal populations and the Cañada de Las Flores unit through pollinator activity and seed dispersal mechanisms and to provide suitable habitat for introduction efforts needed for recovery of the species.

Cañada de Las Flores Unit

The Cañada de Las Flores Unit consists of marsh and wetland habitat at the head of La Cañada de las Flores, northwest of the town of Los Alamos. All of the lands in this unit are privately owned. The two known populations of *Cirsium loncholepis* in this unit encompasses the easternmost distribution of the species; consequently they occur under slightly different environmental conditions, specifically at a higher elevation (200 ft elev.) and warmer climate than the coastal populations. Preserving any genetic variability within the species that has allowed it to adapt to these slightly different environmental conditions

would be important for the long-term survival and conservation of the species.

Eriodictyon capitatum

We are proposing critical habitat for *Eriodictyon capitatum* in three units currently occupied by the species. Protection of this proposed critical habitat is essential for the conservation of the species because the geographic range that *Eriodictyon capitatum* occupies has been reduced to so few sites that the species is threatened with extinction (65 FR 14888). The areas being proposed as critical habitat are found in three locations in northern Santa Barbara County and include the appropriate sandy, acidic soils and chaparral and southern bishop pine

forest chaparral habitat that supports *Eriodictyon capitatum*. We propose to designate approximately 3,438 ha (8,495 ac) of land as critical habitat for *Eriodictyon capitatum*. Approximately 13 percent of this area consists of Federal lands, and private lands comprise approximately 87 percent of the proposed critical habitat (Table 2). The three units being proposed for *Eriodictyon capitatum* support standing populations of the species. In addition to these areas, both units contain additional habitat that is needed to maintain the ecologic processes that support the primary constituent elements, and habitat that is needed to allow expansion of existing populations.

TABLE 2.—APPROXIMATE PROPOSED CRITICAL HABITAT UNIT AREAS FOR ERIODICTYON CAPITATUM IN HECTARES (HA) (ACRES (AC)) BY LAND OWNERSHIP ¹

Unit Name	State	Private	County and other local jurisdictions	Federal	Total
Solomon Hills	0 ha (0 ac)	1,311 ha (3,239 ac)	0 ha (0 ac)	0 ha (0 ac)	1,311 ha (3,239 ac)
Vandenberg	0 ha (0 ac)	0 ha (0 ac)	0 ha (0 ac)	443 ha (1,094 ac)	443 ha (1,094 ac)
Santa Ynez Mountains	0 ha (0 ac)	1,684 ha (4,162 ac)	0 ha (0 ac)	0 ha (0 ac)	1,684 ha (4,162 ac)
Total	0 ha (0 ac)	2,995 ha (7,401 ac)	0 ha (0 ac)	443 ha (1,094 ac)	3,438 ha (8,495 ac)

¹ Approximate hectares have been converted to acres (1 ha = 2.47 ac).

A brief description of each critical habitat unit is given below:

Solomon Hills Unit

The Solomon Hills Unit consists of a low hill (locally known as Orcutt Hill) located southeast of the community of Orcutt and west of Highway 1. The unit includes watersheds from the ridgelines downslope to the bottoms of the nearest drainages. It supports scattered Bishop pine and live oak, along with maritime chaparral species, and has been dissected by roads, pads, and pipelines associated with oil well drilling. This entire unit is privately owned. This unit is important because it represents one of only four known locations of *Eriodictyon capitatum*. The population that occurs here also includes the northernmost and most inland distribution of the species. Preserving the genetic variability within the species that has allowed it to adapt to these slightly different environmental conditions is important for its long-term survival and conservation.

Vandenberg Unit

The Vandenberg Unit consists of two subunits, Vandenberg West and Vandenberg East, located approximately

3 km (2 mi) apart on the southern portion of Vandenberg Air Force Base in areas that are zoned as open space (C. Gillespie, VAFB, *in litt.* 2001). Vandenberg West consists of relatively flat terrain within Burton Mesa chaparral, and contains the largest population of *Eriodictyon capitatum* on the base. Vandenberg East is comprised of a finger of mesa top, along with surrounding eroded areas that slope toward Pine Canyon and Lake Canyon. The site supports Burton Mesa chaparral and scattered Bishop pine. Based on currently available data (Elam 1994), Pine Canyon in Vandenberg East contains more genetically different individuals than any other known location of *Eriodictyon capitatum*. The unit is considered essential to the conservation of the species because it contains two of the four known locations of *Eriodictyon capitatum*. The populations that occur here encompass the westernmost and most coastally influenced (low elevation and coastal climate) distribution of the species, and includes the location with the greatest number of known genetically different individuals. Preserving the genetic variability within the species that has allowed it to adapt to these slightly

different environmental conditions is important for its long-term survival and conservation.

Santa Ynez Mountains Unit

The Santa Ynez Mountains Unit consists of an 8-km (5 mi) long segment of the Santa Ynez Mountains between the Cañada del Coho and Arroyo Bullito drainages. Several populations of *Eriodictyon capitatum* are scattered among (*Lithocarpus densiflorus*) tanbark oak, (*Quercus agrifolia*) live oak, and numerous chaparral species. The downslope limit of this unit on the south-facing side lies along the shift in vegetation from chaparral at the higher elevations to grasslands at the lower elevations. The entire unit is privately owned. This unit is important because it represents one of only four known locations of *Eriodictyon capitatum*. The populations that occur here includes the southernmost distribution of the species as well as those at the highest elevations (1600 ft in elevation). Preserving the genetic variability within the species that has allowed it to adapt to these slightly different environmental conditions is important for its long-term survival and conservation.

Deinandra increscens ssp. villosa

We are proposing critical habitat for *Deinandra increscens ssp. villosa* in five units that are currently occupied by the species. Protection of these areas is essential for the conservation of the species because the geographic range that *Deinandra increscens ssp. villosa* occupies has been reduced to so few sites that the species is threatened with extinction (65 FR 14888). The areas being proposed as critical habitat are coastal terraces found between Point Sal south to the Gaviota area and include

the appropriate soils and associated grassland and coastal sage scrub plant communities habitat that supports *Deinandra increscens ssp. villosa*. We propose to designate approximately 5,674 ha (14,020 ac) of land as critical habitat for *Deinandra increscens ssp. villosa*. Approximately 24.5 percent of this area consists of Federal lands, private lands comprise approximately 73 percent of the proposed critical habitat, State lands comprise approximately 2.5 percent, and County lands comprise less than 1 percent

(Table 3). The five units being proposed for *Deinandra increscens ssp. villosa* support standing plants or seedbank of the species. In addition to these areas, each unit contains additional habitat that is needed to maintain the ecologic processes that support the primary constituent elements, and habitat that is needed to allow expansion of existing populations and to maintain connectivity through pollinators and dispersal agents between the populations within each unit, and between the five units.

TABLE 3.—APPROXIMATE PROPOSED CRITICAL HABITAT UNIT AREAS FOR DEINANDRA INCRESCENS SSP. VILLOSA IN HECTARES (HA) (ACRES (AC)) BY LAND OWNERSHIP ¹

Unit name	State	Private	County and other local jurisdictions	Federal	Total
Point Sal	0 ha (0 ac)	0 ha (0 ac)	0 ha (0 ac)	95 ha (234 ac)	95 ha (234 ac)
Point Arguello	0 ha (0 ac)	0 ha (0 ac)	0 ha (0 ac)	702 ha (1,734 ac)	702 ha (1,734 ac)
Sudden Peak	0 ha (0 ac)	310 ha (765 ac)	0 ha (0 ac)	384 ha (950 ac)	694 ha (1,715 ac)
Santa Ynez	0 ha (0 ac)	495 ha (1,222 ac)	0 ha (0 ac)	0 ha (0 ac)	495 ha (1,222 ac)
Conception-Gaviota	129 ha (319 ac)	3,339 ha (8,252 ac)	10 ha (24 ac)	210 ha (520 ac)	3,688 ha (9,115 ac)
Total	129 ha (319 ac)	4,144 ha (10,239 ac)	10 ha (24 ac)	1,391 ha (3,438 ac)	5,674 ha (14,020 ac)

¹ Approximate hectares have been converted to acres (1 ha = 2.47 ac).

A brief description of each critical habitat unit is given below:

Point Sal Unit

Point Sal Unit consists of a portion of coastal blufftop approximately 6 km (4 mi) southeast of Point Sal. It is comprised of serpentine soils and outcrops, and supports coastal grassland vegetation along with species more typically found on outcrops. The entire unit is under the Federal jurisdiction of VAFB in an area that is zoned as open space (C. Gillespie, VAFB, *in litt.* 2001). This unit supports the northernmost population of *Deinandra increscens ssp. villosa*; as of 1998, this population comprised approximately 500 individuals. Given its geographic isolation from the remaining populations, it may be genetically different from other populations and, therefore, important for the long-term survival and conservation of *Deinandra increscens ssp. villosa*.

Point Arguello Unit

The Point Arguello Unit consists of a 5-km (3-mi) long stretch of coastal terrace habitat from near Point Pedernales, south to Rocky Point, and east to approximately the 500-foot contour line. This unit is comprised

entirely of lands under Federal jurisdiction at VAFB in an area that is zoned as open space (C. Gillespie, VAFB, *in litt.* 2001). This unit supports one population of *Deinandra increscens ssp. villosa* comprising several hundred individuals as of the year 2000 (C. Gillespie, VAFB *in litt.* 2001) as well as suitable habitat that is important for the expansion of this population and conservation of the species.

Sudden Peak Unit

The Sudden Peak Unit consists of a 5 km (3 mi) stretch of ridgeline in the western portion of the Santa Ynez Mountains west of Sudden Peak and generally includes grasslands above the 1,200-foot contour line. This unit is comprised in part of lands under Federal jurisdiction of VAFB in an area that is zoned as open space (C. Gillespie, VAFB, *in litt.* 2001) (about 55 percent), and of privately owned lands (about 45 percent). VAFB holds an easement on a portion of these private lands. This unit includes two populations of *Deinandra increscens ssp. villosa* that comprised over 1,000 individuals in 1998. This is one of only two units that are known to support populations away from the immediate coast and at higher elevations (1400 ft

in elevation). Preserving the genetic variability within the species that has allowed it to adapt to these slightly different environmental conditions is important for its long-term survival and conservation. It also supports suitable habitat that is important for the expansion of existing populations and conservation of the species.

Santa Ynez Unit

The Santa Ynez Unit consists of a 9.7-km (6-mi) stretch of ridgeline of the Santa Ynez Mountains, ranging from Cañada de las Agujas east to Cañada del Agua Caliente. This unit of 495 ha (1,222 ac) is comprised entirely of privately owned lands. This unit supports two populations of *Deinandra increscens ssp. villosa* that comprised approximately 400 individuals as of 1998. Along with the Sudden Peak unit, this is the only unit that supports populations away from the immediate coast and at higher elevations (1400 ft in elevation). Preserving the genetic variability within the species that has allowed it to adapt to these slightly different environmental conditions is important for its long-term survival and conservation. This unit also includes habitat that is important for the expansion of existing populations and

connectivity between the two populations, and conservation of the species.

Conception-Gaviota Unit

The Conception-Gaviota Unit consists of a 51.5-km (23-mi) long stretch of habitat along the coast from Point Conception, east to Gaviota, and encompasses 3,688 hectares (9,115 ac). At its widest point, this unit extends inland approximately 3.2 km (2 mi). This unit is comprised of State lands at Gaviota State Beach and lands in the process of being transferred to CDFG for the Gaviota Tarplant Preserve (about 3.5 percent), County of Santa Barbara lands at Jalama County Park (less than 1 percent), and privately owned lands (about 91 percent). This unit supports most of the known populations of *Deinandra increscens* ssp. *villosa* that occur along the immediate coast. This includes the Gaviota population which was once abundant but is currently in decline, two small patches discovered in 1998 between Gaviota and Point Conception, and an extensive population discovered in 2000 that ranges from Government Point to the area near Jalama Beach County Park. This unit is important because it supports multiple populations that occur along a stretch of coastline that consists of marine terraces supporting coastal grasslands, as well as intervening suitable habitat that is important for the expansion of existing populations, maintaining connectivity for pollinators and dispersal between these populations, and conservation of the species.

