

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

RIN 1018-A127

Endangered and Threatened Wildlife and Plants; Proposed Designation of Critical Habitat for Five Carbonate Plants From the San Bernardino Mountains in Southern California**AGENCY:** Fish and Wildlife Service, Interior.**ACTION:** Proposed rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), propose designation of critical habitat for five plants endemic (restricted) to carbonate soils in the San Bernardino Mountains of southern California pursuant to the Endangered Species Act of 1973, as amended (Act). Four of the plants, *Astragalus albens* (Cushenbury milk-vetch), *Eriogonum ovalifolium* var. *vineum* (Cushenbury buckwheat), *Lesquerella kingii* ssp. *bernardina* (San Bernardino Mountains bladderpod), and *Oxytheca parishii* var. *goodmaniana* (Cushenbury oxytheca) are federally listed as endangered and one plant is federally listed as threatened, *Erigeron parishii* (Parish's daisy). All five plants were federally listed on August 24, 1994. The following total acreages are proposed for designation as critical habitat for each of the following plants in San Bernardino County, California: *A. albens*, approximately 1,765 hectares (ha) (4,365 acres (ac)); *Erigeron parishii*, approximately 1,790 ha (4,420 ac); *Eriogonum ovalifolium* var. *vineum*, approximately 2,815 ha (6,955 ac); *L. kingii* ssp. *bernardina*, approximately 415 ha (1,025 ac); and *O. parishii* var. *goodmaniana*, approximately 1,275 ha (3,150 ac). Because of the considerable overlap in the proposed critical habitats for each of the five carbonate plants, the total area being proposed as critical habitat is approximately 5,335 ha (13,180 ac).

Several cooperative regional planning efforts that encompass the habitat for the carbonate plants are currently under development. These include the Carbonate Habitat Management Strategy (CHMS), the California Desert Conservation Area Plan (CDCA), and the West Mojave Plan. The CHMS deals specifically with carbonate plants and their habitats. Participants in this effort include the U.S. Forest Service, the Bureau of Land Management (BLM), the Service, and a number of private stakeholders (e.g., mining interests).

If this proposal is made final, section 7 of the Act requires Federal agencies to ensure that actions they fund, authorize, or carry out do not destroy or adversely modify critical habitat to the extent that the action appreciably diminishes the value of the critical habitat for the survival and recovery of the species. Section 4 of the Act requires us to consider economic and other impacts of 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 or refine critical habitat boundaries prior to final designation based on habitat and plant surveys, public comments on the proposed critical habitat rule, and new scientific and commercial information.

DATES: We will accept comments until the close of business on April 15, 2002. Public hearing requests must be received by March 29, 2002.

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

1. You may submit written comments and information to the Field Supervisor, Carlsbad Fish and Wildlife Office, U.S. Fish and Wildlife Service, 2730 Loker Avenue West, Carlsbad, CA 92008.
2. You may hand-deliver written comments to our Carlsbad Fish and Wildlife Office during normal business hours at the address given above.

You may view comments and materials received, as well as supporting documentation used in the preparation of this proposed rule, by appointment, during normal business hours at the above address.

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

SUPPLEMENTARY INFORMATION:**Background**

The five plants addressed in this proposed designation of critical habitat, *Astragalus albens* (Cushenbury milk-vetch), *Erigeron parishii* (Parish's daisy), *Eriogonum ovalifolium* var. *vineum* (Cushenbury buckwheat), *Lesquerella kingii* ssp. *bernardina* (San Bernardino Mountains bladderpod), and *Oxytheca parishii* var. *goodmaniana* (Cushenbury oxytheca) (collectively called "carbonate plants" in this document), are restricted primarily to carbonate deposits and their derived soils in the San Bernardino Mountains of San Bernardino County, CA (59 FR 43652).

Collectively, these five species are found along a 56 kilometer (km) (35 mile (mi)) portion of the San Bernardino Mountains between 1,171 and 2,682 meters (m) (3,842 and 8,800 feet (ft)) in elevation. This area contains outcrops of carbonate substrates, primarily limestone and dolomite, in several bands running on an east-west axis along the desert-facing slopes of the San Bernardino Mountains; it is generally known as the "carbonate belt". All of the carbonate plants are endemic to California.

Limestone mining was cited as the primary threat to the five carbonate plants in the final listing rule (59 FR 43652). The threats to these plants continue to be population reduction and habitat loss, degradation, and fragmentation from surface mining activities. The carbonate plants occur mainly on public lands with unpatented mining claims or on lands that have been patented. At the time of listing, a significant number of carbonate plant occurrences and carbonate plant habitats had been negatively affected (59 FR 43652). Carbonate plant losses and habitat destruction/degradation are expected to continue under ongoing and expanded limestone mining operations.

The U.S. Forest Service, the BLM, the Service, and a number of private stakeholders (e.g., mining interests) are developing a strategy, the CHMS, to conserve carbonate plants while accommodating other land uses. The goals of the CHMS are: (1) To protect the plants and the ecosystems upon which they depend, (2) to guide impact minimization and compensation for unavoidable impacts, (3) to streamline reviews of activities in areas determined to be refuges, and (4) to guide habitat restoration. Tasks to implement the conservation strategy include the development of preserve designs. Other similar planning efforts that include some areas of carbonate habitat include the CDCA and the West Mojave Plan (both of which are spearheaded by the BLM).

There are approximately 13,200 ha (32,600 ac) of carbonate substrates in the northeastern portion of the San Bernardino Mountains that provide suitable habitat for, and may support most of, the carbonate plants (59 FR 43652, Neel 2000, San Bernardino National Forest (SBNF) geographic information system (GIS) data 2001). This acreage is contained within the 64,900 ha (160,300 ac) draft CHMS area. According to the SBNF Carbonate Species Suitable Habitat Models (Sean Redar and Scott Eliason, SBNF, *in litt.* 2001), there are a total of approximately 19,700 ha (48,669 ac) of potential

carbonate plant habitat for the five plants (the sum is not equal to the habitat for each species because there is some overlap). Based on this model, the estimated suitable habitat for each species is: *Astragalus albens*, approximately 6,868 ha (16,964 ac); *Erigeron parishii*, approximately 8,428 ha (20,818 ac); *Eriogonum ovalifolium* var. *vineum*, approximately 8,949 ha (22,103 ac); *Lesquerella kingii* ssp. *bernardina*, approximately 6,753 ha (16,679 ac); and *Oxytheca parishii* var. *goodmaniana*, approximately 7,518 ha (18,570 ac).

The California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California (CNPS 2001) classifies each of the five carbonate plants as List 1B; which they define as rare, threatened, or endangered in California and elsewhere. The California Native Plant Society (CNPS) classifies all but one of the carbonate plants as being distributed in one to several highly restricted occurrences (with *Erigeron parishii* distributed in a limited number of occurrences). The CNPS also classifies each of the carbonate plants as "endangered throughout its range."

The five carbonate plant species in this document are treated as a group because they are restricted to soils that are ultimately derived from limestone, dolomite, or other substrates rich in calcium carbonate in the San Bernardino Mountains, California, and face similar threats. However, each of the five carbonate plants represents a distinct evolutionary lineage, and each has a unique set of ecological requirements and tolerances (Neel 2000).

Species Descriptions

Astragalus albens (Cushenbury Milk-Vetch)

Astragalus albens was described by Edward L. Greene (1885) based on a collection made by Samuel B. Parish and William F. Parish in 1882. Rydberg (1927) placed this species in the genus *Hamosa*. Rupert Barneby (1964) includes *Hamosa* in the genus *Astragalus*. Barneby (1959), Munz (1974), and Spellenberg (1993), all recognize this species as *Astragalus albens*.

Astragalus albens is a small plant in the pea family (Fabaceae). Individual plants are short-lived perennials, but may flower in their first year. The slender silvery-white-haired stems are decumbent (lie flat on ground with tips of stems turned upward), up to 30 centimeters (cm) (1 ft) long, with compound leaves consisting of 5 to 9

small leaflets. The plant's purple flowers have banner petals reaching up to 1 cm (0.4 inch (in)) long and occur in 5 to 14 flowered terminal racemes (flower stalks). The fruits, at maturity, are 10 to 18 millimeters (mm) (0.4 to 0.7 in) long and up to 3.5 mm (0.1 in) wide. The fruits are crescent shaped with three sides and two chambers and become papery in maturity. The plants generally flower from March to June and fruits mature as early as May (Spellenberg 1993).

Occurrences of *Astragalus albens* are scattered along the carbonate belt in the northeastern San Bernardino Mountains extending from Dry Canyon southeastward to the head of Lone Valley, a range of 24 km (15 mi) (Barrows 1988c, 59 FR 43652, California Natural Diversity Data Base (CNDDB) 2001, CNPS 2001). In the final rule to list the carbonate plants, we indicated that there were fewer than 20 known occurrences that supported *A. albens*. The CNDDB (2001) identifies 17 extant element occurrences. The SBNF mapped 103 site-specific localities that support this species for their detailed draft CHMS maps (SBNF GIS data 2001).

Astragalus albens is typically found within singleleaf pinyon-Utah juniper, blackbush scrub, singleleaf pinyon, pinyon woodland, pinyon-juniper woodland, and Joshua tree woodland vegetation communities (Gonella 1994, Gonella and Neel 1995, Neel 2000). Plants closely associated with *A. albens* include *Fremontodendron californicum* (flannelbush), *Coleogyne ramosissima* (blackbush), *Echinocereus triglochidiatus* var. *mojavensis* (Mound cactus), *Prunus fasciculatus* (desert almond), and *Yucca schidigera* (Mojave yucca) (Gonella 1994, Gonella and Neel 1995).

Astragalus albens is typically found on carbonate soils derived directly from decomposing limestone bedrock along rocky washes with no apparent preference for aspect. It is generally found in areas with an open canopy cover, little accumulation of organic material, rock cover exceeding 75 percent, and gentle to moderate slopes (5 to 30 percent) (Neel 2000). Most *A. albens* occurrences are found at elevations between 1,524 and 2,012 m (5,000 and 6,600 ft) (59 FR 43652), but Neel (2000) documented the elevation range between 1,171 and 2,013 m (3,864 and 6,604 ft). This range is at the lower elevational limit of the five carbonate plant species discussed in this rule (Gonella and Neel 1995). Most of the *A. albens* occurrences below 1,500 m (about 5,000 ft) are found in rocky washes with limestone outwash from

erosion (59 FR 43652, CNDDB 2001, SBNF GIS data 2001). Known occupied habitat for this species was mostly correlated with the Bird Spring Formation, Permian and Pennsylvanian age carbonate rock (S. Redar and S. Eliason, *in litt.* 2001). Soils at sites supporting *A. albens* have a higher percentage of calcium than soils that do not support this species (Gonella and Neel 1995).

Erigeron parishii (Parish's Daisy)

Erigeron parishii was described by Asa Gray (1884) based on specimens collected by Samuel B. Parish at Cushenbury Spring in 1882. It is a small perennial herb of the aster family (Asteraceae). Plants grow 10 to 30 cm (4 to 12 in.) high and flower from May through June. The simple linear leaves are covered with soft, silvery hairs, giving an overall light-green appearance to the plant. Flower heads are solitary, with deep rose to lavender ray flowers and yellow disk flowers borne at the tips of leafy stems. The flower heads have grayish-green, glandular bracts at the base of each flower head (59 FR 43652, Nesom 1993).

Erigeron parishii has the widest geographic distribution of the five carbonate plants, with a range that spans approximately 56 km (35 mi) along the carbonate belt in the northeastern San Bernardino Mountains, extending from Pioneertown in the east to Furnace Canyon in the west. This distribution includes occurrences on Tip Top Mountain and in Arctic, Cushenbury, Arrastre, and Rattlesnake Canyons (Krantz 1979a, Barrows 1988a, 59 FR 43652, CNDDB 2001). Recent surveys in Long Canyon (the historical eastern-most occurrence) did not locate any *E. parishii* plants (Neel 2000). We identified 25 occurrences that support *E. parishii* in the final listing rule (59 FR 43652). The CNDDB (2001) identifies 34 extant element occurrences. The SBNF mapped 87 site-specific localities that support this species for their detailed draft CHMS maps (SBNF GIS data 2001).

Erigeron parishii is typically associated with singleleaf pinyon-Utah juniper, singleleaf pinyon, pinyon-juniper woodlands, blackbush scrub, and creosote bush-bursage scrub vegetation communities (59 FR 43652, Neel 2000, Neel and Ellstrand 2001). Plants closely associated with *E. parishii* include *Pinus monophylla* (singleleaf pinyon), *Juniperus californica* (California juniper), *Yucca brevifolia* (Joshua tree), *Coleogyne ramosissima*, and *Astragalus albens*

(Gonella 1994, Gonella and Neel 1995, CNDDDB 2001).

Erigeron parishii typically grows on limestone or dolomite soils occurring on dry, rocky slopes, shallow drainages; and outwash plains (59 FR 43652). Some *E. parishii* occurrences grow on a granite/limestone interface, usually when granitic parent material has been overlaid with limestone materials washed down from upslope (59 FR 43652). An occurrence at the Burns Pinyon Ridge Reserve/Pioneertown area grows on quartz monzonite soils where there is no apparent limestone alluvium (Neel 2000). *Erigeron parishii* is generally found at elevations between 1,171 and 1,950 m (3,842 and 6,400 ft), which is at the lower elevations of the carbonate belt (59 FR 43652, Neel 2000). It is most commonly found in areas with slopes less than 10 degrees with about 50 percent of the occurrences on slopes that have a north aspect (Neel 2000).

Eriogonum ovalifolium var. *vineum* (Cushenbury Buckwheat)

Eriogonum ovalifolium var. *vineum* was described as *E. vineum* by John Kunkel Small (1898) based on a 1894 collection made by Samuel B. Parish near Rose Mine in the San Bernardino Mountains. Nelson (1911) treated the plant as a variety, *E. ovalifolium* var. *vineum*. This combination has incorrectly often been attributed to Jepson (1914), (Reveal 1989, Hickman 1993). Jepson (1914) did publish the combination but subsequently (Jepson 1925) realized the priority of Nelson's combination, which was followed by Abrams (1944), Munz and Keck (1959), and Munz (1974).

Eriogonum ovalifolium var. *vineum* is a perennial member of the buckwheat family (Polygonaceae) that forms low, dense mats typically 15 to 25 cm (6 to 10 in.) in diameter, but may reach 50 cm (20 in.). The leaves are round to ovate, white-woolly on both surfaces, and are 0.7 to 1.5 cm (0.3 to 0.6 in.) long. The flowers are whitish-cream, each petal with a wine-colored midrib, darkening to reddish or purple with age, and flowers are borne on stalks reaching 10 cm (4 in.) tall. Plants flower from May through June (Munz 1974, Hickman 1993). This species is primarily an outcrosser (pollen source for seed production is from another plant) (Neel and Ellstrand 2001).

Eriogonum ovalifolium var. *vineum* occurs in the carbonate belt of the northeastern San Bernardino Mountains extending from White Mountain in the west to Rattlesnake Canyon in the east, a distance of approximately 40 km (25 mi). This includes occurrences in Arctic and Cushenbury Canyons, Terrace and

Jacoby Springs, along Nelson Ridge, and southeast to near Onyx Peak (Barrows 1988b; Brown, *in litt.* 1992; Gonella and Neel 1995; Tierra Madre Consultants 1992; 59 FR 43652; CNDDDB 2001). In the final listing rule, we identified 20 occurrences that support *E. ovalifolium* var. *vineum*. The CNDDDB (2001) identifies 32 extant element occurrences. The SBNF mapped 239 site-specific localities that support this species for their detailed draft CHMS maps (SBNF GIS data 2001).

This species inhabits open areas in singleleaf pinyon-Utah juniper, singleleaf pinyon-mountain juniper, singleleaf pinyon, pinyon, pinyon-juniper, Joshua tree woodlands, and blackbush scrub vegetation communities (Gonella 1994, Gonella and Neel 1995, 59 FR 43652, Neel 2000). Plants closely associated with *Eriogonum ovalifolium* var. *vineum* include *Fremontodendron californicum*, *Arctostaphylos glauca* (big-berry manzanita), *A. patula* (green-leaf manzanita), *Phacelia douglasii* (Douglas' phacelia), *Yucca brevifolia*, *Pinus monophylla*, *Astragalus albens*, and *Erigeron parishii* (Gonella 1994, Gonella and Neel 1995, CNDDDB 2001).

Eriogonum ovalifolium var. *vineum* typically grows with soils derived from limestone or other carbonate substrates (Hickman 1993, 59 FR 43652, CNDDDB 2001). It is generally found on gentle slopes between 10 and 25 degrees (but occasionally on steep slopes up to 80 degrees) mostly with north or west aspects. Other habitat characteristics include open areas with powdery fine soils and little accumulation of organic material, a canopy cover generally less than 15 percent, and rock cover exceeding 50 percent. *Eriogonum ovalifolium* var. *vineum* was found at the widest elevational range of all the carbonate plants, between 1,400 and 2,400 m (4,600 and 7,900 ft) (59 FR 43652, Neel 2000). The known occupied habitat for *E. ovalifolium* var. *vineum* was correlated mostly with the Bird Spring and Bonanza King Formations (S. Redar and S. Eliason, *in litt.* 2001).

Lesquerella kingii ssp. *bernardina* (San Bernardino Mountains Bladderpod)

Lesquerella kingii ssp. *bernardina* is a member of the mustard family (Brassicaceae) and was first described by Munz (1932) as *Lequerella bernardina* based on a collection made by Frank W. Peirson at the east end of Bear Valley in 1924. Munz (1958) subsequently reduced this to a subspecies and published the combination *L. kingii* ssp. *bernardina*.

Lesquerella kingii ssp. *bernardina* is a silvery, short-lived perennial member of

the mustard family (Brassicaceae). It grows to 10 to 20 cm (4 to 8 in.) tall. The basal leaves are elliptic to ovate with petioles 2 to 6 cm (0.8 to 2.4 in.) long. Flowers are borne in terminal racemes, and bloom from May to June. The yellow petals are 9 to 13 mm (0.35 to 0.5 in.) long, and styles are 6 to 9 mm (0.24 to 0.35 in.) long. The spherical fruits are short-haired, 2-chambered, and contain 2 to 4 seeds per chamber (Rollins 1993).

Lesquerella kingii ssp. *bernardina* is currently known from two areas around Bear Valley. One occurrence is on the north side of Big Bear Lake near the east end of Bertha Ridge and adjacent to Big Bear City. The other occurrence is centered on the north-facing slope of Sugarlump Ridge south of Bear Valley, approximately 10 km (6.2 mi) south of the Bertha Ridge site (59 FR 43652, CNDDDB 2001). This species has the smallest known range of the five carbonate plants. In the final rule to list the carbonate plants, we identified these two areas that support *L. kingii* ssp. *bernardina*. Currently, the CNDDDB (2001) identifies four element occurrences. The SBNF mapped 22 site-specific localities that support this species for their detailed draft CHMS maps (SBNF GIS data 2001).

Lesquerella kingii ssp. *bernardina* typically is found within singleleaf pinyon-mountain juniper, white fir forest, Jeffrey pine-western juniper woodland, subalpine forest vegetation communities, and occasionally on old roads (Myers and Barrows 1988, 59 FR 43652, Gonella 1994, Gonella and Neel 1995, Neel 2000, CNDDDB 2001). Plants closely associated with *L. kingii* ssp. *bernardina* include *Pinus contorta* ssp. *murrayana* (lodgepole pine), *P. flexilis* (limber pine), *P. jefferyi* (Jeffery pine), *P. monophylla*, *Juniperus occidentalis* ssp. *australis* (western juniper), and *Eriogonum ovalifolium* var. *vineum* (Gonella 1994, Neel 2000, CNDDDB 2001).

Lesquerella kingii ssp. *bernardina* is generally found on soils derived from dolomite substrates (Brown, *in litt.* 1992). It is usually found either on brown, sandy soils with white rocks or on large rock outcrops in open areas with little accumulation of organic material. It grows on dry flats and slopes of low to moderate steepness (mostly between 10 and 20 degrees) with no apparent aspect preference. The dolomite soils that support *L. kingii* ssp. *bernardina* are south and west of the majority of the sites of the other four carbonate plant species. *Lesquerella kingii* ssp. *bernardina* occupies the narrowest elevational range of the five carbonate plants, between 2,098 and

2,700 m (6,883 and 8,800 ft) (Rollins 1993, 59 FR 43652). The known occupied habitat for this plant is associated with the Bonanza King Formation and other Cambrian age substrates (S. Redar and S. Eliason, *in litt.* 2001).

Oxytheca parishii var. *goodmaniana* (Cushenbury *Oxytheca*)

Barbara Ertter (1980) described the variety *Oxytheca parishii* var. *goodmaniana* based on material collected by S. P. Parish and W. F. Parish in 1882 near Cushenbury Spring. Previous collections of this species were identified as *Oxytheca parishii* var. *abramsii* or *Oxytheca watsonii*.

Oxytheca parishii var. *goodmaniana* is a small, wiry annual plant belonging to the buckwheat family (Polygonaceae). Specimens grow to 5 to 30 cm (2 to 12 in.) tall and have a basal rosette of leaves. Each leaf is 1 to 3 cm (0.4 to 1.2 in.) long. The six small flowers have white to rose or greenish-yellow perianth segments (undifferentiated whorl of petals and sepals). Flowers occur in clusters of 3 to 12 and are surrounded at their base by a funnel-shaped involucre bract (modified leaf).

Oxytheca parishii var. *goodmaniana* is an annual species, so the number of individual plants present fluctuates from year to year, depending on the seed bank dynamics, rainfall, and temperature. Because it is an annual, has few occurrences, and the total number of individuals at some occurrences is often low, this species may be more susceptible to extinction from environmental stochasticity (random events) than the other four carbonate plant species (59 FR 43652).

Oxytheca parishii var. *goodmaniana* is scattered along the carbonate belt in the northeastern San Bernardino Mountains extending from White Mountain in the west to Rattlesnake Canyon in the east. This distribution includes occurrences near Cushenbury Spring; Cushenbury, Marble, Arctic, Wild Rose, and Furnace Canyons; Blackhawk, Mineral, and Tip Top Mountains; Terrace Springs; Rose Mine and Green Lead gold mine (59 FR 43652, CNDDDB 2001, CNPS 2001, Gonella and Neel 1995). This species occupies the second-smallest geographical area of the five carbonate plants. In the final listing rule, we identified seven known extant occurrences. The CNDDDB (2001) identifies 16 element occurrences. The SBNF mapped 93 site-specific localities that support this species for their detailed draft CHMS maps (SBNF GIS data 2001).

Oxytheca parishii var. *goodmaniana* is typically found in singleleaf pinyon-Utah juniper, singleleaf pinyon-mountain juniper, singleleaf pinyon, and canyon live oak woodlands vegetation communities (59 FR 43652, Neel 2000). Plants closely associated with *O. parishii* var. *goodmaniana* include *Cercocarpus ledifolius* (mountain mahogany), *Arctostaphylos glauca*, *Chrysothamnus viscidiflorus* (yellow rabbitbrush), and *Achnatherum coronata* (needlegrass) (CNDDDB 2001).

Oxytheca parishii var. *goodmaniana* is typically found on soils derived from limestone, dolomite, or a mixture of limestone and dolomite substrates (Tierra Madre Consultants 1992, 59 FR 43652, Neel 2000). Hickman (1993) describes it as occurring on limestone talus. Neel (2000) found that it generally occurs in areas with gentle slopes between 10 and 25 degrees with no apparent preference for aspect.

Oxytheca parishii var. *goodmaniana* is typically found at elevations between 1,440 and 2,372 m (4,724 and 7,782 ft) (Neel 2000). Known occupied habitat for this species is mostly correlated with the Bird Springs Formation, Bonanza King Formation, Monte Cristo Limestone, and Sultan Limestone, and Crystal Pass substrate (S. Redar and S. Eliason, *in litt.* 2001).

Habitat Descriptions

The San Bernardino Mountains support a wide diversity of natural habitats that are the result of their geographic position between the desert and coastal environments, geological history, elevation, varied topography, and uncommon geological substrates such as carbonate outcrops (e.g., limestone and dolomite). The SBNF, which encompasses most of the San Bernardino Mountains, covers less than one percent of the land area within the State of California, yet reportedly contains populations of more than 25 percent of all native Californian plant species (Krantz 1994). The San Bernardino Mountains are also known to support one of the highest concentrations of endemic plants in the United States (Krantz 1994). This high rate of endemism includes a number of specialized plants that are restricted to carbonate substrates in this area (Gonella 1994, Krantz 1994).

Within the mountain range, carbonate rock outcrops occur in several east-west bands that run along the desert-facing slopes, from approximately White Mountain in the west to Blackhawk Mountain and Terrace Springs in the east. From here, the band of carbonate substrate narrows and turns southeast toward Rattlesnake Canyon and Tip Top

Mountain. Disjunct (separate) outcrops occur on ridges to the north and south of the Big Bear Valley, and eastward to the Sawtooth Hills (U.S. Geologic Survey 1995).

Collectively, the ranges of these five species span 56 km (35 mi) and occupy elevations between 1,178 and 2,659 m (3,864 to 8,724 ft) in the San Bernardino Mountains (Neel 2000). Plant communities in this area vary greatly by substrate type and elevation and have been described by Holland (1986), Thorne (1995), Vasek and Barbour (1995), Vasek and Thorne (1995), and Neel (2000). Neel (2000) developed more detailed, quantitative descriptions of the vegetation types that are associated with the five carbonate plants using extensive vegetation sampling and found that most of the occurrences of each of the five carbonate plants are found in the following six vegetation types: blackbush scrub, canyon live oak, singleleaf pinyon, singleleaf pinyon-mountain juniper, singleleaf pinyon-Utah juniper, and white fir forest.

Blackbush scrub vegetation supports *Astragalus albens*, *Erigeron parishii*, and *Eriogonum ovalifolium* var. *vineum*. It primarily occurs between 1,130 and 1,665 m (3,707 to 5,463 ft) in this area. Blackbush scrub vegetation is increasingly abundant at the higher elevations and is dominated by *Coleogyne ramosissima* (blackbush). The shrub cover is generally under 1 meter high and sometimes quite dense. The overstory is sparse and consists of *Yucca brevifolia*, *Pinus monophylla*, and *Juniperus osteosperma* (Utah juniper) (Neel 2000).

Singleleaf pinyon vegetation supports *Astragalus albens*, *Erigeron parishii*, *Eriogonum ovalifolium* var. *vineum*, and *Oxytheca parishii* var. *goodmaniana*. It primarily occurs between 1,420 and 2,440 m (4,659 to 8,005 ft) in this area. Singleleaf pinyon vegetation is dominated by *Pinus monophylla* (singleleaf pinyon). The shrub layer in this vegetation is relatively open and occasionally supports *Arctostaphylos glauca* (Neel 2000).

Canyon live oak vegetation supports *Oxytheca parishii* var. *goodmaniana* and primarily occurs between 1,793 and 2,440 m (5,883 and 8,005 ft) in this area. Canyon live oak vegetation is dominated by both *Quercus chrysolepis* (canyon live oak) and *Pinus monophylla*. Tree cover in this vegetation type is the densest of all of the vegetation types mentioned in this document, while shrub cover is the sparsest (Neel 2000).

Singleleaf pinyon-mountain juniper vegetation supports *Eriogonum ovalifolium* var. *vineum*, *Lesquerella kingii* ssp. *bernardina*, and *Oxytheca*

parishii var. *goodmaniana*. It primarily occurs between 1,909 and 2,745 m (6,263 and 9,005 ft) in this area. Singleleaf pinyon-mountain juniper vegetation is dominated by *Pinus monophylla* and *Juniperus occidentalis* ssp. *australis*. *Cercocarpus ledifolius* is the only characteristic understory species (Neel 2000).

Singleleaf pinyon-Utah juniper vegetation supports *Astragalus albens*, *Erigeron parishii*, *Eriogonum ovalifolium* var. *vineum*, and *Oxytheca parishii* var. *goodmaniana*. It primarily occurs between 1,212 and 2,390 m (3,976 and 7,841 ft) in this area. Singleleaf pinyon-Utah juniper vegetation is dominated by *Pinus monophylla* and *Juniperus osteosperma*. *Ephedra viridis* (green ephedra) and *Achnatherum coronatum* (needlegrass) are characteristic of the understory (Neel 2000).

White fir forest vegetation supports *Lesquerella kingii* ssp. *bernardina* and *Oxytheca parishii* var. *goodmaniana*. It primarily occurs on steep north-facing slopes between 2,196 and 2,720 m (7,205 and 8,924 ft) in this area. White fir forest vegetation is dominated by *Abies concolor* (white fir) and *Pinus flexilis* (limber pine) in the overstory (Neel 2000).

The carbonate plants have also been reported to occur in five other vegetation communities: Jeffrey pine-western juniper woodland, Joshua tree woodland, pinyon woodland, pinyon-juniper woodland, and subalpine forest (Krantz 1979a, 1979b; Neel 2000; CNDDDB 2001). Jeffrey pine-western juniper woodland is reported to support *Lesquerella kingii* ssp. *bernardina* (CNDDDB 2001). Joshua tree woodland and pinyon woodland are reported to support *Astragalus albens* and *Eriogonum ovalifolium* var. *vineum* (CNDDDB 2001). Pinyon-juniper woodland is reported to support *A. albens*, *Erigeron parishii*, and *Eriogonum ovalifolium* var. *vineum* (CNDDDB 2001). Pinyon-juniper woodlands are generally associated with relatively steep slopes.

Some of these plant communities occur in the same general area (e.g., singleleaf pinyon woodlands, canyon live oak woodland), but on noncarbonate soils. Big sagebrush, pebble plains, riparian, and meadow communities also occur within the carbonate plants area; however, they do not occupy large areas and do not support carbonate endemic plants.