Effects of Critical Habitat Designation

Section 7 Consultation

Critical habitat receives protection under section 7 of the Act through the prohibition against destruction or adverse modification of critical habitat with regard to actions carried out, funded, or authorized by a Federal agency. Section 7 also requires Federal agencies to confer with the Service on any actions that are likely to result in the destruction or adverse modification of proposed critical habitat. In our regulations at 50 CFR 402.02, we define destruction or adverse modification as "direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species. Such alterations include, but are not limited to, alterations adversely modifying any of those physical or biological features that were the basis for determining the habitat to be critical." Aside from the added protection that may be provided

under section 7, the Act does not provide other forms of protection to lands designated as critical habitat. Because consultation under section 7 of the Act does not apply to activities on private or other non-Federal lands that do not involve a Federal nexus, critical habitat designation would not afford any additional protections under the Act against such activities.

Section 7(a)(2) of the Act requires Federal agencies, including the Service, to ensure that the actions they fund, authorize, permit, or carry out do not destroy or adversely modify critical habitat to the extent that the action appreciably diminishes the value of the critical habitat for the survival and recovery of the species. Individuals, organizations, States, local governments, and other non-Federal entities are affected by the designation of critical habitat only if their actions occur on Federal lands, require a Federal permit, license, or other authorization, or involve Federal funding.

Section 7(a) of the Act requires Federal agencies, including the Service, to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened, and with respect to its critical habitat, if any is designated or proposed. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402. Section 7(a)(4) of the Act requires Federal agencies to confer with us on any action that is likely to jeopardize the continued existence of a proposed species or result in destruction or adverse modification of proposed critical habitat. Conference reports provide conservation recommendations to assist Federal agencies in eliminating conflicts that may be caused by their proposed action[s]. The conservation measures in a conference report 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 actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of such a species or to destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency (action agency) must enter into consultation with us. Through this consultation we would ensure that the permitted actions do not jeopardize the continued existence of the species or destroy or adversely modify critical habitat.

When we issue a biological opinion concluding that a project is likely to result in the destruction or adverse modification of critical habitat, we also

provide reasonable and prudent alternatives to the project, if any are identifiable. Reasonable and prudent alternatives are defined at 50 CFR 402.02 as alternative actions identified during consultation that can be implemented in a manner consistent with the intended purpose of the action, that are consistent with the scope of the Federal agency's legal authority and jurisdiction, that are economically and technologically feasible, and that we believe would avoid the likelihood of jeopardizing the continued existence of listed species or result in the destruction or adverse modification of critical habitat. Reasonable and prudent alternatives can vary from slight project modifications to extensive redesign or relocation of the project. 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 critical habitat is subsequently designated and the Federal agency has retained discretionary involvement or control over the action or such discretionary involvement or control is authorized by law. Consequently, some Federal agencies may request reinitiation of consultation or conference with us on actions for which formal consultation has been completed, if those actions may affect designated critical habitat, or adversely modify or destroy proposed critical habitat.

Federal agencies are to confer with us on any action which is likely to jeopardize the continued existence of any proposed species, or result in the destruction or adverse modification of proposed critical habitat (50 CFR 402.10(a)). 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)).

Activities on Federal lands that may affect *Cirsium loncholepis*, *Eriodictyon capitatum*, and *Deinandra increscens* ssp. *villosa* or their critical habitat will require section 7 consultation. Activities on private or State lands requiring a permit from a Federal agency, such as a permit from the U.S. Army Corps of Engineers (Corps) under section 404 of the Clean Water Act, a section

10(a)(1)(B) permit from the Service, or some other Federal action, including funding (e.g., Federal Highway Administration, Environmental Protection Agency, or Federal Emergency Management Authority funding), will also continue to be subject to the section 7 consultation process. Federal actions not affecting listed species or critical habitat and actions on non-Federal and private lands that are not federally funded, authorized, or permitted do not require section 7 consultation.

Habitat is often dynamic, and populations may move from one area to another over time. Furthermore, we recognize that designation of critical habitat may not include all of the habitat areas that may eventually be determined to be necessary for the recovery of the species. For these reasons, all should understand that critical habitat designations do not signal that habitat outside the designation is unimportant or may not be required for recovery. Areas outside the critical habitat designation will continue to be subject to conservation actions that may be implemented under section 7(a)(1) of the Act and to the regulatory protections afforded by the section 7(a)(2) of the Act jeopardy standard and the applicable prohibitions of section 9 of the Act, as determined on the basis of the best available information at the time of the action. We specifically anticipate that federally funded or assisted projects affecting listed species outside their designated critical habitat areas may still result in jeopardy findings in some cases. Similarly, critical habitat designations made on the basis of the best available information at the time of designation will not control the direction and substance of future recovery plans, habitat conservation plans, or other species conservation planning efforts if new information available to these planning efforts calls for a different outcome.

Section 4(b)(8) of the Act requires us to evaluate briefly and describe within any proposed or final regulation that designates critical habitat those activities involving a Federal action that may adversely modify such habitat or that may be affected by such designation. Activities that may destroy or adversely modify critical habitat include those that appreciably reduce the value of critical habitat for both the survival and recovery of *Cirsium loncholepis*, *Eriodictyon capitatum*, and *Deinandra increscens* ssp. *villosa*. We note that such activities may also jeopardize the continued existence of the species.

To properly portray the effects of critical habitat designation, we must first compare the section 7 requirements for actions that may affect critical habitat with the requirements for actions that may affect a listed species. Section 7 of the Act prohibits actions funded, authorized, or carried out by Federal agencies from jeopardizing the continued existence of a listed species or destroying or adversely modifying the listed species' critical habitat. Actions likely to "jeopardize the continued existence" of a species are those that would appreciably reduce the likelihood of the species' survival and recovery. Actions likely to "destroy or adversely modify" critical habitat are those that would appreciably reduce the value of critical habitat for the survival and recovery of the listed species. Common to both definitions is an appreciable detrimental effect on both survival and recovery of a listed species. Given the similarity of these definitions, actions likely to destroy or adversely modify critical habitat would almost always result in jeopardy to the species concerned, particularly when the area of the proposed action is occupied by the species concerned. Designation of critical habitat in areas occupied by *Cirsium loncholepis*, *Eriodictyon capitatum*, and *Deinandra increscens* ssp. *villosa* is not likely to result in a regulatory burden above that already in place due to the presence of the listed species. Designation of critical habitat in areas not currently occupied by these species may result in an additional regulatory burden when a Federal nexus exists.

Activities that, when carried out, funded, or authorized by a Federal agency, may directly or indirectly destroy or adversely modify critical habitat for *Cirsium loncholepis* include, but are not limited to:

(1) Activities that alter watershed characteristics in ways that would appreciably alter or reduce the quality or quantity of surface and subsurface flow of water needed to maintain the coastal dune swale, marsh, and riparian habitat within the range of *Cirsium loncholepis*. Such activities adverse to *Cirsium loncholepis* could include, but are not limited to, water drawdown or water diversions that drop the water table, agricultural activities that would affect the quality of water through contamination, agricultural activities and grading activities that destroy the attendant native vegetation and make these areas more susceptible to invasion by nonnative plant species, off-highway vehicle activity that alters vegetation cover and topography, road building and maintenance or modification that

alters runoff patterns, oil field development, oil contamination remediation activities, construction of pipelines and utility corridors, golf course and residential development, and certain recreational activities.

Activities that, when carried out, funded, or authorized by a Federal agency, may directly or indirectly destroy or adversely modify critical habitat for *Eriodictyon capitatum* include, but are not limited to:

(1) Activities that alter watershed characteristics in ways that would appreciably alter or reduce the ability of the chaparral habitat to maintain a mosaic of stands in different age classes, such as maintaining an unnatural fire regime either through fire suppression or prescribed fires that are too frequent or poorly-timed; residential and commercial development, including road building and golf course installations; agricultural activities, including orchardry, viticulture, row crops, and livestock grazing; and vegetation manipulation such as brush clearance in the watershed upslope from *Eriodictyon capitatum*; and

(2) Activities that appreciably degrade or destroy native maritime chaparral and oak woodland communities at interior sites, including but not limited to livestock grazing, clearing, discing, introducing or encouraging the spread of nonnative species, and heavy recreational use.

Activities that, when carried out, funded, or authorized by a Federal agency, may directly or indirectly destroy or adversely modify critical habitat for *Deinandra increscens* ssp. *villosa* include, but are not limited to:

(1) Activities that alter watershed characteristics in ways that would appreciably alter or reduce the ability of the coastal terraces to maintain healthy grassland communities, such as maintaining an unnatural fire regime either through fire suppression or prescribed fires that are too frequent or poorly-timed; residential and commercial development, including road building and golf course installations; agricultural activities, including orchardry, viticulture, row crops, and livestock grazing, oil field development, oil contamination remediation, and construction and decommissioning of pipelines and utility corridors.

Designation of critical habitat could affect the following agencies and actions: development on private lands requiring permits from Federal agencies, such as authorization by the Corps pursuant to section 404 of the Clean Water Act, or permits from other Federal agencies; activities of the U.S.

Fish and Wildlife Service on its Refuge lands; the funding of projects by agencies such as Housing and Urban Development; military activities of the U.S. Department of Defense (Vandenberg Air Force Base) on their lands or lands under their jurisdiction; activities of the Federal Aviation Authority on their lands or lands under their jurisdiction; the release or authorization of release of biological control agents by the U.S. Department of Agriculture; regulation of activities affecting point source pollution discharges into waters of the United States by the Environmental Protection Agency under section 402 of the Clean Water Act; watershed management activities sponsored by the Natural Resources Conservation Service; construction of communication sites licensed by the Federal Communications Commission; and authorization of Federal grants or loans. Where federally listed wildlife species occur on private lands proposed for development, any habitat conservation plans submitted by the applicant to secure a permit to take according to section 10(a)(1)(B) of the Act would be subject to the section 7 consultation process, a process which would consider all federally listed species affected by the HCP including plants.

Several other species that are listed under the Act occur in the same general areas as *Cirsium loncholepis*, *Eriodictyon capitatum*, and *Deinandra increscens* ssp. *villosa*. Western snowy plovers (*Charadrius alexandrinus nivosus*), tidewater gobies (*Eucyclogobius newberryi*), California least terns (*Sterna antillarum browni*), California red-legged frogs (*Rana aurora draytonii*), *Arenaria paludicola* (marsh sandwort), *Rorippa gambelii* (Gambel's watercress), and *Lupinus nipomensis* (Nipomo lupine) occur within the coastal portions of the Pismo-Orcutt unit being proposed for *Cirsium loncholepis*; in addition, critical habitat for the Western snowy plover and the California red-legged frog overlaps with that being proposed for *Cirsium loncholepis*. California tiger salamanders (*Ambystoma californiense*) occur on the more inland portion of the Pismo-Orcutt unit in the vicinity of Orcutt, as well as in the vicinity of the Cañada de las Flores unit being proposed for *Cirsium loncholepis*. Along the coast between Jalama Beach County Park and Gaviota, Western snowy plovers and their critical habitat, California red-legged frogs and their critical habitat, and tidewater gobies overlap with the Conception-Gaviota

unit being proposed for *Deinandra increscens* ssp. *villosa*.

If you have questions regarding whether specific activities will likely constitute adverse modification of critical habitat, contact the Field Supervisor, Ventura Fish and Wildlife Office (see **ADDRESSES** section). Requests for copies of the regulations on listed wildlife and inquiries about prohibitions and permits may be addressed to the U.S. Fish and Wildlife Service, Portland Regional Office, 911 NE 11th Avenue, Portland, Oregon 97232-4181 (503/231-6131, FAX 503/231-6243).

Relationship to Habitat Conservation Plans and Other Planning Efforts

Currently, no habitat conservation plans (HCPs) exist that include *Cirsium loncholepis*, *Eriodictyon capitatum*, and *Deinandra increscens* ssp. *villosa* as covered species. However, we believe that, in most instances, the benefits of excluding HCPs from critical habitat designations will outweigh the benefits of including them. In the event that future HCPs covering *Cirsium loncholepis*, *Eriodictyon capitatum*, and *Deinandra increscens* ssp. *villosa* are developed within the boundaries of the designated critical habitat, we will work with applicants to ensure that the HCPs provide for protection and management of habitat areas essential for the conservation of this species. The HCP development process would provide an opportunity for more intensive data collection and analysis regarding the use of particular habitat areas by *Cirsium loncholepis*, *Eriodictyon capitatum*, and *Deinandra increscens* ssp. *villosa*. The process would also enable us to conduct detailed evaluations of the importance of such lands to the long-term survival of the species in the context of constructing a biologically configured system of interlinked habitat blocks. We will also provide technical assistance and work closely with applicants throughout the development of any future HCPs to identify appropriate management for the long-term conservation of *Cirsium loncholepis*, *Eriodictyon capitatum*, and *Deinandra increscens* ssp. *villosa*. The take minimization and mitigation measures provided under such HCPs would be expected to protect the essential habitat lands proposed as critical habitat in this rule.