Ecology

Little is known about certain aspects of the life history and population dynamics of carbonate plants, including

their pollination biology, seed dispersal agents and patterns, seed bank dynamics, seed dormancy requirements, and seedling ecology and establishment rates (Neel 2000). However, the distributions of each of these plants have been well studied through numerous botanical investigations and project-level surveys funded by Federal agencies and mining companies (Krantz 1979a, 1979b; Wilson and Bennett 1980; Barrows 1988a, 1988b, 1988c; Tierra Madre Consultants 1992; and herbarium specimens at Rancho Santa Ana Botanic Garden). The general ranges of these species are described in Munz and Keck (1959), Barneby (1959), Munz (1974), Hickman (1993), Nessom (1993), Rollins (1993), Spellenberg (1993) and in the final listing rule (59 FR 43652). The carbonate plants do not appear to be specifically linked to early vegetation successional stages after disturbance; however, they are found on some surfaces that are naturally disturbed by landslides and substrate upheaval. Primarily, they occur in habitat that is undisturbed by human activities. They consistently occur on soils that are at least partially derived from carbonate substrates. However, each of these plants have specific habitat and microhabitat requirements, including parent geology, vegetation community type, associated species, soil pH, slope, and elevation (Neel 2000).

Occurrences of carbonate plants shift within the range of suitable habitat. Historically, occurrences may have periodically become extirpated, while other suitable habitat may have been colonized from other large occurrences. Given (1994) noted the need for enough suitable habitat to maintain equilibrium between naturally occurring local extirpations and colonizations. Not all habitat for a species is likely to be occupied at the same time, and failure to conserve enough suitable habitat could potentially reduce the size and viability of the metapopulation as surely as destruction of occupied habitat (Given 1994). A metapopulation has been described as “* * * a set of populations (i.e., independent demographic units; Ehrlich 1965) that are interdependent over ecological time. That is, although member populations may change in size independently, their probabilities of existing at a given time are not independent of one another because they are linked by processes of extinction and mutual recolonization, processes that occur, say, on the order of every 10 to 100 generations” (Harrison *et al.* 1988). The persistence of these species depends on the interrelatedness of local extirpations

and recolonizations, the availability of newly suitable habitat, and dispersal (Given 1994; Hanski 1997, 1999; Hanksi and Gilpin 1991). Harrison *et al.* (2000) demonstrated this natural turnover and fluctuation in populations of five plants restricted to serpentine seeps in Napa and Solano counties, California. Because of these population dynamics, long-term persistence of the carbonate plants requires sufficient suitable habitat contiguous with areas that are currently occupied by the plants.

Each of the five carbonate plant species exhibits several limiting ecological factors that increases the probability for extirpation events to occur (e.g., restricted distribution, habitat specialization, and short reproductive lifespans). These factors may, among other things, reduce gene flow between occurrences, reduce pollination between and among occurrences, and decrease the probability that new colonizations will occur. The amount of habitat required to sustain a species increases because of these limiting ecological factors (Burgman *et al.*, 2001).

Previous Federal Action

On December 15, 1980, we published a Notice of Review (NOR) of plants which included *Eriogonum ovalifolium* var. *vineum* and *Lesquerella kingii* ssp. *bernardina* as Category 1 candidate taxa and *Erigeron parishii* as a Category 2 taxon (45 FR 82480). The February 21, 1990, NOR of plants also included *Astragalus albens* as a Category 1 taxon and *Oxytheca parishii* var. *goodmaniana* as a Category 2 taxon (55 FR 6184). Category 1 taxa were those taxa for which substantial information on biological vulnerability and threats were available to support preparation of listing proposals. Category 2 candidates were taxa for which data in our possession indicated listing was possibly appropriate but for which substantial information on biological vulnerability and threats were not known or on file to support preparation of proposed rules.

On November 19, 1991, we published a proposed rule in the **Federal Register** to list the five plants as endangered (56 FR 58332). On August 24, 1994, we published a final rule listing *Erigeron parishii* as threatened and *Astragalus albens*, *Eriogonum ovalifolium* var. *vineum*, *Lesquerella kingii* ssp. *bernardina*, and *Oxytheca parishii* var. *goodmaniana* as endangered (59 FR 43652). At that time, we indicated that designation of critical habitat for these plants was not prudent because such designation would likely increase the

degree of threat from vandalism, collection, or other human activities.

On June 15, 2000, the CNPS filed a lawsuit in Federal District Court for the Southern District of California for our failure to designate critical habitat for the five carbonate plants (*California Native Plant Society v. Berg, et al.*, 00CV1207-L (LSP)). On April 27, 2001, the Court vacated our August 24, 1994, "not prudent" determination for critical habitat and ordered us to reevaluate its prudence, and if prudent to complete a proposed rule by January 31, 2002. The Court further ordered us to publish a final critical habitat designation on or before September 30, 2002. This proposed critical habitat determination has been drafted in compliance with the aforementioned court order.

Critical Habitat

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

Section 7(a)(2) of the Act requires Federal agencies to consult with the Service to insure that any action it authorizes, funds, or carries out is not likely to result in the destruction or adverse modification of habitat determined to be critical to a species. Section 7 of the Act also requires conferences on Federal 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 "a direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species. Such alterations include, but are not limited to, alterations adversely modifying any of those physical or biological features that were the basis for determining the habitat to be critical." Aside from the protection that may be provided under section 7, the Act does not provide other forms of protection for 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 lack a Federal nexus, critical habitat designation would not afford any additional protections under the Act with respect to such activities.

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

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

Within the geographic area occupied by the species, we 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 becomes 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 for the 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 attempt to not designate areas that lack all primary constituent elements, as defined at 50 CFR 424.12(b), that provide for the essential life cycle needs of the species. However, we may be restricted by our minimum mapping unit or mapping scale.

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

will not designate critical habitat in areas outside the geographic area occupied by the species.

Our Policy on Information Standards Under the Endangered Species Act, published in the **Federal Register** on July 1, 1994, provides criteria, establishes procedures, and provides guidance to ensure that our decisions represent the best scientific and commercial data available (59 FR 34271). It requires us, 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, at a minimum, be the listing package for the species. Additional information may be obtained from a recovery plan, articles in peer-reviewed journals, conservation plans developed by States and counties, scientific status surveys and studies, biological assessments, unpublished materials, and expert opinions.

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

Prudency Determination

Section 4(a)(3) of the Act, as amended, and implementing regulations (50 CFR 424.12) require that, to the maximum extent prudent and determinable, we designate critical habitat at the time a 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 such threat to the species, or (2) such designation of critical habitat would not be beneficial to the species.

In our final listing rule we concluded that the designation of critical habitat for the five carbonate plants was not prudent, explaining that such designation likely would increase the degree of threat from vandalism, collection, or other human activities (59 FR 43652).

The five carbonate plants may be vulnerable to vandalism, collection, or other human activities. In the final rule to list the four plants from southwestern California and Baja California, Mexico (63 FR 54938), we indicated that threats to listed plants might be exacerbated by the publication of critical habitat maps and further dissemination of location information. We also documented increases in collections of other sensitive species after listing actions (an increase in the collection of plants following the proposed listing of the six mountain plants from southern California) (63 FR 49006). Recently, we have even determined that designation of critical habitat is not prudent for one species (the rock gnome lichen) because it would likely increase the threat from collection, vandalism, or habitat degradation and destruction, both direct and inadvertent (66 FR 51445).

However, at this time, we do not have site-specific evidence throughout the limited range of the carbonate plants documenting the vandalism or collection of these species, nor do we have evidence of an increase in threats due to illegal mining or other human activities following the listing of the five carbonate plants. There has been one known instance of illegal mining that was apparently an isolated incident (S. Eliason, pers. comm., 2001). Since then, there has been cooperative participation in the CHMS involving the SBNF, the Service, the BLM, and local stakeholders including mining interests. Maps with detailed, site-specific locations of the five carbonate plants

have been used during meetings for the CHMS. Since this time, there have been no known additional instances of illegal mining. Therefore, it does not appear that the dissemination of distributional information of the five carbonate plants has led to an increase in the nature or degree of threats. Because of the cooperative participation in the CHMS, we do not expect that the identification of critical habitat will substantially increase the degree of threat to these species by vandalism, collection, or other human activities (e.g., illegal mining).

There may be some educational or informational benefits to designating critical habitat. Critical habitat may be used as a tool to help identify areas within the range of the five carbonate plants essential for their conservation. For example, designation of critical habitat on non-Federal lands may provide some educational benefit by formally identifying on a range-wide basis those areas essential to the conservation of these species and, therefore, areas that are likely to be the focus of recovery efforts. Also, while a critical habitat designation for habitat currently occupied by these species would not likely change the section 7 consultation process, because an action that destroys or adversely modifies such critical habitat would also be likely to result in jeopardy to the species, there may be instances when a section 7 consultation would be triggered only if critical habitat is designated (for example, if we designated unoccupied habitat or if occupied habitat became unoccupied).

Based on our discussion above, we now determine that the designation of critical habitat is not likely to increase the nature and degree of threats due to vandalism, and in fact, there may be some additional conservation benefits to designating critical habitat on lands essential to the conservation of the five carbonate plants. Additionally, this proposed critical habitat may help focus efforts in the development of the CHMS and revised draft San Bernardino Mountains Carbonate Endemic Plants Recovery Plan. Therefore, in accordance with our regulations (50 CFR 424.12(a)(1)), we now determine that it is prudent to propose the designation of critical habitat for the five carbonate plants: *Astragalus albens*, *Erigeron parishii*, *Eriogonum ovalifolium* var. *vineum*, *Lesquerella kingii* ssp. *bernardina*, and *Oxytheca parishii* var. *goodmaniana*.

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 the five carbonate plants. This information included data from aerial photography (1995 Digital Orthorectified Quarter Quadrangles (DOQQ) and 2000 SPOT (*Système Pour l'Observation de la Terre*) satellite imagery); the SBNF Carbonate Species Suitable Habitat Models (S. Redar and S. Eliason, *in litt.* 2001); species location data from the SBNF, draft CHMS, and CNDDDB (2001); the final listing rule (59 FR 43652); information in species background sections (USFWS 2001a, *in prep.*) being prepared for the revised draft San Bernardino Mountains Carbonate Endemic Plants Recovery Plan; research and survey observations published in peer-reviewed articles; regional GIS coverages (e.g., soils, occurrence data, vegetation, land ownership, and elevation); project-specific and other miscellaneous reports submitted to us; additional information from the BLM regarding a section 7 consultation (1–8–01–F–18) on the effects of the California Desert Conservation Area Plan (CDCA) on 10 plant species (BLM, *in litt.* 2001); a section 7 consultation with the SBNF on various ongoing and related activities affecting carbonate habitats (USFWS 2001b); discussions with representatives of the SBNF and botanical and other knowledgeable experts; and geologic map coverage of the Cushenbury Canyon area. We also visited portions of the carbonate belt in the northeastern San Bernardino Mountains, San Bernardino County, California within the SBNF. We concentrated our analysis on those areas with known occurrences for each of these species.

The number of individuals of each carbonate plant species fluctuates temporally (over time) and spatially (over an area) (Tierra Madre 1992; Krantz 1994; Neel 2000; CNDDDB 2001). Population estimates from different time periods and surveyors also vary in precision and accuracy. Therefore, comparing these data may yield misleading estimates of the number of individuals in a given area (Neel 2000). Additionally, the mapped polygons associated with various groupings of the carbonate plants have varied from year to year and surveyor to surveyor (Tierra Madre 1992; Krantz 1994; Neel 2000; CNDDDB 2001). Therefore, estimates of the number of individuals are not given in this document.

Names associated with the various groupings of carbonate plants also differ (e.g., population, aggregate occurrence (grouped occurrences), element

occurrence (as used by the CNDDDB), and point location (which describes a detailed mapping area used by the SBNF) (59 FR 43652, Neel 2000, CNDDDB 2001)). For the purposes of determining areas essential to the conservation of the carbonate plants, we grouped many of the site-specific localities identified by the CNDDDB and the SBNF. This grouping allowed us to analyze the site-specific observations of the individual plants and the biological and ecological dynamics of these groupings, such as seed banks, connectivity and gene flow, and pollinator and seed dispersal vectors. The groupings also allowed for ease in the description, mapping, and definitions of legal boundaries. Consequently, we refer to each of these groupings as an "occurrence."

After analyzing all of the occurrence data from the CNDDDB, the final listing rule, SBNF, and additional scientific and commercial sources, we grouped *Astragalus albens* into 19 occurrences, *Erigeron parishii* into 27 occurrences, *Eriogonum ovalifolium* var. *vineum* into 28 occurrences, *Lesquerella kingii* ssp. *bernardina* into 2 occurrences, and *Oxytheca parishii* var. *goodmaniana* into 19 occurrences. We are proposing to designate all or portions of 19 *A. albens* occurrences, 27 *Erigeron parishii* occurrences, 28 *Eriogonum ovalifolium* var. *vineum* occurrences, portions of both *L. kingii* ssp. *bernardina* occurrences, and all or portions of 18 *O. parishii* var. *goodmaniana* occurrences. We are not including one of the *O. parishii* var. *goodmaniana* occurrences because the area is considered to be too degraded and, therefore, not essential to the conservation 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 must 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, 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 (not all of which apply to plants). All areas

proposed as critical habitat for *Astragalus albens*, *Erigeron parishii*, *Eriogonum ovalifolium* var. *vineum*, *Lesquerella kingii* ssp. *bernardina*, and *Oxytheca parishii* var. *goodmaniana* are within their respective historical ranges and contain one or more of the physical or biological features (primary constituent elements) essential for the conservation of the species.

Habitat components that are essential for each of the five carbonate plants are primarily found in, but not limited to, pinyon woodland, pinyon-juniper woodland and forests, Joshua tree woodland, white fir forests, subalpine forest, canyon live oak woodlands and forests, and blackbush scrub vegetation communities in the San Bernardino Mountains. These habitat components provide for: (1) Individual and population growth, including sites for germination, pollination, reproduction, pollen and seed dispersal, and seed dormancy; (2) areas that allow for and maintain gene flow between sites through pollinator activity and seed dispersal mechanisms; (3) areas that provide basic requirements for growth such as water, light, minerals; and (4) areas that support pollinators and seed dispersal vectors.

The following are important to the conservation of the five carbonate plants: the conservation and management of existing population sites (USFWS 1997); the conservation and management of suitable habitat that contains micro-habitat sites that are not known to be currently occupied to maintain equilibrium between naturally occurring local extirpations and colonizations (Harrison *et al.* 2000); the protection and maintenance of upslope or upstream geologic features that provide the necessary materials to replace the soils continually lost to natural processes (65 FR 77178); the conservation and connectivity of native habitat between these occurrences to allow and maintain gene flow between sites through pollinator activity and seed dispersal mechanisms (66 FR 32052); the conservation and maintenance of sites for the survival of pollinators and seed dispersal agents (66 FR 32052); the conservation of suitable micro-habitat sites that could be colonized to allow a population to expand and contract, or maintain its normal metapopulation dynamics (Harrison *et al.* 2000); and the maintenance of normal ecological functions within all of these sites. The small fragmented range of each of these species, coupled with the other limiting ecological factors that adversely affect the chances of species survival (*e.g.*, habitat specialist, short reproductive

lifespan), makes them especially vulnerable to natural and human caused effects (*e.g.*, non-native species, wildfire, livestock grazing, forest product harvesting, and mining) (Burgman *et al.*, 2001).

Based on our current knowledge of these species, the primary constituent elements of critical habitat for each species is listed below and consist of, but are not limited to:

Astragalus albens

(1) Soils derived primarily from the upper and middle members of the Bird Spring Formation and Undivided Cambrian parent materials that occur on hillsides or along rocky washes with limestone outwash/deposits at elevations between 1,171 and 2,013 m (3,864 and 6,604 ft);

(2) Soils with intact, natural surfaces that have not been substantially altered by land use activities (*e.g.* graded, excavated, re-contoured, or otherwise altered by ground-disturbing equipment); and

(3) Associated plant communities that have areas with an open canopy cover and little accumulation of organic material (*e.g.*, leaf litter) on the surface of the soil.

Erigeron parishii

(1) Soils derived primarily from upstream or upslope limestone, dolomite, or quartz monzonite parent materials that occur on dry, rocky hillsides, shallow drainages, or outwash plains at elevations between 1,171 and 1,950 m (3,842 and 6,400 ft);

(2) Soils with intact, natural surfaces that have not been substantially altered by land use activities (*e.g.* graded, excavated, re-contoured, or otherwise altered by ground-disturbing equipment); and

(3) Associated plant communities that have areas with an open canopy cover.

Eriogonum ovalifolium var. *vineum*

(1) Soils derived primarily from the upper and middle members of the Bird Spring Formation and Bonanza King Formation parent materials that occur on hillsides at elevations between 1,400 and 2,400 m (4,600 and 7,900 ft);

(2) Soils with intact, natural surfaces that have not been substantially altered by land use activities (*e.g.* graded, excavated, re-contoured, or otherwise altered by ground-disturbing equipment); and

(3) Associated plant communities that have areas with an open canopy cover (generally less than 15 percent cover) and little accumulation of organic material (*e.g.*, leaf litter) on the surface of the soil.

Lesquerella kingii ssp. *bernardina*

(1) Soils derived primarily from Bonanza King Formation and Undivided Cambrian parent materials that occur on hillsides or on large rock outcrops at elevations between 2,098 and 2,700 m (6,883 and 8,800 ft);

(2) Soils with intact, natural surfaces that have not been substantially altered by land use activities (e.g. graded, excavated, re-contoured, or otherwise altered by ground-disturbing equipment); and

(3) Associated plant communities that have areas with an open canopy cover and little accumulation of organic material (e.g., leaf litter) on the surface of the soil.

Oxytheca parishii var. *goodmaniana*

(1) Soils derived primarily from upslope limestone, a mixture of limestone and dolomite, or limestone talus substrates with parent materials that include Bird Spring Formation, Bonanza King Formation, middle and lower members of the Monte Cristo Limestone, and the Crystal Pass member of the Sultan Limestone Formation at elevations between 1,440 and 2,372 m (4,724 and 7,782 ft);

(2) Soils with intact, natural surfaces that have not been substantially altered by land use activities (e.g. graded, excavated, re-contoured, or otherwise altered by ground-disturbing equipment); and

(3) Associated plant communities that have areas with a moderately open canopy cover (generally between 25 and 53 percent (Neel 2000)).

Criteria Used To Identify Critical Habitat

The downlisting and delisting sections of the revised draft San Bernardino Mountains Carbonate Endemic Plants Recovery Plan (USFWS 2001c, *in prep.*) for the five carbonate plants, in concert with the draft CHMS, identify the specific recovery needs of these species and facilitated the identification of areas essential to their conservation. The draft recovery plan identifies lands as essential for the long-term conservation of the carbonate plants that: (1) Contain source occurrences that must be stabilized to recover the species; (2) include habitats that were part of a historical population

distribution adjacent to occupied areas and are needed for the expansion and stability of additional occurrences; and (3) provide landscape connectivity between occurrences that are required to maintain genetic exchange and the natural processes of extirpations and colonizations. To recover the carbonate plants to the point where they can be downlisted or delisted, it is essential to preserve the species' genetic diversity, as well as their habitat.

During the development of the programmatic consultation for the four southern California National Forests (USFWS 2001d) and the draft CHMS, the SBNF delineated the distribution of each of the five carbonate species and developed a model of potential suitable habitat based on geology, soil substrates, elevations, and vegetative plant communities. The SBNF ranked the relative importance of the known occurrences of carbonate plants by evaluating the size, density, location, configuration, associated species, defensibility of each occurrence, and the overall quality of the supporting habitat. Priority was also given to occurrences that maintained the ecological and geographical variability of the species (e.g., highest and lowest in elevation, westernmost and easternmost in distribution) (S. Eliason, *in litt.* 2001). We used the distribution and occurrence data, modeled suitable habitat maps, and the occurrence ranking information to determine habitat areas essential to the conservation of the five carbonate plants. We used 1996 and 2000 aerial photography to remove areas with (1) Urban development; (2) active mining; and (3) other current disturbances. The 1996 imagery provided finer 1-meter resolution, while the 2000 imagery provided more recent information, but at a lower resolution. We reviewed previous section 7 consultations for the carbonate plants to remove any additional lands that were previously determined to be non-essential. The boundaries were refined to provide: (1) Adequate seed bank habitat, (2) micro-habitat sites to maintain equilibrium between naturally occurring local extirpation and colonization events, (3) connectivity of native habitat to maintain gene flow between sites through pollinator activity and seed

dispersal, (4) upslope or upstream geologic substrates that provide the necessary materials to replace the soils which are continually lost to natural processes, and (5) sites for the survival of pollinators and seed dispersal agents. To map these essential lands, we overlaid them with a 100-m Universal Transverse Mercator (UTM) grid. Because the grid captured additional non-essential lands, we then evaluated all grid cells adjacent to actively disturbed areas and eliminated grid cells where either the entire cell or the majority of the cell was within a disturbed area. Cells that had documented occurrences of the carbonate plants were retained even if the majority of the cell was disturbed.

In defining critical habitat boundaries, we made an effort to exclude all developed areas, such as towns, housing developments, active mines, and lands unlikely to contain the primary constituent elements essential for the conservation of each of the five carbonate plants. Our 100-m UTM grid minimum mapping unit was designed to minimize the amount of non-essential lands included in our designation. Critical habitat does not include existing features and structures, such as buildings, mines that are active at the time of this proposed rule's publication, paved or unpaved roads, other paved or cleared areas, lawns, and other urban landscaped areas that do not contain one or more of the primary constituent elements. Federal actions limited to those areas, therefore, would not trigger a section 7 consultation, unless they may affect the species or the primary constituent elements in adjacent critical habitat.

The proposed critical habitat units described below constitute our best assessment of areas that are essential for the species' conservation. We anticipate that in the time between the proposed rule and the final rule, and based upon the additional information received during the public comment period, that the boundaries of the mapping units may be refined.

Critical Habitat Proposal

The acreage of proposed critical habitat land ownership is shown in Table 1.

TABLE 1.—PROPOSED CRITICAL HABITAT IN HECTARES (HA) (ACRES (AC)) BY SPECIES AND LAND OWNERSHIP, SAN BERNARDINO COUNTY, CALIFORNIA

[Area estimates reflect critical habitat unit boundaries, not primary constituent elements within ¹.]

| Species | Federal ² | Private | Total |
|--|-------------------------|----------------------|-------------------------|
| <i>Astragalus albens</i> | 1,565 ha (3,870 ac) | 200 ha (495 ac) | 1,765 ha (4,365 ac) |
| <i>Erigeron parishii</i> | 1,330 ha (3,280 ac) | 460 ha (1,140 ac) | 1,790 ha (4,420 ac) |
| <i>Eriogonum ovalifolium</i> var. <i>vineum</i> | 2,440 ha (6,025 ac) | 375 ha (930 ac) | 2,815 ha (6,955 ac) |
| <i>Lesquerella kingii</i> ssp. <i>bernardina</i> | 405 ha (1,005 ac) | 10 ha (20 ac) | 415 ha (1,025 ac) |
| <i>Oxytheca parishii</i> var. <i>goodmaniana</i> | 1,085 ha (2,675 ac) | 190 ha (475 ac) | 1,275 ha (3,150 ac) |
| Total ³ | 4,565 ha (11,280 ac) | 770 ha (1,900 ac) | 5,335 ha (13,180 ac) |

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

² Federal lands include SBNF and BLM lands.

³ Because of overlapping boundaries, the sum of proposed critical habitat for each carbonate plant species does not equal the total area that has been proposed as critical habitat for each species.

The proposed critical habitat areas described below constitute our best assessment of the areas essential for the conservation of each of the five carbonate plants. The proposed critical habitat for each species is considered to be occupied by either standing plants or seeds as part of the seed bank and contains one or more of their primary constituent elements. We propose to designate approximately 5,335 ha (13,180 ac) of land as critical habitat for the five carbonate plants. The lands proposed as critical habitat have been divided into three critical habitat units: the Northeastern Slope, Bertha Ridge, and Sugarlump Ridge. The Northeastern Slope Unit contains *Astragalus albens*, *Erigeron parishii*, *Eriogonum ovalifolium* var. *vineum*, and *Oxytheca parishii* var. *goodmaniana*. The Bertha Ridge Unit contains *Eriogonum ovalifolium* var. *vineum* and *Lesquerella kingii* ssp. *bernardina*. The Sugarlump Ridge Unit contains *L. kingii* ssp. *bernardina*. Lands proposed as critical habitat are under Federal and private ownership. Federal lands include areas owned or managed by the SBNF and BLM.

A brief description of each unit and reasons for proposing to designate it as critical habitat are presented below.

Unit 1: Northeastern Slope Unit, San Bernardino County, California (4,850 ha (11,980 ac))

The Northeastern Slope Unit includes 115 separate polygons (subunits) around essential occurrences of the carbonate plants. The unit extends from White

Mountain at the western edge to Rattlesnake Canyon at the eastern edge, a distance of approximately 40 km (25 mi). The lands within this unit contain the majority of the carbonate substrates in the carbonate belt that spans the north to northeastern slope of the San Bernardino Mountains. This unit contains four of the five carbonate plants: *Astragalus albens*, *Erigeron parishii*, *Eriogonum ovalifolium* var. *vineum*, and *Oxytheca parishii* var. *goodmaniana*.

This unit contains the vast majority of the known ranges of each of these four carbonate plants, including 17 of the 19 *Astragalus albens* occurrences, 22 of the 27 *Erigeron parishii* occurrences, 22 of the 28 *Eriogonum ovalifolium* var. *vineum* occurrences, and 18 of the 19 *Oxytheca parishii* var. *goodmaniana* occurrences.

This unit contains occurrences of the carbonate plants that the SBNF ranked as very important for their survival and conservation. The SBNF's ranking was instrumental in our determining which occurrences of each carbonate plant were essential within this critical habitat unit. Additionally, the revised draft San Bernardino Mountains Carbonate Endemic Plants Recovery Plan specifically mentions that the permanent protection of (1) a large number of core occurrences and (2) the majority of the remaining additional occurrences of each of these four carbonate plants are necessary for their downlisting and/or delisting.

The persistence of metapopulation species, including the carbonate plants,

depends on the combined dynamics of local extirpations and colonizations by dispersal (Given 1994; Hanski 1999; Hanski and Gilpin 1991; McCullough 1996). Every proposed occurrence in this unit is important to maintain the natural metapopulation dynamics of local extirpation and colonization events that are necessary for the conservation of the species. Every proposed carbonate plant occurrence is important as a seed source to colonize unoccupied sites and therefore maintain an equilibrium between colonization and extirpation events such as have been documented in populations of five plants restricted to serpentine seeps in Napa and Solano Counties, California (Harrison *et al.* 2000). Every proposed occurrence provides important genetic material through cross pollination and seed dispersal which helps maintain genetic diversity and reduce the likelihood of extirpation events.

This unit is essential to the conservation of these four carbonate plants because: (1) The majority of their known occurrences are within this unit, (2) a number of important core occurrences are found in this unit, and (3) since there is one core occurrence for three of the plants and two core areas where the fourth is known to occur, maintaining viable examples of potentially unique genetic makeup will likely prove to be essential to the long-term conservation of the species.

The acreage of proposed critical habitat for Unit 1 by land ownership is shown in Table 2.

TABLE 2.—PROPOSED CRITICAL HABITAT FOR UNIT 1 IN HECTARES (HA) (ACRES (AC)) BY SPECIES AND LAND OWNERSHIP, SAN BERNARDINO COUNTY, CALIFORNIA.

[Area estimates reflect critical habitat unit boundaries, not primary constituent elements within¹.]

| Species | BLM | USFS | Federal total | Private | Total |
|--|----------------------|------------------------|-------------------------|----------------------|-------------------------|
| <i>Astragalus albens</i> | 345 ha (850 ac) | 1,220 ha (3,020 ac) | 1,565 ha (3,870 ac) | 200 ha (495 ac) | 1,765 ha (4,365 ac) |
| <i>Erigeron parishii</i> | 390 ha (960 ac) | 940 ha (2,320 ac) | 1,330 ha (3,280 ac) | 460 ha (1,140 ac) | 1,790 ha (4,420 ac) |
| <i>Eriogonum ovalifolium</i> var. <i>vineum</i> | 175 ha (430 ac) | 2,120 ha (5,230 ac) | 2,290 ha (5,660 ac) | 375 ha (930 ac) | 2,665 ha (6,590 ac) |
| <i>Oxytheca parishii</i> var. <i>goodmaniana</i> | 35 ha (85 ac) | 1,050 ha (2,590 ac) | 1,085 ha (2,675 ac) | 190 ha (475 ac) | 1,275 ha (3,150 ac) |
| Total ² | 640 ha (1,585 ac) | 3,450 ha (8,515 ac) | 4,090 ha (10,100 ac) | 760 ha (1,880 ac) | 4,850 ha (11,980 ac) |

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

² Because of overlapping boundaries, the sum of proposed critical habitat for each carbonate plant species does not equal the total area that has been proposed as critical habitat for each species.

Unit 2: Bertha Ridge Unit, San Bernardino County, California (275 ha (685 ac))

The Bertha Ridge Unit includes four separate polygons encompassing essential occurrences of the carbonate plants. This unit is located on the north side of Big Bear Lake adjacent to Big Bear City, California. It is near the east end of Bertha Ridge on its south facing slope. The majority of lands within this unit contain soils derived from carbonate substrates (particularly dolomite) that are essential to the survival and conservation of both carbonate plant species. This unit contains essential core occurrences of two of the five carbonate plants: *Eriogonum ovalifolium* var. *vineum* and *Lesquerella kingii* ssp. *bernardina*.