Economic Analysis

Section 4(b)(2) of the Act requires us to designate critical habitat on the basis of the best scientific and commercial information available and to consider the economic and other relevant

impacts of designating a particular area as critical habitat. We may exclude areas from critical habitat upon a determination that the benefits of such exclusions outweigh the benefits of including such areas as critical habitat. We cannot exclude areas from critical habitat if the exclusion will result in the extinction of the species. We will conduct an analysis of the economic impacts of designating these areas as critical habitat prior to a final determination. When completed, we will announce the availability of the draft economic analysis with a notice in the **Federal Register**, and we will open a 30-day public comment period on the draft economic analyses and proposed rule at that time.

Public Comments Solicited

We intend that any final action resulting from this proposal will be as accurate and as effective as possible. Therefore, we solicit comments or suggestions from the public, other concerned governmental agencies, the scientific community, industry, or any other interested party concerning this proposed rule. We particularly seek comments concerning:

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

(2) Specific information on the amount and distribution of *Cirsium loncholepis*, *Eriodictyon capitatum*, and *Deinandra increscens* ssp. *villosa* habitat, and what habitat is essential to the conservation of these species and why;

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

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

(5) Economic and other values associated with designating critical habitat for *Cirsium loncholepis*, *Eriodictyon capitatum*, and *Deinandra increscens* ssp. *villosa* such as those derived from non-consumptive uses (e.g., hiking, camping, bird-watching, enhanced watershed protection, improved air quality, increased soil retention, "existence values", and reductions in administrative costs); and

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

accommodating public concern and comments.

If you wish to comment on this proposed rule, you may submit your comments and materials by any one of several methods (see **ADDRESSES**). Please submit Internet comments as an ASCII file and avoid the use of special characters and any form of encryption. Please also include "Attn: [1018-AG88]" and your name and return address in your Internet message. Please note that the Internet address "fw1coastaltrio@r1.fws.gov" will be closed out at the termination of the public comment period. If you do not receive a confirmation from the system that we have received your Internet message, contact us directly by calling our Ventura Fish and Wildlife Office at phone number 805-644-1766.

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

Peer Review

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

We will consider all comments and information received during the 60-day public comment period on this proposed rule during preparation of a final rulemaking. Accordingly, the final determination may differ from this proposal.

Public Hearings

The Act provides for one or more public hearings on this proposal, if requested. Requests for public hearings must be made within 45 days of the date of publication of this proposal in the **Federal Register**. We will schedule public hearings on this proposal, if any are requested, and announce the dates, times, and places of those hearings in the **Federal Register** and local newspapers at least 15 days prior to the first hearing.

Clarity of the Rule

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

Please send any comments that concern how we could make this notice easier to understand to the Field Supervisor, Ventura Fish and Wildlife Office (see **ADDRESSES**).

Required Determinations

Regulatory Planning and Review

In accordance with Executive Order (EO) 12866, this document is a significant rule and was reviewed by the Office of Management and Budget (OMB) in accordance with the four criteria discussed below. We are preparing a draft analysis of this proposed action, which will be available for public comment, to determine the economic consequences of designating the specific areas as critical habitat. The availability of the draft economic analysis will be announced in the **Federal Register** so that it is available for public review and comments.

(a) While we will prepare an economic analysis to assist us in

considering whether areas should be excluded pursuant to section 4 of the Act, we do not believe this rule will have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local or tribal governments or communities. Therefore, we do not believe a cost benefit and economic analysis pursuant to EO 12866 is required.

The three species for which critical habitat is proposed were listed as endangered on March 20, 2000 (65 FR 14888). Consequently, and as needed, we will conduct formal and informal section 7 consultations with other Federal agencies to ensure that their actions will not jeopardize the continued existence of *Cirsium loncholepis*, *Eriodictyon capitatum*, and *Deinandra increscens* ssp. *villosa*. Under the Act, critical habitat may not be adversely modified by a Federal agency action. Critical habitat does not impose any restrictions on non-Federal persons unless they are conducting activities funded or otherwise sponsored or permitted by a Federal agency (see Table 4). Section 7 of the Act requires Federal agencies to ensure that they do not jeopardize the continued existence of the species. Based on our experience with the species and their needs, we believe that any Federal action or authorized action that could potentially cause an adverse modification of the proposed critical habitat would be considered as jeopardy under the Act in areas occupied by the species. Accordingly, we do not expect the designation of currently occupied areas as critical habitat to have any incremental impacts on what actions may or may not be conducted by Federal agencies or non-Federal persons that receive Federal authorization or funding.

The designation of areas as critical habitat where section 7 consultations would not have occurred but for the critical habitat designation (that is, in areas currently unoccupied by the three listed species), may have impacts that are not attributable to the species listing on what actions may or may not be conducted by Federal agencies or non-Federal persons who receive Federal authorization or funding. We will evaluate any impact through our economic analysis (under section 4 of the Act; see Economic Analysis section of this rule). Non-Federal persons who do not have a Federal sponsorship of their actions are not restricted by the designation of critical habitat.

(b) This rule is not expected to create inconsistencies with other agencies' actions. As discussed above, Federal agencies have been required to ensure that their actions do not jeopardize the continued existence of *Cirsium loncholepis*, *Eriodictyon capitatum*, and *Deinandra increscens ssp. villosa* since the species' listing in 2000. The prohibition against adverse modification of critical habitat is expected to impose few, if any, additional restrictions to those that currently exist in the proposed critical habitat on currently occupied lands. We will evaluate any impact of designating areas where

section 7 consultations would not have occurred but for the critical habitat designation through our economic analysis. Because of the potential for impacts on other Federal agency activities, we will continue to review this proposed action for any inconsistencies with other Federal agency actions.

(c) This proposed rule, if made final, is not expected to significantly affect entitlements, grants, user fees, loan programs, or the rights and obligations of their recipients. Federal agencies are currently required to ensure that their activities do not jeopardize the continued existence of the species, and,

as discussed above, we do not anticipate that the adverse modification prohibition resulting from critical habitat designation will have any incremental effects in areas of occupied habitat on any Federal entitlement, grant, or loan programs. We will evaluate any impact of designating areas where section 7 consultation would not have occurred but for the critical habitat designation through our economic analysis.

(d) OMB has determined that this rule may raise novel legal or policy issues and, as a result, this rule has undergone OMB review.

TABLE 4.—IMPACTS OF *Cirsium loncholepis*, *Eriodictyon capitatum*, AND *Deinandra increscens* SSP. *villosa* LISTING AND CRITICAL HABITAT DESIGNATION

Categories of activities	Activities potentially affected by species listing only	Additional activities potentially affected by critical habitat designation ¹
Federal Activities Potentially Affected ² .	Activities conducted by the Army Corps of Engineers, the Department of Defense, the Environmental Protection Agency, the U.S. Fish and Wildlife Service, and any other Federal Agencies, including, but not limited to, grading, construction, road building, oil field development, oil contaminants remediation, herbicide application, fill of wetlands, control of water table levels, and recreational activities that would destroy habitat for these species or appreciably decrease habitat value or quality through indirect effects (e.g., edge effects, invasion of exotic plants or animals, or fragmentation.).	Activities by these Federal Agencies in designated areas where section 7 consultations would not have occurred but for the critical habitat designation.
Private or other non-Federal Activities Potentially Affected ³ .	Activities that require a Federal action (permit, authorization, or funding) and may remove or destroy habitat for <i>Cirsium loncholepis</i> , <i>Eriodictyon capitatum</i> , and <i>Deinandra increscens ssp. villosa</i> by mechanical, chemical, or other means or appreciably decrease habitat value or quality through indirect effects (e.g., edge effects, invasion of exoic plants or animals, fragmentation of habitat.	Funding, authorization, or permitting actions by Federal Agencies in designated areas where section 7 consultations would not have occurred but for the critical habitat designation.

¹ This column represents activities potentially affected by the critical habitat designation in addition to those activities potentially affected by listing the species.

² Activities initiated by a Federal agency.

³ Activities initiated by a private or other non-Federal entity that may need Federal authorization or funding.

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

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

agencies to provide a statement of the factual basis for certifying that rule will not have a significant economic effect on a substantial number of small entities. SBREFA also amended the RFA to require a certification statement. In today's rule, we are certifying that the rule will not have a significant effect on a substantial number of small entities. The following discussion explains our rationale.

Small entities include small organizations, such as independent non-profit organizations, and small governmental jurisdictions, including school boards and city and town governments that serve fewer than 50,000 residents, as well as small businesses. Small businesses include manufacturing and mining concerns with fewer than 500 employees,

wholesale trade entities with fewer than 100 employees, retail and service businesses with less than \$5 million in annual sales, general and heavy construction businesses with less than \$27.5 million in annual business, special trade contractors doing less than \$11.5 million in annual business, and agricultural businesses with annual sales less than \$750,000. To determine if potential economic impacts to these small entities are significant, we consider the types of activities that might trigger regulatory impacts under this rule as well as the types of project modifications that may result. In general, the term significant economic impact is meant to apply to a typical small business firm's business operations.

To determine if the rule would affect a substantial number of small entities, we consider the number of small entities affected within particular types of economic activities (e.g., housing development, grazing, oil and gas production, timber harvesting, etc.). We apply the "substantial number" test individually to each industry to determine if certification is appropriate. In some circumstances, especially with proposed critical habitat designations of very limited extent, we may aggregate across all industries and consider whether the total number of small entities affected is substantial. In estimating the numbers of small entities potentially affected, we also consider whether their activities have any Federal involvement; some kinds of activities are unlikely to have any Federal involvement and so will not be affected by critical habitat designation.

Designation of critical habitat only affects activities conducted, funded, or permitted by Federal agencies; non-Federal activities are not affected by the designation. In areas where the species is present, Federal agencies are already required to consult with us under section 7 of the Act on activities that they fund, permit, or implement that may affect *Cirsium loncholepis*, *Eriodictyon capitatum*, and *Deinandra increscens* ssp. *villosa*. If this critical habitat designation is finalized, Federal agencies must also consult with us if their activities may affect designated critical habitat. However, in areas where the species is present, we do not believe this will result in any additional regulatory burden on Federal agencies or their applicants because consultation would already be required due to the presence of the listed species, and the duty to avoid adverse modification of critical habitat would not trigger additional regulatory impacts beyond the duty to avoid jeopardizing the species.

Even if the duty to avoid adverse modification does not trigger additional regulatory impacts in areas where the species is present, designation of critical habitat could result in an additional economic burden on small entities due to the requirement to reinstate consultation for ongoing Federal activities. However, since *Cirsium loncholepis*, *Eriodictyon capitatum*, and *Deinandra increscens* ssp. *villosa* have only been listed since March 2000, there have only been two formal consultations involving the species. Both consultations were conducted with the ACOE on restoration activities being undertaken by Unocal to clean up and restore beach habitat contaminated by oil production activities. In these

consultations, restoration of CILO habitat was proposed as part of the project because Unocal had to fulfill permit requirements imposed by the County of San Luis Obispo and the Coastal Commission. There have not been any consultations on the other two species. Therefore, the requirement to reinstate consultations for ongoing projects will not affect a substantial number of small entities.

When the species is clearly not present, designation of critical habitat could trigger additional review of Federal activities under section 7 of the Act, that would otherwise not be required. *Cirsium loncholepis*, *Eriodictyon capitatum*, and *Deinandra increscens* ssp. *villosa* have been listed a relatively short time and there have been few activities with Federal involvement in these areas where the species area not clearly present during this time. As mentioned above, we have conducted only two formal consultations under section 7 involving any of the species. As a result, we can not easily identify future consultations that may be due to the listing of the species or the increment of additional consultations that may be required by this critical habitat designation. Therefore, for the purposes of this review and certification under the Regulatory Flexibility Act, we are assuming that any future consultations in the area proposed as critical habitat will be due to the critical habitat designation.

Projected land uses for the majority of the proposed critical habitat consists of farming, cattle grazing, low impact recreation, military activities on VAFB, low density development, set-asides for conservation of natural resources (including Federal lands at Guadalupe-Nipomo Dune National Wildlife Refuge as well as non-federal lands), and continuing use and decommissioning of oil production facilities. On the Federal lands included in this proposed critical habitat designation, the only commercial activity that we are aware of is the leasing of several cattle grazing allotments by the Federal Penitentiary in Lompoc on VAFB lands. However, we do not consider the Penitentiary to be a small entity for this analysis.