This unit contains one of the two known *Lesquerella kingii* ssp. *bernardina* occurrences. It is an essential core occurrence that may be large enough to maintain the natural dynamics of local extirpation and colonization events. This unit also contains a geographically distinct *Eriogonum ovalifolium* var. *vineum*

occurrence. This is the only *E. ovalifolium* var. *vineum* occurrence found on soils primarily derived from dolomite substrates and may contain genetic characteristics essential to overall long-term conservation of the species.

Each of these occurrences have been identified by the SBNF as being very important core occurrences for the survival and conservation for each carbonate plant species. The SBNF's ranking was instrumental in our determining which occurrences of each carbonate plant were essential within this critical habitat unit. Additionally, the revised draft San Bernardino Mountains Carbonate Endemic Plants Recovery Plan specifically mentions that the permanent protection of each of the occurrences of these two carbonate plants are necessary for their downlisting and/or delisting.

The core occurrences of the two carbonate plants in this unit are essential as sources for the re-colonization events (e.g., seed dispersal) that are necessary to maintain the natural dynamics of local extirpation

and colonization events. Every proposed carbonate plant occurrence in this unit is important as a seed source to colonize unoccupied sites and therefore maintain an equilibrium between colonization and extirpation events. Every proposed occurrence provides important genetic material through cross pollination and seed dispersal which helps maintain genetic diversity and reduces the likelihood of extirpation events and/or extinction.

This unit is essential to the conservation of both of these carbonate species because: (1) It contains an essential core occurrence of each species, (2) this unit contains roughly half of the known range of *Lesquerella kingii* ssp. *bernardina*, and (3) since there are only two core areas for each of the two plants within this unit, maintaining viable examples of potentially unique genetic makeup will likely prove to be essential to the long-term conservation of the species.

The acreage of proposed critical habitat for Unit 2 by land ownership is shown in Table 3.

TABLE 3.—PROPOSED CRITICAL HABITAT FOR UNIT 2 IN HECTARES (HA) (ACRES (AC)) BY SPECIES AND LAND OWNERSHIP, SAN BERNARDINO COUNTY, CALIFORNIA.

[Area estimates reflect critical habitat unit boundaries, not primary constituent elements within¹.]

| Species | BLM | USFS | Federal total | Private | Total |
|--|----------------|--------------------|--------------------|------------------|--------------------|
| <i>Eriogonum ovalifolium</i> var. <i>vineum</i> | 0 ha (0 ac) | 150 ha (365 ac) | 150 (365 ac) | 0 ha (0 ac) | 150 ha (365 ac) |
| <i>Lesquerella kingii</i> ssp. <i>bernardina</i> | 0 ha (0 ac) | 195 ha (490 ac) | 195 ha (490 ac) | 10 ha (20 ac) | 205 ha (510 ac) |
| Total ² | 0 ha (0 ac) | 265 ha (665 ac) | 265 ha (665 ac) | 10 ha (20 ac) | 275 ha (685 ac) |

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

² Because of overlapping boundaries, the sum of proposed critical habitat for each carbonate plant species does not equal the total area that has been proposed as critical habitat for each species.

Unit 3: Sugarlump Ridge Unit, San Bernardino County, California (210 ha (515 ac))

The Sugarlump Ridge Unit includes two separate polygons encompassing an essential core occurrence of the *Lesquerella kingii* ssp. *bernardina*. This unit is centered on the north-facing slope of Sugarlump Ridge south of Bear Valley, approximately 10 km (6.2 mi) south of the Bertha Ridge unit. The soils in this unit are primarily derived from dolomite instead of limestone. *Lesquerella kingii* ssp. *bernardina* is the only carbonate plant in this unit.

This unit contains one of the two known *Lesquerella kingii* ssp. *bernardina* occurrences. This occurrence has been identified by the SBNF as being a very important core occurrence for the survival and conservation of *L. kingii* ssp.

bernardina. The SBNF's ranking was instrumental in our determining which occurrences of each carbonate plant were essential within this critical habitat unit. Additionally, the revised draft San Bernardino Mountains Carbonate Endemic Plants Recovery Plan specifically mentions that the permanent protection of this occurrence is necessary for its downlisting or delisting.

The core *Lesquerella kingii* ssp. *bernardina* occurrence in this unit is essential as a source for the re-colonization events (e.g., seed dispersal) that are necessary to maintain the natural metapopulation dynamics of local extirpation and colonization events. Every proposed occurrence of this carbonate plant is important as a seed source to colonize unoccupied sites and therefore maintain an

equilibrium between colonization and extirpation events. Every proposed occurrence provides important genetic material through cross pollination and seed dispersal which helps maintain genetic diversity and reduces the likelihood of extirpation events.

This unit is essential to the conservation of *Lesquerella kingii* ssp. *bernardina* because: (1) It contains one of the two known occurrences of this species, (2) this unit contains roughly half of the known range of *L. kingii* ssp. *bernardina*, and (3) since there area only two core areas where this plant is know to occur, maintaining viable examples of potentially unique genetic makeup will likely prove to be essential to the long-term conservation of the species.

The acreage of proposed critical habitat for Unit 3 by land ownership is shown in Table 4.

TABLE 4.—PROPOSED CRITICAL HABITAT FOR UNIT 3 IN HECTARES (HA) (ACRES (AC)) BY SPECIES AND LAND OWNERSHIP, SAN BERNARDINO COUNTY, CALIFORNIA

[Area estimates reflect critical habitat unit boundaries, not primary constituent elements within.¹]

| Species | BLM | USFS | Federal total | Private | Total |
|--|----------------|--------------------|--------------------|----------------|--------------------|
| <i>Lesquerella kingii</i> ssp. <i>bernardina</i> | 0 ha (0 ac) | 210 ha (515 ac) | 210 ha (515 ac) | 0 ha (0 ac) | 210 ha (515 ac) |
| Total ² | 0 ha (0 ac) | 210 ha (515 ac) | 210 ha (515 ac) | 0 ha (0 ac) | 210 ha (515 ac) |

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

² Because of overlapping boundaries, the sum of proposed critical habitat for each carbonate plant species does not equal the total area that has been proposed as critical habitat for each species.

Effects of Critical Habitat Designation

Section 7 Consultation

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

Section 7(a) of the Act requires Federal agencies 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 the action agency in eliminating conflicts that may be caused by the proposed action. The conservation recommendations in a conference report are advisory. We may issue a formal conference report, if requested by the Federal action agency. Formal conference reports include an opinion that is prepared according to 50 CFR 402.14, as if the species was listed or critical habitat designated. We may adopt the formal conference report as the biological opinion when the species is listed or critical habitat designated, if

no substantial new information or changes in the action alter the content of the opinion (see 50 CFR 402.10(d)).

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

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

provide "reasonable and prudent alternatives" to the project, if any are identifiable. Reasonable and prudent alternatives are defined at 50 CFR 402.02 as alternative actions identified during consultation that can be implemented in a manner consistent with the intended purpose of the action, that are consistent with the scope of the Federal agency's legal authority and jurisdiction, that are economically and technologically feasible, and that the Director believes would avoid 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.

Activities on Federal lands that may affect *Astragalus albens*, *Erigeron parishii*, *Eriogonum ovalifolium* var. *vineum*, *Lesquerella kingii* ssp. *bernardina*, and *Oxytheca parishii* var. *goodmaniana* 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 or any other activity requiring Federal action (*i.e.*, funding, authorization) will also continue to be subject to the section 7 consultation process. Federal actions not affecting listed species or critical habitat and actions on non-Federal lands that are not federally funded, authorized, or permitted do not require section 7 consultation.

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

of critical habitat for the conservation of any of the five carbonate plants. We note that such activities may also jeopardize the continued existence of the species. Activities that, when carried out, funded or authorized by a Federal agency, may destroy or adversely modify critical habitat include, but are not limited to:

(1) Removing, thinning, or clearing *Astragalus albens*, *Erigeron parishii*, *Eriogonum ovalifolium* var. *vineum*, *Lesquerella kingii* ssp. *bernardina*, and *Oxytheca parishii* var. *goodmaniana* habitat (as defined in the primary constituent elements), whether by burning, mechanical, chemical, or other means (*e.g.*, grubbing, grading, grazing, woodcutting, construction, road building and maintenance, mining, herbicide application, and weed abatement);

(2) Activities that appreciably degrade *Astragalus albens*, *Erigeron parishii*, *Eriogonum ovalifolium* var. *vineum*, *Lesquerella kingii* ssp. *bernardina*, and *Oxytheca parishii* var. *goodmaniana* habitat (as defined in the primary constituent elements), including, but not limited to, mining, fire management, livestock grazing, clearing, residential or commercial development, introducing or encouraging the spread of nonnative species, off-road vehicle use, and heavy/intense recreational use; and

(3) Appreciably decreasing habitat value or quality through indirect effects (*i.e.*, upslope or upstream removal of carbonate substrates, or significant watershed alteration).

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

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 ensures that actions funded, authorized, or carried out by Federal agencies are not likely to jeopardize the continued existence of a listed species or destroy or adversely modify 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, and 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. Because all of the units we are proposing are occupied by either standing plants or seeds as part of the seed bank of *Astragalus albens*, *Erigeron parishii*, *Eriogonum ovalifolium* var. *vineum*, *Lesquerella kingii* ssp. *bernardina*, and *Oxytheca parishii* var. *goodmaniana*, and Federal agencies already consult with us on activities in areas where the species may be present to ensure that their actions do not jeopardize the continued existence of the species, the designation of critical habitat is not likely to result in a significant regulatory burden above that already in place due to the presence of the listed species. Actions on which Federal agencies consult with us include, but are not limited to:

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

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

(3) Road construction, right of way designation, or regulation of agricultural or mining activities by Federal agencies;

(4) Development on private lands requiring permits from other Federal agencies;

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

(6) Authorization of Federal grants or loans;

(7) Activities funded by the Environmental Protection Agency, Department of Energy, or any other Federal agency; and

(8) Hazard mitigation and post-disaster repairs funded by the FEMA.

Relationship to Habitat Conservation Plans and Other Planning Efforts

Exclusions Under Section 4(b)(2)

Only one HCP, *Habitat conservation plan for the federally threatened desert tortoise, Cushenbury sand and gravel quarry, San Bernardino, California* (Lilburn Corporation 1994), has been completed within the area where these five carbonate plants occur. This HCP

addresses the federally listed as threatened desert tortoise (*Gopherus agassizii*). While *Erigeron parishii* occurs within the area addressed by this HCP, neither this species nor any other carbonate plant addressed in this proposal is covered under this HCP. In the event that future HCPs are developed within the boundaries of designated critical habitat in which one or more of the carbonate plants is included as a covered species, we will work with applicants to ensure that the HCPs provide for protection and management of habitat areas essential for their conservation by either directing development and habitat modification to non-essential areas or appropriately modifying activities within essential habitat areas so that such activities will not destroy or adversely modify critical habitat. The HCP development process provides an opportunity for more intensive data collection and analysis regarding the use of particular habitat areas by the five carbonate plants. The process also enables us to conduct detailed evaluations of the importance of such lands to the long term survival of the species in the context of constructing a biologically configured system of interlinked habitat preserves. We fully expect that any HCPs undertaken by local jurisdictions (e.g., counties, cities) and other parties will identify, protect, and provide appropriate management for those specific lands within the boundaries of the plans that are essential for the long-term conservation of the species. We believe and fully expect that our analyses of these proposed HCPs and proposed permits under section 7 will show that covered activities carried out in accordance with the provisions of the HCPs and biological opinions will not result in destruction or adverse modification of critical habitat.

Economic Analysis

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

Public Comments Solicited

We intend that any final action resulting from this proposal to be as accurate and 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 benefits of designation will outweigh any threats to these species due to designation;

(2) Specific information on the amount and distribution of carbonate plant 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 habitats;

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

(5) Economic and other values associated with designating critical habitat for *Astragalus albens*, *Erigeron parishii*, *Eriogonum ovalifolium* var. *vineum*, *Lesquerella kingii* ssp. *bernardina*, and *Oxytheca parishii* var. *goodmaniana*, such as those derived from non-consumptive uses (e.g., hiking, camping, plant-watching/ botanizing, 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.

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, which we will honor to the extent allowable by law. In some circumstances, we would withhold from the rulemaking record a respondent's identity, as allowable by

law. If you wish us to withhold your name or address, you must state this request prominently at the beginning of your comment. However, 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 seek the expert opinions of at least three appropriate and independent specialists regarding this proposed rule. The purpose of such review is to ensure listing decisions are based on scientifically sound data, assumptions, and analyses. We will send these peer reviewers copies of this proposed rule immediately following publication in the **Federal Register**. We will invite these peer reviewers to comment, during the public comment period, on the specific assumptions and conclusions regarding the proposed designation of critical habitat.

We will consider all comments and information received during the public comment period on this proposed rule during preparation of a final rulemaking. Accordingly, the final decision 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 at least 15 days prior to the close of the public comment period. 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 notice easier to understand including answers to questions such as the following: (1) Are the requirements in the notice clearly stated? (2) Does the notice contain technical language or jargon that interferes with the clarity? (3) Does the format of the notice (grouping and order of sections, use of headings, paragraphing, etc.) aid or

reduce its clarity? (4) Is the description of the notice in the **SUPPLEMENTARY INFORMATION** section of the preamble helpful in understanding the notice? What else could we do to make the notice easier to understand?

Send a copy of any comments that concern how we could make this notice easier to understand to: Office of Regulatory Affairs, Department of the Interior, Room 7229, 1849 C Street, NW, Washington, DC 20240.

Required Determinations

Regulatory Planning and Review

In accordance with Executive Order 12866, this document is a significant rule and was reviewed by the Office of Management and Budget (OMB) in accordance with the four criteria discussed below. We are preparing a draft economic 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** and in local newspapers so that it is available for public review and comment.

(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 E.O. 12866 is required.

Astragalus albens, *Erigeron parishii*, *Eriogonum ovalifolium* var. *vineum*, *Lesquerella kingii* ssp. *bernardina*, and *Oxytheca parishii* var. *goodmaniana* were listed as endangered or threatened species in 1994. In fiscal years 1994 through 2001, we have conducted, or are in the process of conducting, an estimated seven formal section 7 consultations with other Federal agencies to ensure that their actions will not jeopardize the continued existence of *A. albens*, *Erigeron parishii*, *Eriogonum ovalifolium* var. *vineum*, *L. kingii* ssp. *bernardina*, or *O. parishii* var. *goodmaniana*.

If a species is listed or critical habitat is designated, section 7(a)(2) of the Act requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of such a species or to destroy or adversely modify its critical habitat. Based upon our experience with the species and its habitat requirements, we conclude that any Federal action or authorized action that could potentially cause adverse modification of the proposed critical habitat would currently be considered as "jeopardy" under the Act (see Table 5). Accordingly, the designation of critical habitat for *Astragalus albens*, *Erigeron parishii*, *Eriogonum ovalifolium* var. *vineum*, *Lesquerella kingii* ssp. *bernardina*, and *Oxytheca parishii* var. *goodmaniana* is not anticipated to have any significant incremental impacts on actions proposed by Federal agencies or non-

Federal persons that 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 that 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 *Astragalus albens*, *Erigeron parishii*, *Eriogonum ovalifolium* var. *vineum*, *Lesquerella kingii* ssp. *bernardina*, or *Oxytheca parishii* var. *goodmaniana* since the listing in 1994. The designation of critical habitat is expected to impose few, if any, additional restrictions to those that currently exist. Because of the potential for impacts on other Federal agencies activities, we will continue to review this action for any inconsistencies with other Federal agencies' 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 critical habitat designation will have any significant incremental effects.

(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 5.—IMPACTS OF ASTRAGALUS ALBENS, ERIGERON PARISHII, ERIOGONUM OVALIFOLIUM VAR. VINEUM, LESQUERELLA KINGII SSP. BERNARDINA, AND OXYTHECA PARISHII VAR. GOODMANIANA LISTING AND CRITICAL HABITAT DESIGNATION

| Categories of Activities | Activities potentially affected by species listing only ¹ | Additional activities potentially affected by critical habitat designation ² |
|--|--|---|
| Federal Activities Potentially Affected ³ . | Activities the Federal Government carries out such as removing, thinking, or destroying <i>Astragalus albens</i> , <i>Erigeron parishii</i> , <i>Eriogonum ovalifolium</i> var. <i>vineum</i> , <i>Lesquerella kingii</i> ssp. <i>bernardina</i> , or <i>Oxytheca parishii</i> var. <i>goodmaniana</i> habitat (as defined in the primary constituent elements), whether by burning or mechanical, chemical, or other means (e.g., woodcutting, grubbing, grading, overgrazing, construction, road building, mining, herbicide application) and appreciably decreasing habitat value or quality through indirect effects (e.g., upslop or upstream removal of carbonate substrates, significant watershed alteration). | May result in a limited increase in the number of section 7 consultations (re-initiations or new). Since critical habitat is occupied, few to no additional activities would be affected by critical habitat. |

TABLE 5.—IMPACTS OF ASTRAGALUS ALBENS, ERIGERON PARISHII, ERIOGONUM OVALIFOLIUM VAR. VINEUM, LESQUERELLA KINGII SSP. BERNARDINA, AND OXYTHECA PARISHII VAR. GOODMANIANA LISTING AND CRITICAL HABITAT DESIGNATION—Continued

| Categories of Activities | Activities potentially affected by species listing only ¹ | Additional activities potentially affected by critical habitat designation ² |
|--|--|---|
| Private Activities Potentially Affected ⁴ . | Activities such as removing, thinning, or destroying <i>Astragalus albens</i> , <i>Erigeron parishii</i> , <i>Eriogonum ovalifolium</i> var. <i>vineum</i> , <i>Lesquerella kingii</i> ssp. <i>bernardina</i> , or <i>Oxytheca parishii</i> var. <i>goodmaniana</i> habitat (as defined in the primary constituent elements), whether by burning or mechanical, chemical, or other means (e.g., woodcutting, grubbing, grading, overgrazing, construction, road building, mining, herbicide application) and appreciably decreasing habitat value or quality through indirect effects (e.g., upslope or upstream removal of carbonate substrates, significant watershed alteration that require a Federal action (permit, authorization, or funding)). | May result in a limited increase in the number of section 7 consultations (re-initiations or new). Since critical habitat is occupied, few to no additional activities would be affected by critical habitat. |

¹ This column represents the activities potentially affected by listing the *Astragalus albens*, *Erigeron parishii*, *Eriogonum ovalifolium* var. *vineum*, *Lesquerella kingii* ssp. *bernardina*, or *Oxytheca parishii* var. *goodmaniana* as endangered or threatened species (August 24, 1994, 59 FR 43652) under the Endangered Species Act.

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

³ Activities initiated by a Federal agency.

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

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

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

We must determine whether the proposed rulemaking will affect a substantial number of small entities. 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 (13 CFR 121.201). 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. If the proposed rulemaking will affect a substantial number of small entities, we must determine if there will be a significant economic impact on them.

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; mining; timber harvesting; low-, moderate-, and high-impact recreation; placement of communication towers; peak energy production plants). We apply the "substantial number" test individually to each industry to determine if a certification of no significant effect 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 the proposed 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 *Astragalus albens*, *Erigeron parishii*, *Eriogonum ovalifolium* var. *vineum*, *Lesquerella kingii* ssp. *bernardina*, or *Oxytheca parishii* var. *goodmaniana*. If this critical habitat designation is finalized, Federal agencies must also consult with us if their activities may affect designated critical habitat. However, we do not believe this will result in any significant 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 significant additional regulatory impacts beyond the duty to avoid jeopardizing the species.

Even if the duty to avoid adverse modification does not trigger significant 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 reinitiate consultation for ongoing Federal activities. Since the listing of

the five carbonate plants in August 1994 (59 FR 43652), we have completed approximately six consultations involving the carbonate plants. Of these, four were with the USFS, one was with the BLM, and one was an intra-Service consultation on the issuance of a 10(a)(1)(B) permit. Due to this consultation history we know what land uses have triggered consultations in the past and we can estimate land uses that may trigger consultations in the future. Land uses that have triggered these consultations include: Livestock grazing; wild burro management; forest road and trail use, maintenance, and construction; special use permits (recreation and non-recreation); forest product harvesting (e.g., fuelwood collection) and commercial mining (limestone).

We believe that the requirement to reinstate consultations for ongoing projects will not affect a substantial number of small entities. We analyzed the consultations and attempted to determine which entities are involved in the consultations. There were six grazing permits on the SBNF as of 1998. Since that time, four areas with grazing permits have been closed. Of the two remaining grazing permits, only one is within areas proposed as critical habitat. This single grazing permit is not affecting a substantial number of small entities. The SBNF uses its own employees for wild burro management. No small entities are involved with this activity.

The SBNF separates special use permits (SUP) into two categories: Recreation and non-recreation. The recreation SUPs are usually of short duration and the majority of activities covered by them occur on existing roads and trails and will not be affected by critical habitat. Several times a year, the SBNF will issue SUPs that involve activities off-trail or off-road; however, several years ago the SBNF stopped issuing SUPs for activities that would occur in carbonate plant habitat. Therefore, we do not anticipate that this critical habitat designation will affect a substantial number of small entities involved in recreation activities. The non-recreation SUPs are generally long-term. These SUPs are issued for major projects that occur on Forest Service lands (i.e., power lines, pipelines, roads, sewer lines, and other utilities). These SUPs generally involve entities such as Verizon Wireless, Southern California Edison Company, Pacific Gas and Electric, and California Department of Transportation. The vast majority of these SUPs are for activities that occur outside of carbonate plant habitat. Since the majority of these entities are not

considered small and the majority of these activities occur outside of carbonate plant habitat, critical habitat is not anticipated to affect a substantial number of small entities involved in major infrastructure development.

Forest product harvesting involves activities such as fire wood collecting, the clearing of deadwood in post-fire areas, and commercial seed collecting. The SBNF stopped allowing these activities in areas with carbonate plant habitats in 1998, but still allows them to occur in non-carbonate plant habitat. Therefore, critical habitat will not affect a substantial number of small entities that rely on forest product harvesting activities.

The SBNF has records of over 200 mining claims in carbonate plant habitats. These claims are held by entities ranging from individuals, to small clubs (i.e., hobby gold mining clubs), to large multi-national corporations (e.g., Mitsubishi). If mines on these claims will have significant ground disturbing activities, they are required to complete a Plan of Operation (PoO; this is the standard acronym used by the BLM and USFS as per 36 CFR 2800). Significant ground-disturbing activities is defined as 2 ha (5 ac) by the BLM and discretionary to the Forest Officer for the USFS. Entities that will not have significant ground-disturbing activities are not required to complete a PoO, and thus these mining activities would not likely trigger any section 7 consultation requirement. To date, only three entities (Mitsubishi, Omya, and Specialty Minerals, Inc.) have filed PoOs with the SBNF, and none qualify as a small entity. Approximately 134 (63%) of the claims are owned or leased by entities that do not qualify as a small entity. The remaining 79 (37%) of the claims are either idle or have not submitted a PoO. Due to the significant cost of limestone mining, we do not expect individual claimants or other small entities to mine the claims without either associating with a large business or leasing their claim to a large business. Therefore, critical habitat will not affect a substantial number of small entities that rely on significant ground-disturbing activities such as mining.

When the species is clearly not present, designation of critical habitat could trigger additional review of Federal activities under section 7 of the Act. We have only proposed to designate occupied habitat, therefore, we do not anticipate that critical habitat will trigger significant additional review of Federal activities under section 7 of the Act. Therefore, for the purposes of this review and certification under the

RFA, we are assuming that any future consultations in the area proposed as critical habitat will be due jointly to both the presence of at least one of the five listed carbonate plants and its corresponding critical habitat. Because of our consultation history, we project that the future land uses in this area will be similar to the land uses that have occurred since 1994. With the development and completion of the CHMS (which will focus mining and other activities to minimize the threats within carbonate habitats), we anticipate that there will not be any additional land uses within the area proposed as critical habitat for the carbonate plants. Of all of these activities, we only expect that one additional small entity may be affected by this designation. We anticipate that one entity, not associated with a major business entity, will request a PoO approval. This entity will first have to comply with the National Environmental Policy Act and a section 7 consultation may be required, because the area under consideration is currently occupied by one or more of the five listed carbonate plants. We are not aware of any other small entities that will be conducting activities within the area proposed for designation of critical habitat for the carbonate plants. 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.

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 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. We can only describe the general kinds of actions that may be identified in future reasonable and prudent alternatives, because none of our previous consultations on any of the five carbonate plants has required reasonable and prudent alternatives. The kinds of actions that may be identified in future reasonable and prudent alternatives 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. They 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 summary, we have considered whether this proposed rule would result in a significant economic effect on a substantial number of small entities. We have concluded that it would not significantly affect a substantial number of small entities because most of the entities that conduct activities in carbonate plant habitat either have already consulted with us or they do not qualify as a small entity. Additionally, we are working towards a management plan with the other stakeholders (e.g., SBNF, BLM, mining interests) for the carbonate plant habitat.

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 to occur 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. We anticipate that the kinds of reasonable and prudent alternatives we would provide can usually be implemented at very low cost. Therefore, we are certifying that the proposed designation of critical habitat for *Astragalus albens*, *Erigeron parishii*, *Eriogonum ovalifolium* var. *vineum*, *Lesquerella kingii* ssp. *bernardina*, or *Oxytheca parishii* var. *goodmaniana* will not have a significant economic impact on a substantial number of small entities. Consequently, an initial regulatory flexibility analysis is not required for this proposed designation.

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, 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) which applies to regulations that significantly affect energy supply, distribution, and use. Executive Order 13211 requires agencies to prepare Statements of Energy Effects when undertaking certain actions. Because the area within the proposed critical habitat is mined for limestone (for use in pharmaceuticals and aggregate production) and not energy producing minerals (e.g., coal, petroleum products), this proposed rule is not expected to significantly affect energy supplies, distribution, or use; this action is not a significant energy action; and no Statement of Energy Effects is required. Additionally, the area proposed as critical habitat is occupied by listed species, therefore, any required section 7 consultation by a Federal agency undertaking an action in this area would initially be triggered by the presence of the listed species and not solely by this proposed designation of critical habitat.

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

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

(a) This rule, as proposed, will not “significantly or uniquely” affect small governments. A Small Government Agency Plan is not required. Small governments will only be affected to the extent that their proposed activities require Federal funds, permits or other authorization. Activities with a Federal nexus may not destroy or adversely modify critical habitat. However, as discussed previously, these activities are currently subject to equivalent restrictions as a result of the listing of the species, and no further restrictions are anticipated.

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

Takings

In accordance with Executive Order 12630 (“Government Actions and Interference with Constitutionally Protected Private Property Rights”), we have analyzed the potential takings implications of proposing to designate a total of 5,336 ha (13,180 ac) of lands in San Bernardino County, California, as

critical habitat for *Astragalus albens*, *Erigeron parishii*, *Eriogonum ovalifolium* var. *vineum*, *Lesquerella kingii* ssp. *bernardina*, and *Oxytheca parishii* var. *goodmaniana* in a takings implication assessment. The takings implication assessment concludes that this proposed rule does not pose a significant takings implication for lands proposed as critical habitat for these five carbonate plants.

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 within the geographic range occupied by *Astragalus albens*, *Erigeron parishii*, *Eriogonum ovalifolium* var. *vineum*, *Lesquerella kingii* ssp. *bernardina*, and *Oxytheca parishii* var. *goodmaniana* imposes no additional restrictions to those currently in place and, therefore, has little incremental impact on State and local governments and their activities. The designation may have some benefit to these governments in that the areas essential to the conservation of the species are more clearly defined, and the primary constituent elements of the habitat necessary to the survival of the species are specifically identified. While this definition and identification does not alter where and what federally sponsored activities may occur, it may assist these local governments in long-range planning rather than waiting for case-by-case section 7 consultations to occur.

Civil Justice Reform

In accordance with Executive Order 12988, the Department of the Interior's Office of the Solicitor has determined that the rule does not unduly burden the judicial system and meets the requirements of sections 3(a) and 3(b)(2) of the Order. We 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 *Astragalus albens*, *Erigeron parishii*, *Eriogonum ovalifolium* var. *vineum*, *Lesquerella kingii* ssp. *bernardina*, and *Oxytheca parishii* var. *goodmaniana*.

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

This rule does not contain any new collections of information that require approval by the Office of Management and Budget under the Paperwork Reduction Act (44 U.S.C. 3501 et seq.). This rule will not impose new record-keeping or reporting requirements on State or local governments, individuals, businesses, or organizations. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB Control Number.

National Environmental Policy Act

We have determined we do not need to prepare an Environmental Assessment or an Environmental Impact Statement as defined by the National Environmental Policy Act of 1969 in connection with regulations adopted pursuant to section 4(a) of the Endangered Species Act, as amended. We published a notice outlining our 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 the Department of the Interior's manual at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with recognized Federal Tribes on a government-to-government basis. We

have determined that there are no Tribal lands essential for the conservation of *Astragalus albens*, *Erigeron parishii*, *Eriogonum ovalifolium* var. *vineum*, *Lesquerella kingii* ssp. *bernardina*, or *Oxytheca parishii* var. *goodmaniana* because no Tribal lands support populations or provide essential habitat for the five carbonate plants. Therefore, critical habitat for *A. albens*, *Erigeron parishii*, *Eriogonum ovalifolium* var. *vineum*, *L. kingii* ssp. *bernardina*, or *O. parishii* var. *goodmaniana* has not been proposed on Tribal lands.

References Cited

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

Author

The primary author of this proposed rule is Mark A. Elvin (see **ADDRESSES** section).