On non-federal lands, activities that lack Federal involvement would not be affected by the critical habitat designation. Activities of an economic nature that are likely to occur on non-federal lands in the area encompassed by this proposed designation are primarily farming, cattle grazing, recreation, housing, and oil production. On lands that are in agricultural production the types of activities that

might trigger a consultation include water delivery projects that may require section 404 authorizations and watershed management and restoration projects sponsored by NRCS. However the NRCS restoration projects typically are voluntary and the water delivery projects are rare and would only affect a small percentage of the small entities within this proposed critical habitat designation. Some of the lands encompassed in the Cañada de las Flores unit support populations of California tiger salamander; a change in land use on these lands could require authorization from the ACOE or section 10(a)(1)(B) permits from the Service. However, there are fewer than ten landowners in this entire unit. The proposed rule would not affect a substantial number of small agricultural entities.

On lands that are currently or have been under oil production, expansion of operations or decommissioning of facilities may require section 404 authorizations from the ACOE, section 10(a)(1)(B) permits from the Service for federally listed species including the California red-legged goby, snowy plover and the tidewater goby, or approvals or funding from the EPA. Oil production activities within the area proposed as critical habitat are largely conducted by large firms, including Chevron, Unocal, Texaco, and Nuevo Energy. This rule would not affect a substantial number of small entities involved in oil production. On lands that are zoned for rural residential, some amount of development may occur which may require section 404 authorizations from the ACOE or section 10(a)(1)(B) permits from the Service for federally listed species. Projected land uses in much of these areas are continued agriculture, low-density development, and recreation. In many cases, these kinds of land uses do not require Federal permits. We are not aware of a significant number of future activities that would require Federal permitting or authorization; therefore, we conclude that the proposed rule would not affect a substantial number of small entities involved in rural development.

We also considered the likelihood that this rule would result in significant economic impacts to small entities. In general, two different mechanisms in section 7 consultations could lead to additional regulatory requirements. First, if we conclude, in a biological opinion, that a proposed action is likely to jeopardize the continued existence of a species or adversely modify its critical habitat, we can offer "reasonable and prudent alternatives." Reasonable and prudent alternatives are alternative

actions that can be implemented in a manner consistent with the scope of the Federal agency's legal authority and jurisdiction, that are economically and technologically feasible, and that would avoid jeopardizing the continued existence of listed species or resulting in adverse modification of critical habitat. A Federal agency and an applicant may elect to implement a reasonable and prudent alternative associated with a biological opinion that has found jeopardy or adverse modification of critical habitat. An agency or applicant could alternatively choose to seek an exemption from the requirements of the Act or proceed without implementing the reasonable and prudent alternative. However, unless an exemption were obtained, the Federal agency or applicant would be at risk of violating section 7(a)(2) of the Act if it chose to proceed without implementing the reasonable and prudent alternatives. Secondly, if we find that a proposed action is not likely to jeopardize the continued existence of a listed animal species, we may identify reasonable and prudent measures designed to minimize the amount or extent of take and require the Federal agency or applicant to implement such measures through non-discretionary terms and conditions. However, the Act does not prohibit the take of listed plant species or require terms and conditions to minimize adverse effect to critical habitat. We may also identify discretionary conservation recommendations designed to minimize or avoid the adverse effects of a proposed action on listed species or critical habitat, help implement recovery plans, or to develop information that could contribute to the recovery of the species.

Based on our experience with section 7 consultations for all listed species, virtually all projects—including those that, in their initial proposed form, would result in jeopardy or adverse modification determinations in section 7 consultations—can be implemented successfully with, at most, the adoption of reasonable and prudent alternatives. These measures must be economically feasible and within the scope of authority of the Federal agency involved in the consultation. As we have a very limited consultation history for *Cirsium loncholepis*, *Eriodictyon capitatum*, and *Deinandra increscens* ssp. *villosa*, we can only describe the general kinds of actions that may be identified in future reasonable and prudent alternatives. These are based on our understanding of the needs of the species and the threats they face, especially as described in the final listing rule and in this proposed

critical habitat designation, as well as our experience with similar listed plants in California. In addition, the State of California listed *Eriodictyon capitatum* as rare in 1979, and *Cirsium loncholepis*, and *Deinandra increscens* ssp. *villosa* as threatened and endangered species, respectively, in 1990 under the California Endangered Species Act, therefore, we have also considered the kinds of actions required through State consultations for this species. The kinds of actions that may be included in future reasonable and prudent alternatives include conservation set-asides, management of competing non-native species, restoration of degraded habitat, construction of protective fencing, and regular monitoring. These measures are not likely to result in a significant economic impact to a substantial number of small entities.

As required under section 4(b)(2) of the Act, we will conduct an analysis of the potential economic impacts of this proposed critical habitat designation, and will make that analysis available for public review and comment before finalizing this designation. However, court deadlines require us to publish this proposed rule before the economic analysis can be completed. In the absence of this economic analysis, we have reviewed our previously published analyses of the likely economic impacts of designating critical habitat for other California plant species, such as *Chorizanthe robusta* var. *hartwegii* (Scotts Valley spineflower). Like *Cirsium loncholepis*, *Eriodictyon capitatum*, and *Deinandra increscens* ssp. *villosa*, *C. robusta* var. *hartwegii* is a native species restricted to certain specific habitat types along the central coast of California and requires similar protective and conservation measures. Our high-end estimate of the economic effects of designating one critical habitat unit of *C. robusta* var. *hartwegii* ranged from \$82,500 to \$287,500 over ten years.

In summary, we have considered whether this proposed rule would result in a significant economic effect on a substantial number of small entities. It would not affect a substantial number of small entities. Many of the parcels within this designation are located in areas where likely future land uses are not expected to result in Federal involvement or section 7 consultations. As discussed earlier, most of the private parcels within the proposed designation are currently being used for agricultural purposes and, therefore, are not likely to require any Federal authorization. In the remaining areas, Federal involvement—and thus section 7 consultations, the only trigger for economic impact under

this rule—would be limited to a subset of the area proposed. The most likely future section 7 consultations resulting from this rule would be for ACOE permits and EPA permits related to oil development and remediation. These consultations would likely occur on only a subset of the total number of parcels and therefore not likely to affect a substantial number of small entities. This rule would result in project modifications only when proposed Federal activities would destroy or adversely modify critical habitat. While this may occur, it is not expected frequently enough to affect a substantial number of small entities. Even when it does occur, we do not expect it to result in a significant economic impact, as the measures included in reasonable and prudent alternatives must be economically feasible and consistent with the proposed action. Therefore, since we are certifying that the proposed designation of critical habitat for *Cirsium loncholepis*, *Eriodictyon capitatum*, and *Deinandra increscens* ssp. *villosa* will not have a significant economic impact on a substantial number of small entities, and an initial regulatory flexibility analysis is not required.

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

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

Executive Order 13211

On May 18, 2001, the President issued an Executive Order (E.O. 13211) on regulations that significantly affect energy supply, distribution, and use. Executive Order 13211 requires agencies to prepare Statements of Energy Effects when undertaking certain actions. Although this rule is a significant regulatory action under Executive Order 12866, it is not expected to significantly affect energy supplies, distribution, or use. Therefore, this action is not a significant energy action and no Statement of Energy Effects is required.

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

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

(a) This rule, as proposed, will not "significantly or uniquely" affect small governments. A Small Government Agency Plan is not required. Small governments will not be affected unless they propose an action requiring Federal funds, permits or other authorization. Any such activity will require that the Federal agency ensure that the action will not adversely modify or destroy designated critical habitat.

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

Takings

In accordance with Executive Order 12630, this rule does not have significant takings implications. A takings implication assessment is not required. As discussed above, the designation of critical habitat affects only Federal agency actions. This rule will not take private property. As discussed above, the designation of critical habitat affects only Federal agency actions; it does not provide additional protection for the species on non-Federal lands regarding actions that lack any Federal involvement. Further, the Act provides mechanisms, through section 7 consultation, to resolve apparent conflicts between proposed Federal actions, including Federal funding or permitting of actions on private land, and the conservation of species, including the avoidance of destruction or adverse modification of designated critical habitat. Should projects be proposed which require Federal funding, permitting or authorization, we anticipate that, through section 7 consultation, such projects can be implemented in ways consistent with the conservation of the species and the avoidance of destruction or adverse modification to critical habitat. Therefore, this rule would not result in takings.

Landowners in areas that are included in the designated critical habitat will continue to have opportunity to utilize their property in ways consistent with the survival and recovery of *Cirsium loncholepis*, *Eriodictyon capitatum*, and *Deinandra increscens ssp. villosa*.

Federalism

In accordance with Executive Order 13132, the rule does not have significant Federalism effects. A Federalism assessment is not required. In keeping with Department of the Interior policy, we requested information from, and coordinated development of this critical habitat designation, with appropriate State resource agencies in California. The designation of critical habitat in areas currently occupied by *Cirsium loncholepis*, *Eriodictyon capitatum*, or *Deinandra increscens ssp. villosa* imposes no additional restrictions to those currently in place, and therefore, has little incremental impact on State and local governments and their activities. The designations may have some benefit to these governments in that the areas essential to the conservation of these species are more clearly defined, and the primary constituent elements of the habitat necessary to the survival of these species are specifically identified. While this definition and identification does not alter where and what federally sponsored activities may occur, it may assist these local governments in long-range planning (rather than waiting for case-by-case section 7 consultations to occur).

In unoccupied areas, or areas of uncertain occupancy, designation of critical habitat could trigger additional review of Federal activities under section 7 of the Act, and may result in additional requirements on Federal activities to avoid destroying or adversely modifying critical habitat. Any development that lacked Federal involvement would not be affected by the critical habitat designation. Should a federally funded, permitted, or implemented project be proposed that may affect designated critical habitat, we will work with the Federal action agency and any applicant, through section 7 consultation, to identify ways to implement the proposed project while minimizing or avoiding any adverse effect to the species or critical habitat.

Civil Justice Reform

In accordance with Executive Order 12988, the Office of the Solicitor has determined that this rule does not unduly burden the judicial system and does meet the requirements of sections 3(a) and 3(b)(2) of the Order. We are proposing to designate critical habitat in accordance with the provisions of the Endangered Species Act. The rule uses standard property descriptions and identifies the primary constituent elements within the designated areas to

assist the public in understanding the habitat needs of *Cirsium loncholepis*, *Eriodictyon capitatum*, and *Deinandra increscens ssp. villosa*.

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

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

National Environmental Policy Act

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

Government-to-Government Relationship With Tribes

In accordance with the President's memorandum of April 29, 1994, "Government-to-Government Relations With Native American Tribal Governments" (59 FR 22951), Executive Order 13175, and 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with federally recognized Tribes on a government-to-government basis. We have determined that there are no Tribal lands essential for the conservation of *Cirsium loncholepis*, *Eriodictyon capitatum*, or *Deinandra increscens ssp. villosa* because they do not support populations, nor do they provide essential habitat. Therefore, critical habitat for *Cirsium loncholepis*, *Eriodictyon capitatum*, and *Deinandra increscens ssp. villosa* has not been designated on Tribal lands.

References Cited

A complete list of all references cited herein, as well as others, is available upon request from the Ventura Fish and Wildlife Office (see **ADDRESSES** section).

Author

The primary author of this proposed rule is Constance Rutherford (see ADDRESSES section).

List of Subjects in 50 CFR Part 17

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

Proposed Regulation Promulgation

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

PART 17—[AMENDED]

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

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

2. In § 17.12(h) revise the entries for *Cirsium loncholepis*, *Eriodictyon capitatum*, remove the entry for *Hemizonia increscens* ssp. *villosa*, and add an entry for *Deinandra increscens* ssp. *villosa* in alphabetical order under “FLOWERING PLANTS” to read as follows:

§ 17.12 Endangered and threatened plants.

* * * * *
(h) * * *

Species		Historic range	Family	Status	When listed	Critical habitat	Special rules
Scientific name	Common name						
FLOWERING PLANTS							
* <i>Cirsium loncholepis</i>	* La Graciosa thistle	* U.S.A. (CA)	* Asteraceae-sun-flower.	* E	* 691	* 17.96(b)	* NA
* <i>Deinandra increscens</i> ssp. <i>villosa</i> .	* Gaviota tarplant	* U.S.A. (CA)	* Asteraceae-sun-flower.	* E	* 691	* 17.96(b)	* NA
* <i>Eriodictyon capitatum</i> .	* Lompoc yerba santa	* U.S.A. (CA)	* Hydrophyllaceae-waterleaf.	* E	* 691	* 17.96(b)	* NA
* 	* 	* 	* 	* 	* 	* 	*

3. In § 17.96, as proposed to be amended at 65 FR 66865, November 7, 2000, amend paragraph (b) by adding entries for *Cirsium loncholepis*, *Deinandra increscens* ssp. *villosa*, in alphabetical order under Family Asteraceae and adding an entry for *Eriodictyon capitatum* under Family Hydrophyllaceae to read as follows:

Sec. 17.96 Critical Habitat—Plants.