List of Subjects in 50 CFR Part 17

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

Proposed Regulation Promulgation

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

PART 17—[AMENDED]

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

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

2. In § 17.12(h), revise the entries for *Astragalus albens*, *Erigeron parishii*, *Eriogonum ovalifolium* var. *vineum*, *Lesquerella kingii* ssp. *bernardina*, and *Oxytheca parishii* var. *goodmaniana* under "FLOWERING PLANTS" in the List of Endangered and Threatened 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>Astragalus albens</i> | * Cushenbury milk-vetch. | * U.S.A. (CA) | * Fabaceae—Pea | * E | * 548 | * 17.96(b) | * NA |

| Species | | Historic range | Family | Status | When listed | Critical habitat | Special rules |
|--|---|------------------------|------------------------------|------------|-------------|------------------|---------------|
| Scientific name | Common name | | | | | | |
| * <i>Erigeron parishii</i> | * Parish's daisy | * U.S.A. (CA) | * Asteraceae—Sunflower. | * T | * 548 | * 17.96(b) | * NA |
| * <i>Eriogonum ovalifolium</i> var. <i>vineum</i> . | * Cushenbury buckwheat. | * U.S.A. (CA) | * Polygonaceae—Buckwheat. | * E | * 548 | * 17.96(b) | * NA |
| * <i>Lesquerella kingii</i> ssp. <i>bernardina</i> . | * San Bernardino Mountains bladderpod. | * U.S.A. (CA) | * Brassicaceae—Mustard. | * E | * 548 | * 17.96(b) | * NA |
| * <i>Oxytheca parishii</i> var. <i>goodmaniana</i> . | * Cushenbury oxytheca. | * U.S.A. (CA) | * Polygonaceae—Buckwheat. | * E | * 548 | * 17.96(b) | * NA |
| * | * | * | * | * | * | * | * |

3. In § 17.96, as proposed to be amended at 65 FR 66865, November 7, 2000, add critical habitat for the *Astragalus albens*, *Erigeron parishii*, *Eriogonum ovalifolium* var. *vineum*, *Lesquerella kingii* ssp. *bernardina*, and *Oxytheca parishii* var. *goodmaniana* under paragraph (a) by adding entries for *A. albens*, *Erigeron parishii*, *Eriogonum ovalifolium* var. *vineum*, *L. kingii* ssp. *bernardina*, and *O. parishii* var. *goodmaniana* in alphabetical order by family under Asteraceae, Brassicaceae, Fabaceae, and Polygonaceae (respectively) to read as follows:

§ 17.96 Critical habitat—plants.

- (a)
(2)* * *
(i)* * *

Family Asteraceae: *Erigeron parishii* (Parish's daisy)

(A) Critical habitat units are depicted for San Bernardino County, California, on the maps below.

(B) The primary constituent elements of critical habitat for *Erigeron parishii* are those habitat components that are essential for the primary biological needs of the species. Based on our current knowledge of this species, the primary constituent elements of critical habitat for this species are listed below and consist of, but are not limited to:

(1) Soils derived primarily from upstream or upslope limestone, dolomite, or quartz monzonite parent materials that occur on dry, rocky hillsides, shallow drainages, or outwash plains at elevations between 1,171 and 1,950 m (3,842 and 6,400 ft);

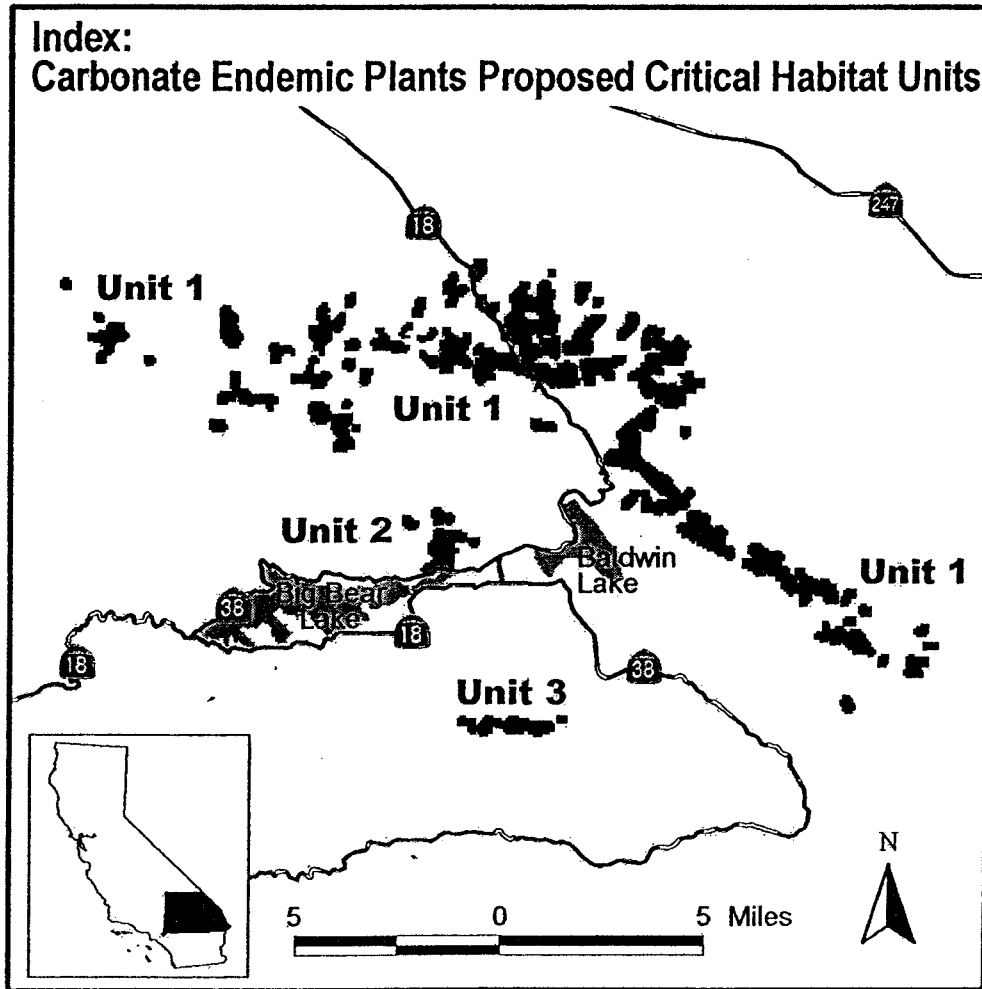
(2) Soils with intact, natural surfaces that have not been substantially altered

by land use activities (e.g., graded, excavated, re-contoured, or otherwise altered by ground-disturbing equipment); and

(3) Associated plant communities that have areas with an open canopy cover.

(C) Critical habitat does not include existing features and structures, such as buildings, mines that are active at the time of this rule's publication, paved or unpaved roads, other paved or cleared areas, lawns, and other urban landscaped areas that do not contain one or more of the primary constituent elements. Federal actions limited to those areas, therefore, would not trigger a section 7 consultation, unless they may affect the species and/or primary constituent elements in adjacent critical habitat.

(D) Map 1 follows. [index map]



(E) Northeastern Slope Unit, San Bernardino County, California.

(I) From USGS 1:24,000 quadrangle maps Fawnskin, Big Bear City, and Onyx Peak, California.

Subunit 1a: land bounded by the following UTM11 NAD27 coordinates (E, N): 507200, 3802000; 507400, 3802000; 507400, 3801800; 507500, 3801800; 507500, 3801600; 507400, 3801600; 507400, 3801500; 507500, 3801500; 507500, 3801200; 507600, 3801200; 507600, 3801300; 507700, 3801300; 507700, 3801400; 507800, 3801400; 507800, 3801500; 507900, 3801500; 507900, 3801600; 508100, 3801600; 508100, 3801100; 508000, 3801100; 508000, 3800900; 507900, 3800900; 507900, 3800800; 507700, 3800800; 507700, 3800900; 507600, 3800900; 507600, 3801000; 507500, 3801000; 507500, 3800700; 507400, 3800700; 507400, 3800300; 507300, 3800300; 507300, 3799900; 507100, 3799900; 507100, 3800100; 506900, 3800100; 506900, 3800500; 506800, 3800500; 506800, 3800700; 506700, 3800700; 506700, 3801100; 507100,

3801100; 507100, 3801400; 507000, 3801400; 507000, 3801800; 507100, 3801800; 507100, 3801900; 507200, 3801900; and 507200, 3802000.

Subunit 1b: land bounded by the following UTM11 NAD27 coordinates (E, N): 508300, 3802400; 508500, 3802400; 508500, 3801900; 508400, 3801900; 508400, 3801800; 508100, 3801800; 508100, 3802300; 508300, 3802300; and 508300, 3802400.

Subunit 1c: land bounded by the following UTM11 NAD27 coordinates (E, N): 509700, 3800500; 510200, 3800500; 510200, 3800200; 510100, 3800200; 510100, 3800100; 509700, 3800100; and 509700, 3800500.

Subunit 1d: land bounded by the following UTM11 NAD27 coordinates (E, N): 510300, 3801000; 510500, 3801000; 510500, 3800800; 510300, 3800800; and 510300, 3801000.

Subunit 1e: land bounded by the following UTM11 NAD27 coordinates (E, N): 510900, 3802200; 511200, 3802200; 511200, 3801700; 511100, 3801700; 511100, 3801400; 510700, 3801400; 510700, 3801800; 510800,

3801800; 510800, 3802100; 510900, 3802100; and 510900, 3802200.

Subunit 1f: land bounded by the following UTM11 NAD27 coordinates (E, N): 511400, 3801000; 511600, 3801000; 511600, 3800900; 511700, 3800900; 511700, 3800700; 511600, 3800700; 511600, 3800600; 511500, 3800600; 511500, 3800500; 511200, 3800500; 511200, 3800400; 511000, 3800400; 511000, 3800500; 510900, 3800500; 510900, 3800600; 511000, 3800600; 511000, 3800700; 511300, 3800700; 511300, 3800800; 511400, 3800800; and 511400, 3801000.

Subunit 1g: land bounded by the following UTM11 NAD27 coordinates (E, N): 511800, 3800000; 512200, 3800000; 512200, 3799900; 512300, 3799900; 512300, 3799800; 512400, 3799800; 512400, 3799500; 512300, 3799500; 512300, 3799400; 511900, 3799400; 511900, 3799500; 511700, 3799500; 511700, 3799400; 511500, 3799400; 511500, 3799500; 511400, 3799500; 511400, 3799600; 511300, 3799600; 511300, 3799800; 511800, 3799800; and 511800, 3800000.

Subunit 1h: land bounded by the following UTM11 NAD27 coordinates (E, N): 512100, 3800700; 512400, 3800700; 512400, 3800600; 512400, 3800600; 512500, 3800600; 512500, 3800400; 512600, 3800400; 512600, 3800300; 512700, 3800300; 512700, 3800100; 512600, 3800100; 512600, 3800000; 512300, 3800000; 512300, 3800300; 512200, 3800300; 512200, 3800200; 512100, 3800200; 512100, 3800100; 511900, 3800100; 511900, 3800200; 511800, 3800200; 511800, 3800400; 511900, 3800400; 511900, 3800500; 512100, 3800500; and 512100, 3800700.

Subunit 1i: land bounded by the following UTM11 NAD27 coordinates (E, N): 512200, 3803200; 512400, 3803200; 512400, 3803100; 512500, 3803100; 512500, 3802800; 512400, 3802800; 512400, 3802600; 512500, 3802600; 512500, 3802700; 512800, 3802700; 512800, 3802600; 512900, 3802600; 512900, 3802400; 512800, 3802400; 512800, 3802300; 512700, 3802300; 512700, 3802200; 512500, 3802200; 512500, 3802000; 512400, 3802000; 512400, 3801800; 512000, 3801800; 512000, 3802100; 512100, 3802100; 512100, 3802300; 511900, 3802300; 511900, 3802800; 512000, 3802800; 512000, 3802900; 512100, 3802900; 512100, 3803100; 512200, 3803100; and 512200, 3803200.

Subunit 1j: land bounded by the following UTM11 NAD27 coordinates (E, N): 513300, 3802300; 513600, 3802300; 513600, 3802000; 513700, 3802000; 513700, 3801900; 513800, 3801900; 513800, 3802000; 514100, 3802000; 514100, 3801600; 514000, 3801600; 514000, 3801400; 513800, 3801400; 513800, 3801500; 513600, 3801500; 513600, 3801600; 513400, 3801600; 513400, 3801700; 513300, 3801700; 513300, 3801800; 513200, 3801800; 513200, 3802200; 513300, 3802200; and 513300, 3802300.

Subunit 1k: land bounded by the following UTM11 NAD27 coordinates (E, N): 515800, 3802900; 516000, 3802900; 516000, 3802800; 516100, 3802800; 516100, 3802500; 516300, 3802500; 516300, 3802200; 516000, 3802200; 516100, 3802000; 516100, 3801900; 516200, 3801900; 516200, 3801700; 516300, 3801700; 516300, 3801500; 516400, 3801500; 516400, 3800800; 516300, 3800800; 516300, 3800700; 516000, 3800700; 516000, 3801300; 515900, 3801300; 515900, 3801400; 515800, 3801400; 515800, 3801600; 515700, 3801600; 515700, 3801700; 515100, 3801700; 515100, 3801800; 515000, 3801800; 515000, 3801500; 515100, 3801500; 515100, 3801200; 515000, 3801200; 515000, 3801100; 514900, 3801100; 514900, 3800700; 514400,

3800700; 514400, 3801000; 514300, 3801000; 514300, 3801400; 514400, 3801400; 514400, 3801500; 514500, 3801500; 514500, 3801600; 514600, 3801600; 514600, 3802100; 514700, 3802100; 514700, 3802400; 514800, 3802400; 514800, 3802600; 514900, 3802600; 514900, 3802800; 515300, 3802800; 515300, 3802500; 515200, 3802500; 515200, 3802300; 515400, 3802300; 515400, 3802200; 515500, 3802200; 515500, 3802100; 515600, 3802100; 515600, 3802700; 515700, 3802700; 515700, 3802800; 515800, 3802800; and 515800, 3802900.

Subunit 1l: land bounded by the following UTM11 NAD27 coordinates (E, N): 515600, 3801200; 515900, 3801200; 515900, 3800800; 515500, 3800800; 515500, 3801100; 515600, 3801100; and 515600, 3801200.