* * * * *
(b) * * *

Family—Asteraceae: *Cirsium loncholepis* (La Graciosa thistle)

(1) Critical habitat units are depicted for San Luis Obispo and Santa Barbara counties, California, on the maps below.

(2) The primary constituent elements of critical habitat for *Cirsium loncholepis* are those habitat components that provide:

(i) Moist sandy soils associated with dune swales, margins of dune lakes and

marshes, and river margins from the Guadalupe Dune complex along the coast and inland to Cañada de las Flores;

(ii) Plant communities that support associated species, including coastal dune, coastal scrub, and wetland communities, particularly where the following associated species are found:

Juncus species (spp.) (rush), *Scirpus* spp. (tule), *Salix* spp. (willow), *Toxicodendron diversilobum* (poison oak), *Distichlis spicata* (salt grass), and *Baccharis pilularis* (coyote brush); and

(iii) Hydrologic processes, particularly the maintenance of a stable groundwater table that supports the soil moisture regime that appears to be favored by *Cirsium loncholepis*.

(3) Critical habitat does not include existing features and structures, such as buildings, roads, aqueducts, oil pads, railroads, airports, other paved areas, lawns, large areas of closed canopy

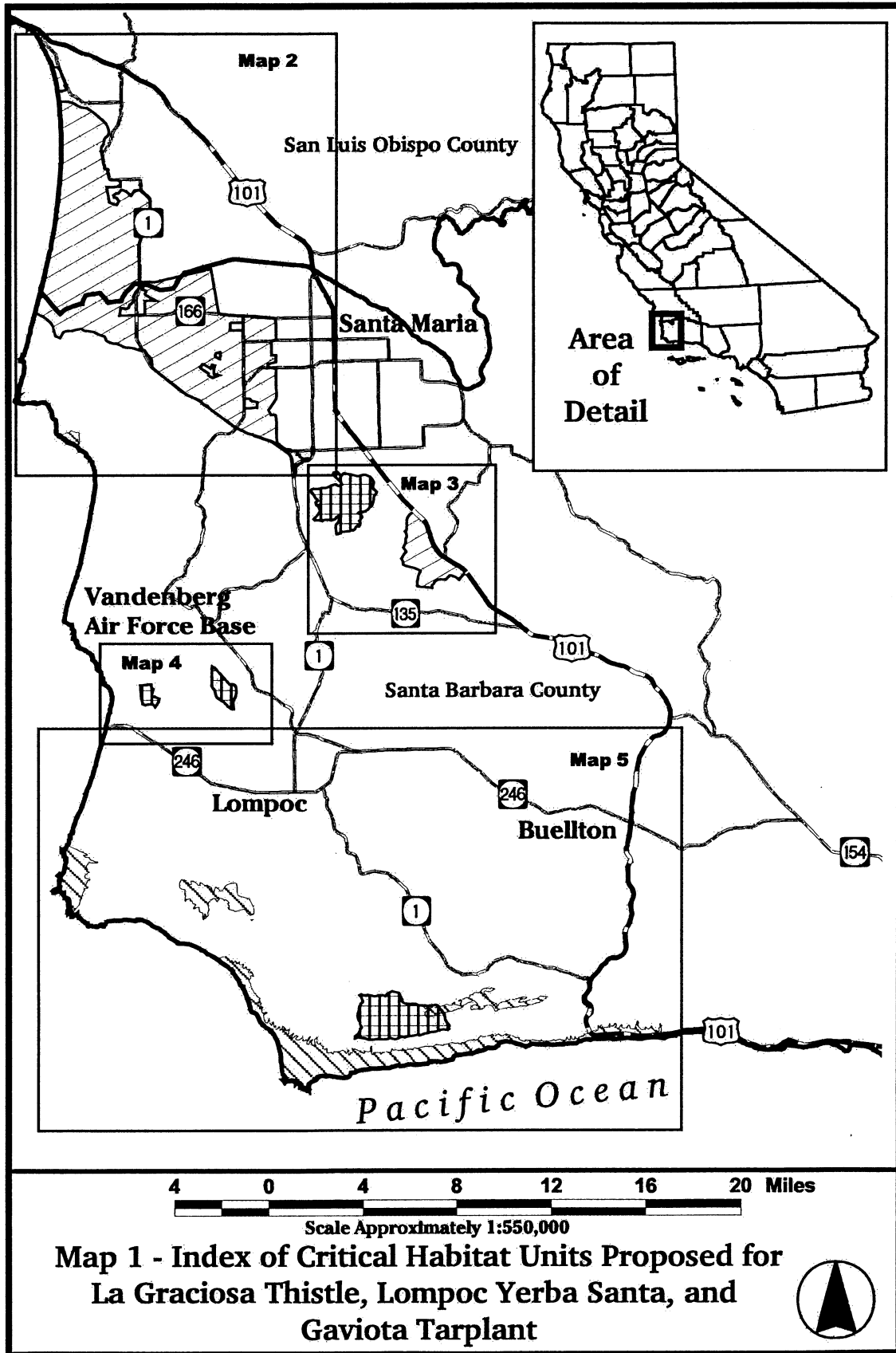
chaparral, agricultural fields, and other urban landscaped areas not containing one or more of the primary constituent elements. Federal actions limited to those areas, therefore, would not trigger a section 7 consultation, unless they affect the species and/or primary constituent elements in adjacent critical habitat.

(4) Critical habitat map units.

(i) Township/Range/Section boundaries are based upon Public Land Survey System. Within the historical boundaries of former Spanish Land Grants, boundaries are based upon section lines that are extensions to the Public Land Survey System developed by the California Department of Forestry and obtained by the Service from the State of California’s Stephen P. Teale Data Center.

(ii) Map 1-Index follows:

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(5) *Pismo-Orcutt Unit, San Luis Obispo and Santa Barbara counties, California.*

(i) From USGS 1:24,000 quadrangle maps Pismo Beach, Oceano, Point Sal, Guadalupe, Santa Maria, and Orcutt lands bounded by the following UTM zone 10 NAD83 coordinates (E,N):

715523,3889170; 715666,3889170;
715853,3889160; 715917,3889140;
715964,3889140; 715962,3889080;
716218,3888440; 716230,3888410;
716243,3888380; 716463,3887840;
716386,3887810; 716452,3887640;
716473,3887520; 716482,3887490;
716209,3887390; 716196,3887450;
715938,3887410; 715885,3887710;
715816,3888060; 715764,3888240;
715651,3888700; 715597,3888960;
715537,3889120; 715523,3889170;
727233,3868210; 726320,3867460;

728344,3870470; 729322,3864880;
722196,3872490; 722175,3872580;
722251,3872780; 719503,3880390;
719421,3880380; 719592,3879290;
720078,3879100; 720208,3879190;
720271,3879400; 720122,3879630;
719918,3879640; 719909,3879790;
720102,3879960; 720259,3879970;
720447,3880190; 720725,3880140;
720797,3880100; 721171,3879780;
721413,3880180; 721836,3880180;
721985,3880020; 722408,3879620;
722470,3879550; 722474,3879500;
722481,3879060; 722491,3878750;
722307,3878080; 721995,3877100;
721713,3876200; 721695,3876160;
721693,3876120; 721725,3875150;
721745,3874170; 721728,3873420;
722105,3873470; 722854,3873430;

723618,3873600; 724862,3873910;
726929,3874380; 727500,3871120;
729109,3870940; 730036,3870930;
731607,3870790; 731658,3870500;
731676,3869190; 731315,3869130;
731295,3868100; 731645,3868100;
731642,3867580; 731052,3867430;
731054,3867150; 731647,3867160;
731659,3866150; 731671,3865510;
731682,3864900; 731410,3864520;
731110,3864070; 731279,3863710;
731599,3863710; 731661,3863640;
731676,3863300; 731684,3862630;

731683,3862230; 731703,3861840;
731711,3861650; 732128,3861310;

732393,3861180; 732484,3861150;
732663,3861180; 732735,3861130;
732741,3861030; 733229,3861050;
733161,3860760; 733338,3860770;
733358,3860650; 733408,3860560;
733516,3860490; 733646,3860470;
733988,3860480; 734106,3860450;
734047,3860390; 733964,3860350;
733843,3860320; 733695,3860310;
733521,3860290; 733525,3860120;
733391,3860090; 733283,3860000;
733171,3859900; 733096,3859760;
733095,3859610; 733102,3859410;
732973,3859390; 732931,3859770;
732806,3860190; 732780,3860510;
732694,3860710; 732524,3860880;
732374,3861000; 732261,3861080;
731979,3861290; 731654,3861530;
731410,3861710; 730729,3861950;
729739,3862310; 729591,3862370;
729274,3862520; 728747,3862760;
726799,3864220; 726592,3864370;

726318,3864530; 726167,3864690;
726078,3864780; 725830,3864890;
725285,3865120; 725080,3865220;
723084,3866840; 722642,3867210;
722667,3867420; 722650,3867700;
722570,3867860; 722439,3868000;
722298,3868130; 722239,3868290;
722128,3868480; 721998,3868450;
721858,3868430; 721318,3868610;
720735,3868660; 720375,3868850;
720085,3868950; 719877,3868950;
719566,3869040; 719335,3869200;
719253,3869470; 719008,3869550;
718688,3869700; 718485,3869790;
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717554,3870030; 717147,3869950;
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716683,3869880; 716430,3869850;
716270,3869750; 716038,3869360;

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715678,3877370; 715933,3879070;
715974,3879300; 716128,3881100;
716227,3882870; 716081,3886670;
716498,3886650; 716686,3886620;
716998,3886530; 717353,3886310;

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719201,3885210; 719327,3885070;
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719522,3884170; 719455,3884100;
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719469,3881680; 719557,3881060;
719589,3880990; 719636,3880950;
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720195,3880940; 720367,3880790;
720374,3880420; 719826,3880410;
719503,3880390; 715523,3889170.

(ii) Excluding lands bounded by:
722251,3872780; 722004,3872860;
722048,3873080; 721743,3873040;
721484,3872710; 721323,3872370;
721362,3872120; 721154,3871830;
721033,3871810; 720961,3871540;
720858,3871510; 720744,3871460;
720552,3871560; 720398,3871530;
720372,3871320; 720344,3870990;
722145,3871020; 722131,3872070;
722948,3872080; 722251,3872780.

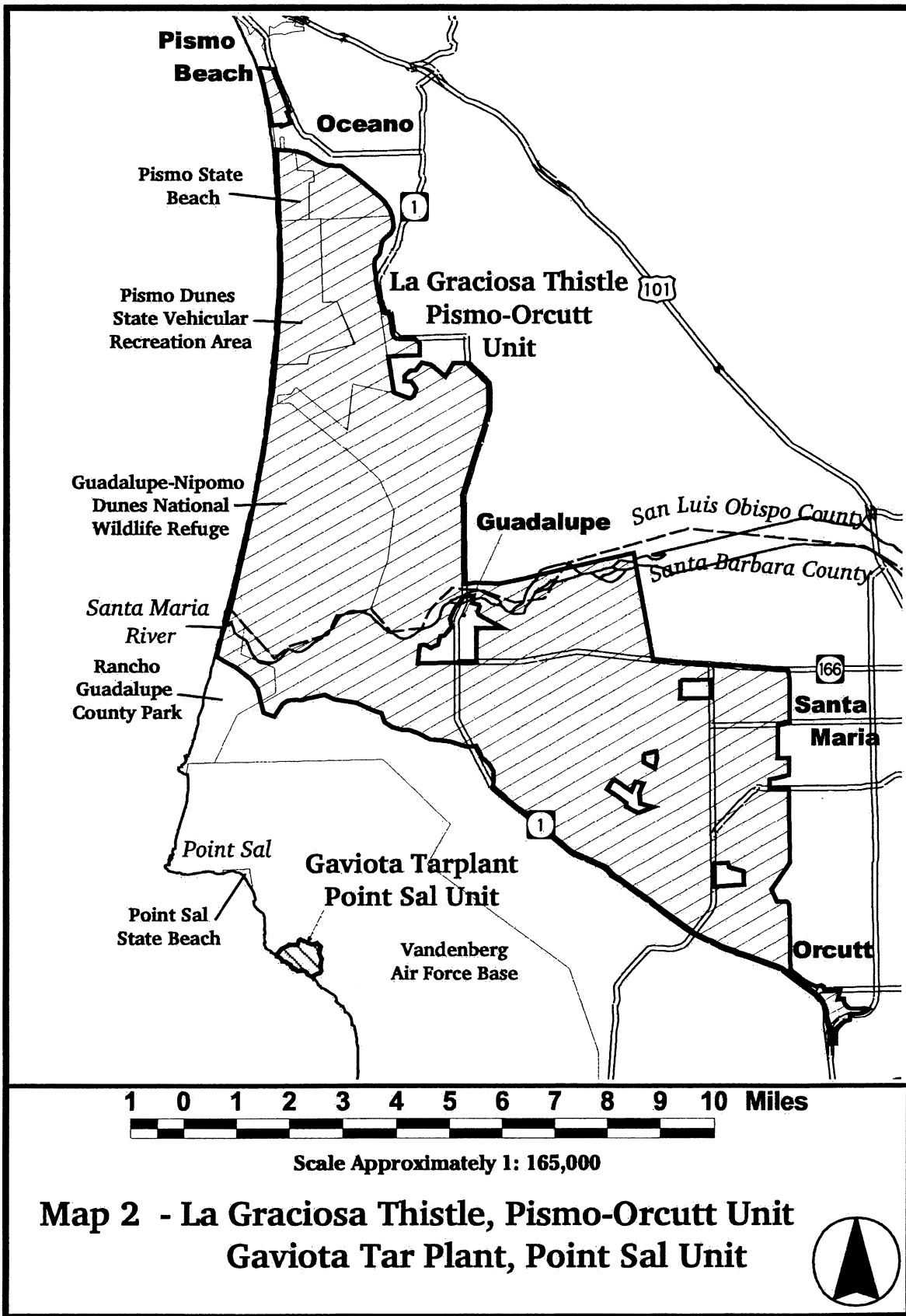
(iii) Excluding lands bounded by:
728326,3869910; 729252,3869920;
729230,3870480; 728344,3870470;
728326,3869910.

(iv) Excluding lands bounded by:
727237,3867980; 727569,3867780;
727637,3868070; 727613,3868310;
727233,3868210; 727237,3867980.

(v) Excluding lands bounded by:
726119,3867150; 726736,3866720;
726723,3866620; 727074,3866420;
727539,3866610; 727137,3866710;
727118,3867030; 727229,3867320;
727007,3867370; 726890,3867090;
726320,3867460; 726119,3867150.

(vi) Excluding lands bounded by:
729324,3864170; 729324,3864160;
730275,3864230; 730265,3864640;
729817,3864760; 729804,3864850;
729771,3864900; 729322,3864880;
729324,3864170.

(vii) Map 2 follows:



(6) Cañada de Las Flores Unit, Santa Barbara County, California.

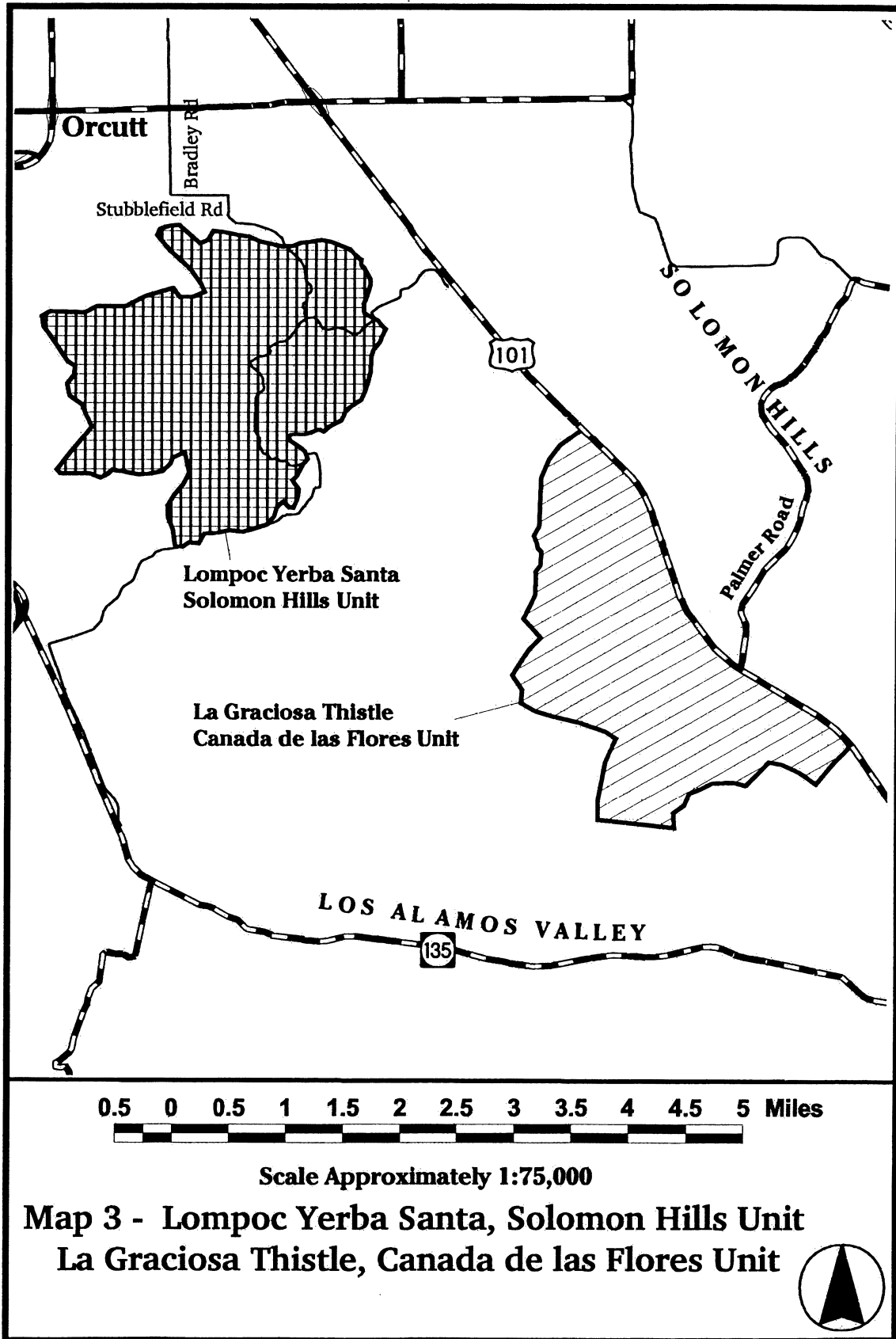
(i) From USGS 1:24,000 quadrangle map Sisquoc, lands bounded by the

following UTM zone 10 NAD83 coordinates (E,N): 743242,3854050;

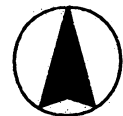
743285,3853980; 743460,3853740;
743664,3853460; 743740,3853390;
743801,3853340; 743927,3853240;
744013,3853180; 744017,3853180;
744471,3852900; 744646,3852800;
744649,3852800; 744755,3852730;
744783,3852710; 744846,3852680;
745005,3852590; 745012,3852580;
745026,3852570; 745122,3852520;
745235,3852440; 745424,3852280;
745580,3852070; 745321,3851810;
745104,3851550; 744861,3851710;
744617,3851820; 744438,3851850;
744110,3851530; 743959,3851570;

743794,3851570; 743626,3851550;
743477,3851470; 743313,3851410;
743244,3851240; 743088,3851130;
743105,3850920; 742033,3851040;
742029,3851290; 742145,3851860;
742218,3852020; 742293,3852190;
742144,3852290; 741773,3852410;
741394,3852500; 741139,3852580;
740945,3852690; 740959,3852880;
740822,3853080; 741050,3853450;
741214,3853620; 741089,3853760;
740973,3853890; 741127,3854220;
741136,3854370; 741142,3854470;
741137,3854560; 741203,3854650;

741221,3854840; 741163,3854900;
741154,3854980; 741111,3855070;
741186,3855200; 741212,3855890;
741324,3856150; 741478,3856350;
741807,3856590; 742081,3856310;
742528,3855890; 742624,3855720;
742758,3855430; 742983,3854780;
742988,3854760; 743059,3854550;
743072,3854510; 743072,3854510;
743076,3854500; 743084,3854480;
743139,3854310; 743181,3854180;
743196,3854160;
743242,3854050; 743242,3854050.
(ii) Map 3 follows:



**Map 3 - Lompoc Yerba Santa, Solomon Hills Unit
La Graciosa Thistle, Canada de las Flores Unit**



Family—Asteraceae: *Deinandra* *increscens* ssp. *villosa* (Gaviota tarplant).

(1) Critical habitat units are depicted for Santa Barbara County, California, on the maps below.

(2) The primary constituent elements of critical habitat for *Deinandra increscens* ssp. *villosa* are the habitat components that provide:

(i) Sandy soils associated with coastal terraces adjacent to the coast or uplifted marine sediments at interior sites up to 5.6 km (3.5 mi) inland from the coast and

(ii) Plant communities where it is associated with needlegrass grasslands, which support *Nassella* spp. (needlegrass), and other herbs and grasses; and coastal sage scrub communities where the grasslands intergrade with and support *Artemisia californica* (California sagebrush), *Baccharis pilularis* (coyote bush), *Hazardia squarrosa* (sawtooth golden bush), and *Eriogonum fasciculatum* (California buckwheat).

(3) Critical habitat does not include existing features and structures, such as buildings, roads, aqueducts, oil pads, railroads, airports, other paved areas, lawns, large areas of closed canopy chaparral, agricultural fields, and other urban landscaped areas not containing one or more of the primary constituent elements. Federal actions limited to those areas, therefore, would not trigger a section 7 consultation, unless they affect the species and/or primary constituent elements in adjacent critical habitat.

(4) *Point Sal Unit*. Santa Barbara County, California.

(i) See Family Asteraceae: *Cirsium loncholepis* (La Graciosa thistle), paragraph (5)(vii) Map 2.

(ii) From USGS 1:24,000 quadrangle maps Point Sal, Guadalupe, Casmalia, lands bounded by the following UTM zone 10 NAD83 coordinates (E,N): 716072,3862070; 716140,3862150; 716181,3862170; 716202,3862190; 716221,3862240; 716255,3862290; 716355,3862330; 716441,3862380; 716489,3862410; 716602,3862410; 716686,3862400; 716745,3862420; 716777,3862520; 716843,3862570; 717002,3862500; 717111,3862450; 717211,3862420; 717333,3862470; 717437,3862360; 717391,3862150; 717467,3861980; 717433,3861750; 717459,3861620; 717417,3861540; 717361,3861540; 717287,3861510; 717257,3861500; 717213,3861430; 717183,3861450; 717124,3861480; 717073,3861500; 717045,3861530; 717027,3861570; 716980,3861610; 716926,3861630; 716872,3861650; 716852,3861630; 716813,3861620;

716792,3861620; 716731,3861630; 716682,3861660; 716641,3861670; 716630,3861680; 716635,3861710; 716605,3861720; 716585,3861710; 716563,3861720; 716542,3861740; 716528,3861780; 716530,3861810; 716510,3861830; 716486,3861830; 716445,3861850; 716428,3861870; 716409,3861890; 716373,3861900; 716342,3861900; 716310,3861900; 716296,3861900; 716297,3861930; 716274,3861950; 716261,3861970; 716180,3862030; 716072,3862070.

(5) *Sudden Peak Unit, Santa Barbara County, California*. From USGS 1:24,000 quadrangle maps Tranquillon Mountain, Lompoc Hills, Santa Rosa Hills, lands bounded by the following UTM zone 10 NAD83 coordinates (E,N): 724666, 3829350; 724689, 3829390; 724710, 3829420; 724742, 3829500; 724748, 3829510; 724772, 3829520; 724802, 3829490; 724864, 3829440; 724894, 3829450; 724903, 3829460; 724923, 3829490; 724952, 3829510; 724982, 3829500; 724993, 3829460; 725000, 3829450; 725013, 3829430; 725045, 3829430; 725100, 3829430; 725105, 3829430; 725116, 3829420; 725120, 3829410; 725124, 3829350; 725129, 3829320; 725139, 3829300; 725145, 3829290; 725167, 3829280; 725196, 3829290; 725210, 3829290; 725229, 3829280; 725242, 3829270; 725252, 3829260; 725266, 3829230; 725267, 3829200; 725289, 3829140; 725294, 3829130; 725325, 3829110; 725354, 3829110; 725367, 3829140; 725375, 3829150; 725383, 3829160; 725444, 3829140; 725450, 3829140; 725456, 3829150; 725460, 3829160; 725460, 3829180; 725452, 3829200; 725437, 3829230; 725430, 3829260; 725427, 3829310; 725432, 3829350; 725431, 3829380; 725425, 3829400; 725425, 3829400; 725406, 3829410; 725427, 3829420; 725435, 3829420; 725466, 3829420; 725496, 3829400; 725526, 3829410; 725556, 3829420; 725581, 3829410; 725586, 3829410; 725617, 3829380; 725651, 3829330; 725679, 3829310; 725708, 3829340; 725738, 3829340; 725774, 3829300; 725786, 3829260; 725796, 3829240; 725862, 3829220; 725869, 3829220; 725888, 3829190; 725912, 3829130; 725917, 3829120; 725956, 3829090; 725986, 3829080; 726017, 3829070; 726048, 3829070; 726056, 3829090; 726061, 3829130; 726069, 3829170; 726090, 3829220; 726100, 3829280; 726112, 3829300; 726130, 3829310; 726163, 3829290; 726242, 3829220; 726253, 3829200; 726284, 3829170; 726314, 3829160; 726322, 3829160; 726334, 3829160; 726478, 3829080; 726500, 3829060; 726529, 3829020; 726558, 3829050; 726570, 3829080; 726584,

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(6) *Arguello Unit, Santa Barbara County, California*. From USGS 1:24,000 quadrangle map Point Arguello and Tranquillon Mountain, lands bounded by the following UTM zone 10 NAD83 coordinates (E,N): 716887, 3827050; 716862, 3827070; 716821, 3827070; 716812, 3827110; 716799, 3827120; 716754, 3827110; 716712, 3827070; 716686, 3827100; 716663, 3827100; 716654, 3827140; 716642, 3827130; 716615, 3827090; 716594, 3827090; 716585, 3827160; 716542, 3827140; 716524, 3827160; 716523, 3827200; 716561, 3827230; 716602, 3827200; 716693, 3827230; 716733, 3827270; 716764, 3827320; 716758, 3827380; 716707, 3827480; 716671, 3827510; 716587, 3827530; 716596, 3827570; 716588, 3827610; 716567, 3827630; 716580, 3827710; 716618, 3827740; 716660, 3827790; 716667, 3827910; 716644, 3827940; 716615, 3827950; 716559, 3827950; 716515, 3827990; 716537, 3828020; 716591, 3828010; 716624, 3828010; 716646, 3828060; 716645, 3828110; 716593, 3828130; 716570, 3828170; 716519, 3828170; 716364, 3828170; 716348, 3828190; 716355, 3828240; 716326, 3828260; 716320, 3828290; 716284, 3828330; 716271, 3828360; 716229, 3828400; 716229, 3828410; 716193, 3828430; 716195, 3828450; 716270, 3828480; 716273, 3828500; 716257, 3828510; 716194, 3828490; 716141, 3828490; 716122, 3828500; 716117, 3828540; 716134, 3828570; 716131, 3828590; 716118, 3828610; 716010, 3828660; 715949, 3828640; 715929, 3828630; 715863, 3828610; 715790, 3828620; 715771, 3828640; 715763, 3828670; 715745, 3828680; 715730, 3828680; 715713, 3828630; 715691, 3828610; 715665, 3828600; 715626, 3828570; 715605, 3828570; 715612, 3828610; 715604, 3828620; 715559, 3828600; 715531, 3828600; 715507, 3828620; 715501, 3828670; 715514, 3828690; 715567, 3828680; 715605, 3828710; 715620, 3828790; 715663, 3828830; 715719, 3828840; 715765, 3828790; 715819, 3828800; 715904, 3828840; 715941, 3828880; 715961, 3828890; 715973, 3828940; 715962, 3828980; 716015, 3829000; 716024, 3829030; 716011, 3829050; 715941, 3829100; 715927, 3829150; 715970, 3829300; 715980, 3829310; 715977, 3829420; 715936, 3829430; 715928, 3829450; 715937, 3829500; 715964, 3829540; 716000, 3829550; 715983, 3829590; 715960, 3829620; 715975, 3829640; 716032, 3829670; 716027, 3829690; 715976, 3829700; 715965, 3829710; 715964, 3829770; 715902, 3829820; 715959, 3829890; 716024, 3829910; 716068, 3829900; 716098, 3829910; 716123, 3829930; 716179, 3829940; 716216, 3829970; 716250, 3830060; 716252, 3830080; 716289, 3830130; 716319, 3830240; 716329, 3830380; 716357, 3830450; 716357, 3830490; 716370, 3830550; 716369, 3830590; 716411, 3830680; 716410, 3830700; 716432, 3830740; 716445, 3830830; 716434, 3830880; 716395, 3830920; 716389, 3830970; 716373, 3831000; 716372, 3831020; 716420, 3831040;

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(7) *Conception-Gaviota Unit, Santa Barbara County, California.* From USGS 1:24,000 quadrangle maps Gaviota, Lompoc Hills, Point Conception, Sacate, and Tranquillon Mountain, lands bounded by the following UTM zone 10 NAD83 coordinates (E,N): 731814, 3817560; 731795, 3817620; 731774, 3817650; 731751, 3817730; 731736, 3817760; 731617, 3818030; 731519, 3818180; 731389, 3818380; 731332, 3818440; 731316, 3818460; 731306, 3818460; 731297, 3818470; 731249, 3818490; 731184, 3818550; 731168, 3818590; 731134, 3818630; 731068, 3818660; 731065, 3818660; 730979, 3818710; 730956, 3818720; 730869, 3818760; 730848, 3818790; 730782, 3818870; 730689, 3818940; 730666, 3818960; 730559, 3819070; 730477, 3819200; 730432, 3819360; 730424, 3819390; 730344, 3819520; 730314, 3819580; 730299, 3819600; 730264, 3819650; 730225, 3819710; 730189, 3819740; 730139, 3819790; 730054, 3819820; 729980, 3819830; 729906, 3819850; 729880, 3819880; 729787, 3820160; 729779, 3820210; 729772, 3820260; 729750, 3820310; 729723, 3820380; 729713, 3820440; 729707, 3820490; 729678, 3820530; 729677, 3820540; 729672, 3820550; 729643, 3820620; 729623, 3820670; 729617, 3820730; 729586, 3820820; 729584, 3820840; 729583, 3820850; 729546,

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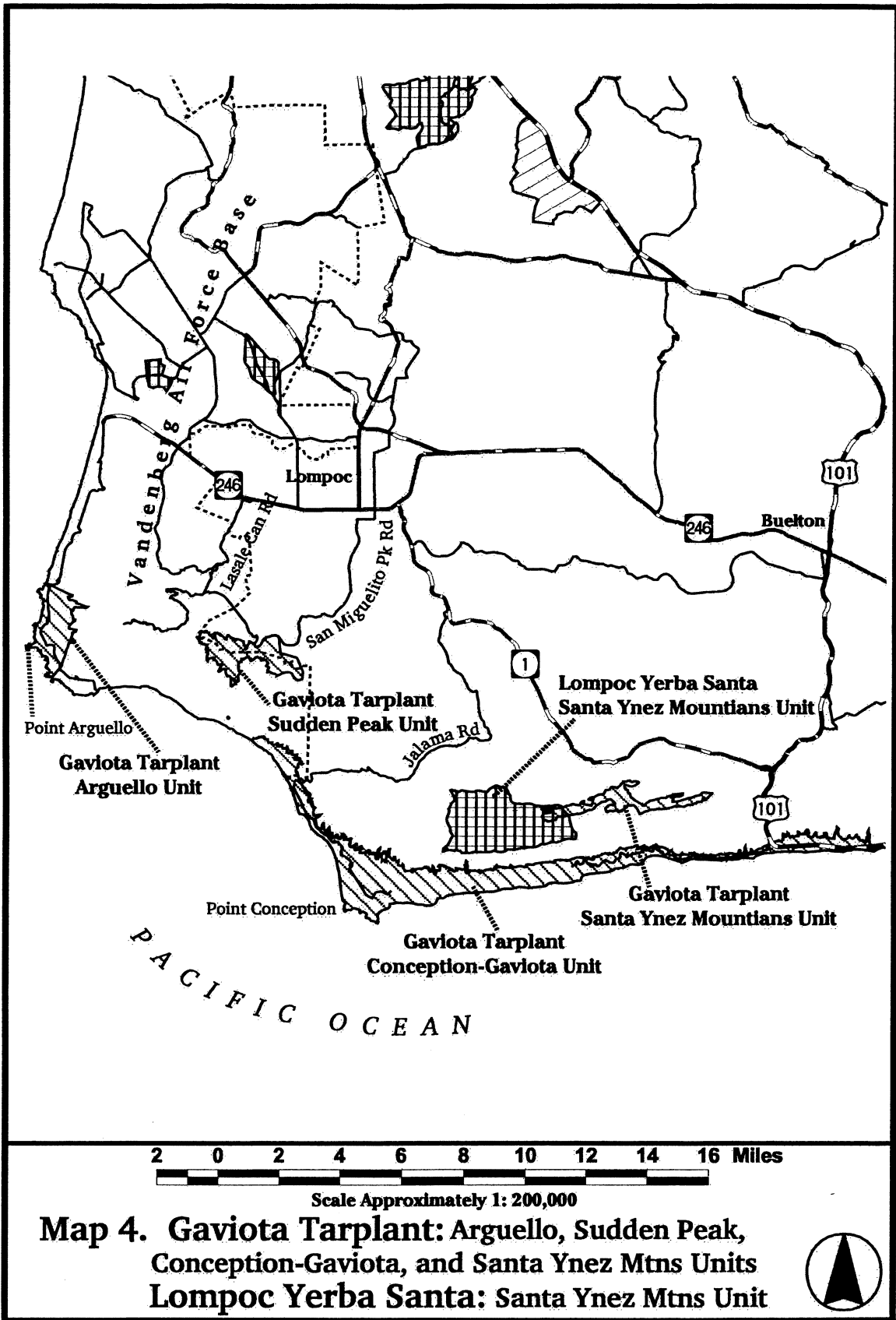
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(8) *Santa Ynez Unit, Santa Barbara County, California.* From USGS 1:24,000 quadrangle maps Santa Rosa Hills and Sacate, lands bounded by the following UTM zone 10 NAD83 coordinates (E,N): 747710, 3821530; 747708, 3821520; 747676, 3821490; 747651, 3821470; 747601, 3821430; 747545, 3821390; 747491, 3821350; 747409, 3821330; 747383, 3821320; 747323, 3821300; 747288, 3821300; 747240, 3821300; 747204, 3821310; 747150, 3821330; 747123, 3821340; 747104, 3821350; 747051, 3821380; 747023, 3821380; 746956, 3821370; 746929, 3821340;

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747710, 3821530;

(9) Map 4 follows:



Family Hydrophyllaceae: *Eriodictyon capitatum* (Lompoc yerba santa)

(1) Critical habitat units are depicted for Santa Barbara County, California, on the maps below.

(2) The primary constituent elements of critical habitat for *Eriodictyon capitatum* are the habitat components that provide:

(i) Soils with a large component of sand and that tend to be acidic;

(ii) Plant communities that support associated species, including maritime chaparral, particularly where the following associated species are found: *Dendromecon rigida* (bush poppy), California scrub oak, Santa Cruz Island scrub oak, and *Ceanothus cuneatus* (buck brush); and in southern bishop pine forests that intergrade with chaparral *Arctostaphylos* spp. (manzanita) and *Salvia mellifera* (black sage); and

(iii) Habitat directly adjacent upslope and downslope from known populations, as this species appear to spread primarily through vegetative reproduction.

(3) Critical habitat does not include existing features and structures, such as buildings, roads, aqueducts, oil pads, railroads, airports, other paved areas, lawns, large areas of closed canopy chaparral, agricultural fields, and other urban landscaped areas not containing one or more of the primary constituent elements. Federal actions limited to those areas, therefore, would not trigger a section 7 consultation, unless they affect the species and/or primary constituent elements in adjacent critical habitat.

(4) *Santa Ynez Unit, Santa Barbara County, California.*

(i) See Family-Asteraceae: *Deinandra increscens* ssp. *villosa* (Gaviota tarplant), paragraph (9).

(ii) From USGS 1:24,000 quadrangle maps Lompoc Hills, Point Conception, Sacate, lands bounded by the following UTM zone 10 NAD83 coordinates (E,N): 739493,3817820; 739352,3817850; 739008,3817860; 738828,3817800; 738440,3817810; 738377,3817820; 738294,3817900; 738288,3817900; 738104,3817960; 738034,3817960; 738028,3817900; 738026,3817900; 737925,3817940; 737892,3817950; 737726,3817950; 737666,3818000; 737619,3817970; 737540,3817910; 737423,3817890; 737416,3817960; 737414,3818040; 737489,3818070; 737612,3818160; 737622,3818190; 737676,3818230; 737715,3818280; 737744,3818320; 737757,3818380; 737791,3818440; 737809,3818500; 737838,3818550; 737862,3818600; 737916,3818660; 737924,3818710; 737903,3818760; 737865,3818820;

737823,3818880; 737791,3818950; 737804,3819010; 737791,3819100; 737774,3819180; 737701,3819270; 737662,3819360; 737624,3819450; 737611,3819560; 737633,3819670; 737661,3819750; 737679,3819800; 737708,3819870; 737731,3819930; 737729,3820000; 737717,3820070; 737725,3820140; 737753,3820210; 737777,3820240; 737816,3820290; 737829,3820360; 737868,3820430; 737942,3820490; 738005,3820560; 738019,3820610; 737996,3820700; 737947,3820820; 737893,3820930; 737840,3821030; 737813,3821090; 737897,3821130; 738005,3821060; 738136,3821070; 738167,3821060; 738214,3821020; 738264,3821030; 738308,3821050; 738328,3821090; 738373,3821110; 738439,3821080; 738520,3821060; 738581,3821060; 738652,3821060; 738698,3821030; 738759,3821030; 738830,3821010; 738891,3821010; 738951,3821010; 739027,3821020; 739077,3821020; 739111,3821060; 739161,3821090; 739227,3821090; 739288,3821070; 739384,3821050; 739541,3821060; 739607,3821020; 739669,3820990; 739714,3821020; 739762,3821080; 739796,3821140; 739825,3821180; 739969,3821260; 740158,3821340; 740234,3821350; 740295,3821320; 740387,3821280; 740453,3821280; 740503,3821280; 740575,3821270; 740631,3821250; 740677,3821220; 740710,3821150; 740767,3821070; 740784,3821010; 740786,3820950; 740822,3820930; 740869,3820870; 740917,3820790; 740919,3820720; 740917,3820630; 740945,3820540; 741007,3820480; 741084,3820430; 741186,3820400; 741298,3820400; 741383,3820400; 741510,3820380; 741666,3820390; 741747,3820400; 741808,3820400; 741863,3820390; 741990,3820390; 742184,3820310; 742250,3820300; 742356,3820290; 742458,3820280; 742554,3820270; 742604,3820280; 742645,3820260; 742690,3820260; 742741,3820260; 742817,3820270; 742907,3820270; 742973,3820280; 743029,3820250; 743100,3820250; 743139,3820280; 743224,3820310; 743315,3820320; 743406,3820320; 743461,3820320; 743528,3820300; 743579,3820260; 743632,3820200; 743644,3820130; 743686,3820090; 743727,3820040; 743779,3819990; 743826,3819960; 743857,3819910; 743889,3819860; 743926,3819820; 743958,3819770; 743999,3819720; 744026,3819680; 744028,3819620; 744039,3819570; 744061,3819530; 744067,3819490; 744074,3819420; 744096,3819360; 744108,3819300; 744104,3819260; 744146,3819210; 744162,3819170;

744190,3819080; 744211,3819050; 744228,3819020; 744244,3818970; 744300,3818940; 744347,3818910; 744373,3818900; 744394,3818840; 744417,3818780; 744403,3818730; 744383,3818720; 744395,3818650; 744401,3818620; 744407,3818580; 744388,3818560; 744376,3818540; 744260,3818520; 744138,3818530; 744059,3818550; 743870,3818540; 743706,3818470; 743584,3818440; 743363,3818350; 743096,3818380; 742902,3818290; 742736,3818260; 742563,3818270; 742371,3818150; 742218,3818120; 742033,3818130; 741925,3818110; 741699,3818060; 741574,3818050; 741405,3818040; 741236,3817980; 741084,3817970; 740947,3817980; 740756,3817980; 740697,3817920; 740515,3817850; 740279,3817860; 740080,3817930; 739907,3817850; 739493,3817820.

(5) *Solomon Hills Unit, Santa Barbara County, California.*

(i) See Family Asteraceae: *Cirsium loncholepis* (La Graciosa thistle), paragraph (6)(ii) Map 3.

(ii) From USGS 1:24,000 quadrangle map Orcutt, lands bounded by the following UTM zone 10 NAD83 coordinates (E,N): 737509, 3855480; 37459, 3855350; 737375, 3855230; 737166, 3855160; 737013, 3855120; 736836, 3855140; 736656, 3855100; 736471, 3855090; 736395, 3854960; 736258, 3854970; 736172, 3854910; 736061, 3854910; 736031, 3855160; 735966, 3855310; 735963, 3855490; 736052, 3855640; 736183, 3855800; 736258, 3855950; 736195, 3856240; 736031, 3856170; 735998, 3856080; 735887, 3855980; 735693, 3855940; 735521, 3855930; 735325, 3855970; 735168, 3855990; 735107, 3855930; 735014, 3855880; 734852, 3855950; 734450, 3855950; 734404, 3856000; 734591, 3856250; 734780, 3856480; 734889, 3856610; 734811, 3856770; 734747, 3856930; 734572, 3857050; 734537, 3857220; 734640, 3857350; 734649, 3857470; 734545, 3857540; 734298, 3857910; 734208, 3858030; 734184, 3858180; 734302, 3858250; 734780, 3858230; 734952, 3858320; 735359, 3858320; 735625, 3858450; 736033, 3858570; 736122, 3858450; 736313, 3858450; 736465, 3858520; 736418, 3858630; 736270, 3858830; 735988, 3859100; 735804, 3859200; 735840, 3859410; 735973, 3859460; 736109, 3859460; 736397, 3859210; 736510, 3859250; 736585, 3859390; 736761, 3859360; 736922, 3859330; 737107, 3859300; 737240, 3859240; 737430, 3859200; 737572, 3859160; 737722, 3859170; 737827, 3859210; 737948, 3859230; 738117, 3859260; 738254, 3859230; 738509, 3859130;

738564, 3859070; 738664, 3858970;
738666, 3858910; 738711, 3858860;
738794, 3858710; 738796, 3858610;
738752, 3858470; 738707, 3858350;
738711, 3858230; 738780, 3858190;
738903, 3858120; 738952, 3858050;
739019, 3858000; 738964, 3857890;
738941, 3857820; 738843, 3857700;
738808, 3857600; 738811, 3857490;
738800, 3857370; 738770, 3857240;
738734, 3857130; 738675, 3857000;
738613, 3856960; 738509, 3856890;
738452, 3856830; 738398, 3856710;
738240, 3856630; 738188, 3856580;
738149, 3856550; 738100, 3856580;
738059, 3856570; 737904, 3856510;
737701, 3856500; 737656, 3856460;
737687, 3856410; 737833, 3856320;
737890, 3856260; 737928, 3856160;
737869, 3856080; 737787, 3855920;
737720, 3855850; 737812, 3855720;

737788, 3855590; 737737, 3855460;
737672, 3855470; 737590, 3855550;
737509, 3855480;

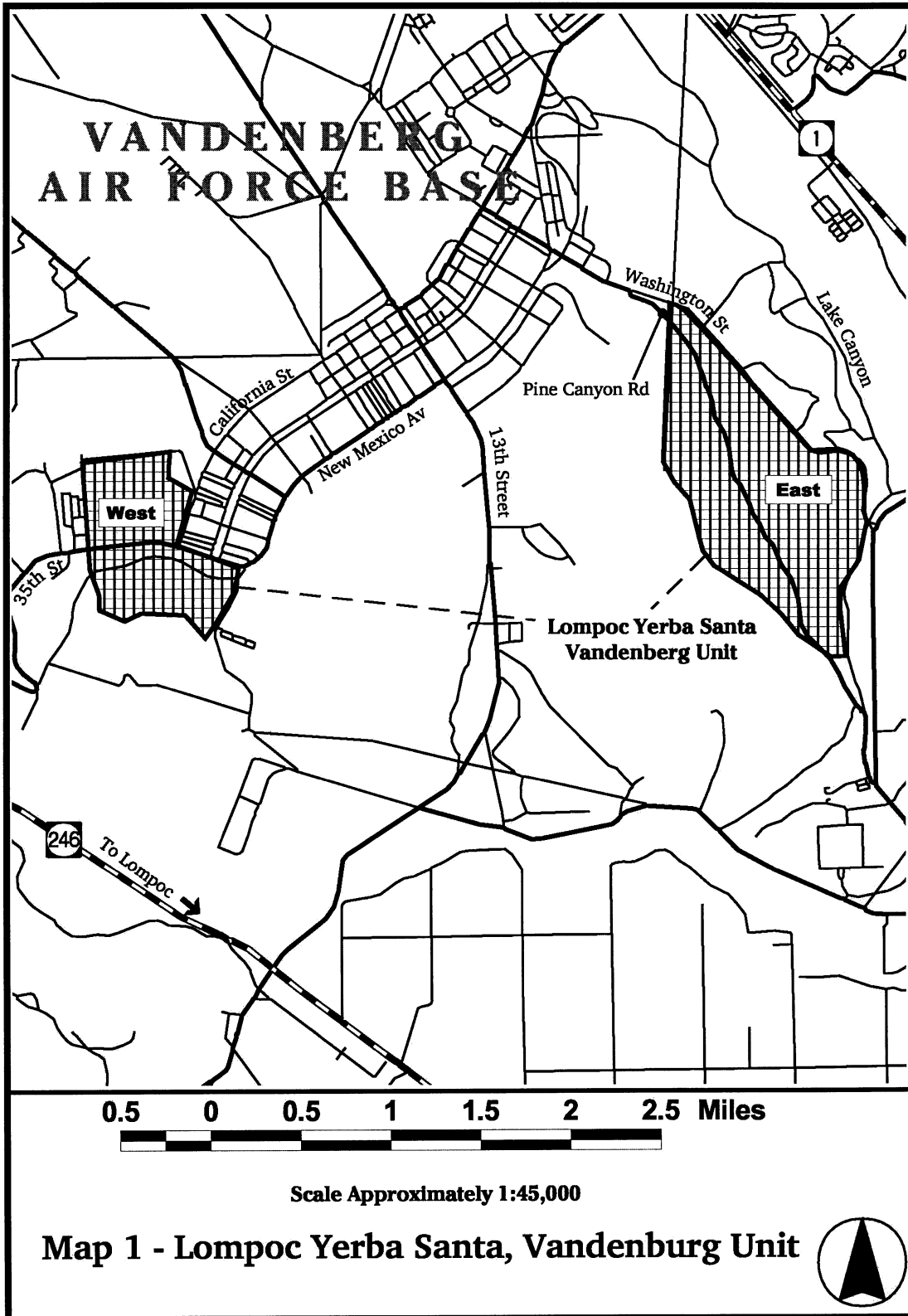
(6) *Vandenberg Unit*, Santa Barbara
County, California.

(i) Vandenberg East Unit. From USGS
1:24, 000 quadrangle map Surf, lands
bounded by the following UTM zone 10
NAD83 coordinates (E, N): 728773,
3843190; 728752, 3843100; 728702,
3842860; 728550, 3842620; 728537,
3842430; 728563, 3842200; 728584,
3841990; 728454, 3841990; 728168,
3842190; 728011, 3842380; 727829,
3842550; 727683, 3842640; 727530,
3842740; 727417, 3842810; 727321,
3842930; 727290, 3843050; 727202,
3843400; 727064, 3843550; 726965,
3843740; 727025, 3845150; 727087,
3845130; 727157, 3845090; 727210,
3845030; 727586, 3844620; 728074,

3844050; 728279, 3843840; 728519,
3843850; 728588, 3843830; 728647,
3843790; 728684, 3843740; 728716,
3843700; 728734, 3843640; 728747,
3843540; 728751, 3843440; 728744,
3843340; 728744, 3843280; 728773,
3843190;

(ii) Vandenberg West Unit. From
USGS 1:24,000 quadrangle map Surf,
lands bounded by the following UTM
zone 10 NAD83 coordinates (E, N):
722619, 3843000; 723176, 3842790;
723134, 3842570; 722964, 3842290;
722874, 3842160; 722696, 3842370;
722307, 3842390; 722158, 3842320;
721938, 3842410; 721930, 3842550;
721850, 3842780; 721783, 3843730;
722561, 3843830; 722552, 3843710;
722549, 3843600; 722760, 3843480;
722619, 3843000;

(iii) Map 1 follows:



* * * * *

Dated: November 2, 2001.
Joseph E. Doddridge,
*Acting Assistant Secretary for Fish and
Wildlife and Parks.*
[FR Doc. 01-28041 Filed 11-14-01; 8:45 am]
BILLING CODE 4310-55-P