Subunit 1m: land bounded by the following UTM11 NAD27 coordinates (E, N): 514900, 3799900; 514900, 3800000; 515000, 3800000; 515000, 3800200; 514900, 3800200; 514900, 3800500; 515000, 3800500; 515000, 3800600; 515400, 3800600; 515400, 3800200; 515500, 3800200; 515500, 3799700; 515400, 3799700; 515400, 3799600; 516000, 3799600; 516000, 3799500; 516100, 3799500; 516100, 3799200; 516500, 3799200; 516500, 3799100; 516600, 3799100; 516600, 3798900; 516500, 3798900; 516500, 3798800; 516200, 3798800; 516200, 3798900; 516000, 3798900; 516000, 3799100; 515900, 3799100; 515900, 3799000; 515700, 3799000; 515700, 3799100; 515600, 3799100; 515600, 3799000; 515200, 3799000; 514800, 3799100; 514800, 3799200; 514700, 3799200; 514700, 3799300; 514100, 3799300; 514100, 3799400; 514000, 3799400; 514000, 3799300; 513600, 3799300; 513500, 3799400; 513500, 3799600; 513600, 3799600; 513600, 3799700; 513500, 3799700; 513500, 3800000; 513600, 3800000; 513600, 3800100; 513700, 3800100; 513700, 3800200; 513900, 3800200; 513900, 3800000; 514700, 3799900; and 514900, 3799900; excluding land bounded by 514900, 3799900; 514900, 3799700; 515000, 3799700; 515000, 3799700; 515000, 3799900; and 514900, 3799900.

Subunit 1n: land bounded by the following UTM11 NAD27 coordinates (E, N): 517300, 3801000; 517800, 3801000; 517800, 3800600; 517600, 3800600; 517600, 3800300; 517500, 3800300; 517500, 3800200; 517000, 3800200; 517000, 3800700; 517100, 3800700; 517100, 3800800; 517200, 3800800; 517200, 3800900; 517300, 3800900; and 517300, 3801000.

Subunit 1o: land bounded by the following UTM11 NAD27 coordinates (E, N): 519200, 3801600; 519500, 3801600; 519500, 3801500; 519600, 3801500; 519600, 3801100; 519500, 3801100; 519500, 3800900; 519400, 3800900; 519400, 3800800; 519300, 3800800; 519300, 3800700; 519200, 3800700; 519200, 3800600; 519100, 3800600; 519100, 3800500; 518800, 3800500; 518800, 3800900; 518900, 3800900; 518900, 3801000; 519000, 3801000; 519100, 3801100; 519100, 3801500; 519200, 3801500; and 519200, 3801600.

Subunit 1p: land bounded by the following UTM11 NAD27 coordinates (E, N): 520000, 3801100; 520300, 3801100; 520300, 3800700; 520100, 3800700; 520100, 3800600; 519900, 3800600; 519800, 3800600; 519800, 3800700; 519800, 3800900; 519900, 3800900; 519900, 3801000; 520000, 3801000; and 520000, 3801100.

Subunit 1q: land bounded by the following UTM11 NAD27 coordinates (E, N): 521100, 3800700; 521300, 3800700; 521300, 3800600; 521400, 3800600; 521400, 3800500; 521600, 3800500; 521600, 3800300; 521700, 3800300; 521700, 3800200; 521600, 3800200; 521500, 3800100; 521500, 3800000; 521300, 3800000; 521300, 3799900; 521200, 3799900; 521200, 3799900; 521000, 3799900; 521000, 3799600; 520900, 3799600; 520900, 3799500; 520500, 3799500; 520500, 3799100; 520300, 3799100; 520300, 3799300; 520200, 3799300; 520200, 3799200; 520000, 3799200; 520000, 3799000; 520200, 3799000; 520200, 3798900; 520300, 3798900; 520300, 3798800; 520700, 3798800; 520700, 3798600; 520800, 3798600; 520800, 3798700; 521500, 3798700; 521500, 3798800; 521300, 3798800; 521300, 3798900; 521700, 3798900; 521700, 3799000; 522000, 3799000; 522000, 3799000; 522000, 3798900; 522000, 3798700; 522000, 3798700; 521900, 3798600; 521900, 3798400; 521500, 3798400; 521500, 3798100; 521300, 3798100; 521200, 3798000; 521200, 3797800; 520600, 3797800; 520600, 3797900; 520500, 3797900; 520500, 3798100; 520400, 3798100; 520400, 3798200; 520300, 3798200; 520300, 3798400; 520200, 3798400; 520200, 3798500; 520100, 3798500; 519600, 3798600; 519600, 3798900; 519200, 3798900; 519200, 3799200; 519300, 3799200; 519300, 3799300; 519500, 3799300; 519500, 3799400; 519700, 3799400; 519900, 3799500; 519900, 3799600; 520100, 3799600; 520100, 3799700; 520300, 3799700; 520300, 3799800; 520400,

3799800; 520400, 3799900; 520500, 3799900; 520500, 3800100; 520600, 3800100; 520600, 3800300; 520800, 3800300; 520800, 3800400; 520900, 3800400; 520900, 3800500; 521000, 3800500; 521000, 3800600; 521100, 3800600; and 521100, 3800700.

Subunit 1r: land bounded by the following UTM11 NAD27 coordinates (E, N): 519200, 3797300; 519600, 3797300; 519600, 3796900; 519500, 3796900; 519500, 3796800; 519400, 3796800; 519400, 3796600; 519300, 3796600; 519300, 3796500; 519500, 3796500; 519500, 3796400; 519600, 3796100; 519700, 3796100; 519700, 3796000; 519600, 3796000; 519600, 3795400; 519300, 3795400; 519300, 3795500; 518500, 3795500; 518500, 3795900; 518800, 3795900; 518800, 3796000; 519000, 3796000; 519000, 3796100; 519100, 3796100; 519100, 3796200; 519200, 3796200; 519200, 3796500; 518900, 3796500; 518900, 3796600; 518800, 3796600; 518800, 3796900; 518900, 3796900; 518900, 3797000; 519100, 3797000; 519100, 3797200; 519200, 3797200; and 519200, 3797300.

Subunit 1s: land bounded by the following UTM11 NAD27 coordinates (E, N): 520000, 3797600; 520300, 3797600; 520300, 3797100; 520100, 3797100; 520100, 3797000; 520000, 3797000; 520000, 3796900; 519800,

3796900; 519800, 3797000; 519700, 3797000; 519700, 3797400; 519800, 3797400; 519800, 3797500; 520000, 3797500; and 520000, 3797600.

Subunit 1t: land bounded by the following UTM11 NAD27 coordinates (E, N): 521300, 3797100; 521700, 3797100; 521700, 3796700; 521600, 3796700; 521600, 3796600; 521400, 3796600; 521400, 3796700; 521300, 3796700; and 521300, 3797100.

Subunit 1u: land bounded by the following UTM11 NAD27 coordinates (E, N): 519300, 3794600; 519700, 3794600; 519700, 3794300; 519600, 3794300; 519600, 3794100; 519500, 3794100; 519500, 3794000; 519400, 3794000; 519400, 3793900; 519300, 3793900; 519300, 3793800; 519000, 3793800; 519000, 3794200; 519100, 3794200; 519100, 3794300; 519200, 3794300; 519200, 3794400; 519300, 3794400; and 519300, 3794600.

Subunit 1v: land bounded by the following UTM11 NAD27 coordinates (E, N): 519800, 3794300; 520200, 3794300; 520200, 3793900; 520300, 3793900; 520300, 3794000; 520500, 3794000; 520500, 3794100; 521000, 3794100; 521000, 3794200; 521600, 3794200; 521600, 3793900; 521500, 3793900; 521500, 3793800; 521200, 3793800; 521200, 3793700; 521100, 3793700; 521100, 3793600; 520800, 3793600; 520800, 3793700; 520600,

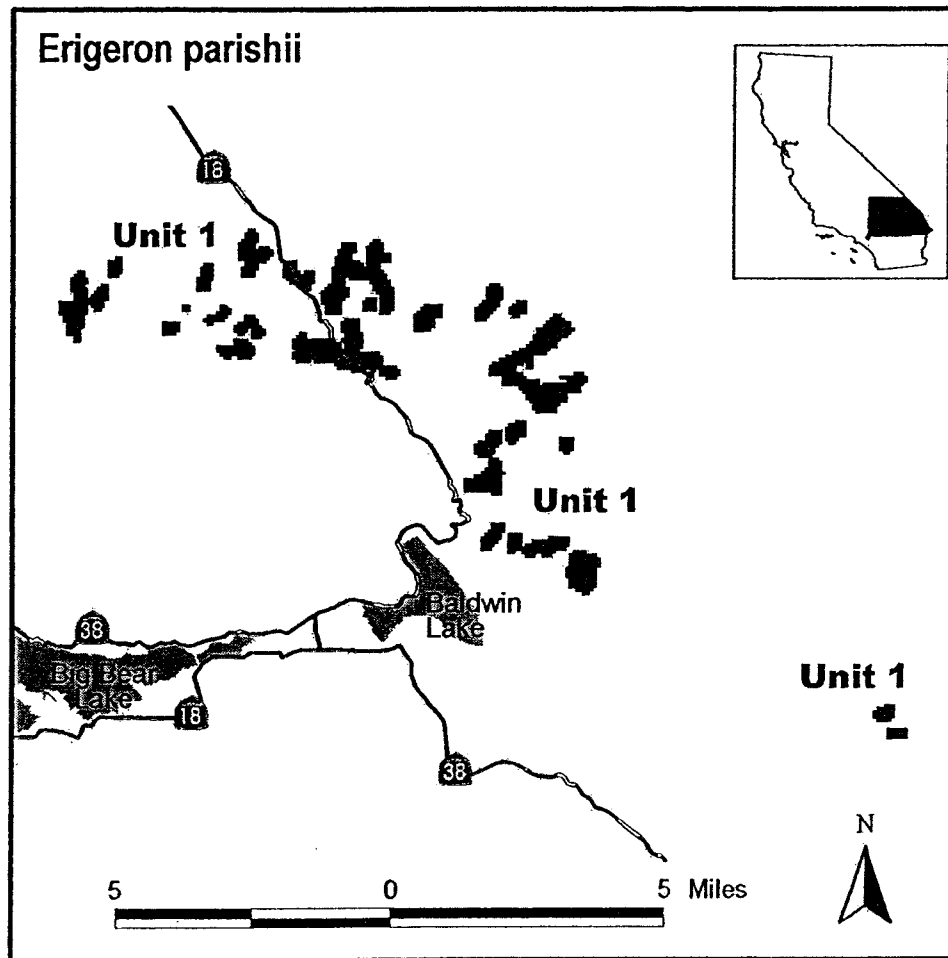
3793700; 520600, 3793600; 520300, 3793600; 520300, 3793700; 520200, 3793700; 520200, 3793800; 520000, 3793800; 520000, 3793700; 519800, 3793700; and 519800, 3794300.

Subunit 1w: land bounded by the following UTM11 NAD27 coordinates (E, N): 521700, 3793800; 522100, 3793800; 522100, 3793700; 522400, 3793700; 522400, 3793600; 522500, 3793600; 522500, 3793300; 522400, 3793300; 522400, 3792700; 522300, 3792700; 522300, 3792600; 522200, 3792600; 522200, 3792500; 522000, 3792500; 522000, 3792600; 521800, 3792600; 521800, 3792700; 521600, 3792700; 521600, 3793000; 521500, 3793000; 521500, 3793300; 521600, 3793300; 521600, 3793700; 521700, 3793700; and 521700, 3793800.

Subunit 1x: land bounded by the following UTM11 NAD27 coordinates (E, N): 530800, 3789300; 531100, 3789300; 531100, 3788900; 531000, 3788900; 531000, 3788800; 530600, 3788800; 530600, 3788900; 530500, 3788900; 530500, 3789100; 530600, 3789100; 530600, 3789200; 530800, 3789200; and 530800, 3789300.

Subunit 1y: land bounded by the following UTM11 NAD27 coordinates (E, N): 530900, 3788600; 531500, 3788600; 531500, 3788300; 530900, 3788300; and 530900, 3788600.

(2) *Erigeron parishii* Map follows.



Family Brassicaceae: *Lesquerella kingii* ssp. *bernardina* (San Bernardino Mountains Bladderpod)

(A) Critical habitat units are depicted for San Bernardino County, California, on the maps below.

(B) The primary constituent elements of critical habitat for *Lesquerella kingii* ssp. *bernardina*, are those habitat components that are essential for the primary biological needs of the species. Based on our current knowledge of this species, the primary constituent elements of critical habitat for this species are listed below and consist of, but are not limited to:

(1) Soils derived primarily from Bonanza King Formation and Undivided Cambrian parent materials that occur on hillsides or on large rock outcrops at elevations between 2,098 and 2,700 m (6,883 and 8,800 ft);

(2) Soils with intact, natural surfaces that have not been substantially altered by land use activities (e.g., graded, excavated, re-contoured, or otherwise altered by ground-disturbing equipment); and

(3) Associated plant communities that have areas with an open canopy cover and little accumulation of organic material (e.g., leaf litter) on the surface of the soil.

(C) Critical habitat does not include existing features and structures, such as buildings, mines that are active at the time of this rule's publication, paved or unpaved roads, other paved or cleared areas, lawns, and other urban landscaped areas that do not contain one or more of the primary constituent elements. Federal actions limited to those areas, therefore, would not trigger a section 7 consultation, unless they may affect the species and/or primary constituent elements in adjacent critical habitat.

(D) Bertha Ridge Unit, San Bernardino County, California.

(1) From USGS 1:24,000 quadrangle maps Fawnskin and Big Bear City, California.

Subunit 2a: land bounded by the following UTM11 NAD27 coordinates (E, N): 510400, 3793600; 510700, 3793600; 510700, 3793500; 510800, 3793500; 510800, 3793400; 511000,

3793400; 511000, 3793100; 510900, 3793100; 510900, 3793000; 510600, 3793000; 510600, 3793100; 510500, 3793100; 510500, 3793200; 510400, 3793200; and 510400, 3793600.

Subunit 2b: land bounded by the following UTM11 NAD27 coordinates (E, N): 511600, 3793900; 511900, 3793900; 511900, 3793800; 512000, 3793800; 512000, 3793700; 512300, 3793700; 512300, 3793600; 512400, 3793600; 512400, 3793300; 512300, 3793300; 512300, 3793200; 512100, 3793200; 512100, 3793200; 512100, 3793300; 512000, 3793300; 512000, 3793200; 511600, 3793200; 511600, 3793500; 511500, 3793500; 511500, 3793800; 511600, 3793800; and 511600, 3793900.

Subunit 2c: land bounded by the following UTM11 NAD27 coordinates (E, N): 511700, 3793100; 512000, 3793100; 512000, 3793000; 512200, 3793000; 512200, 3792700; 512100, 3792700; 512100, 3792500; 511900, 3792500; 511900, 3792300; 512600, 3792300; 512600, 3792100; 512400, 3792100; 512400, 3791400; 512100, 3791400; 512100, 3791500; 511900, 3791500; 511900, 3791400; 511700,

3791400; 511700, 3791300; 511600, 3791300; 511600, 3791200; 511200, 3791200; 511200, 3791400; 511100, 3791400; 511100, 3791500; 511200, 3791500; 511200, 3791600; 511300, 3791600; 511300, 3791700; 511600, 3791700; 511600, 3792300; 511500, 3792300; 511500, 3792500; 511600, 3792500; 511600, 3792600; 511700, 3792600; 511700, 3792700; 511600, 3793000; 511700, 3793000; and 511700, 3793100.

(E) Sugarlump Ridge Unit, San Bernardino County, California.

(1) From USGS 1:24,000 quadrangle map Moonridge, California.

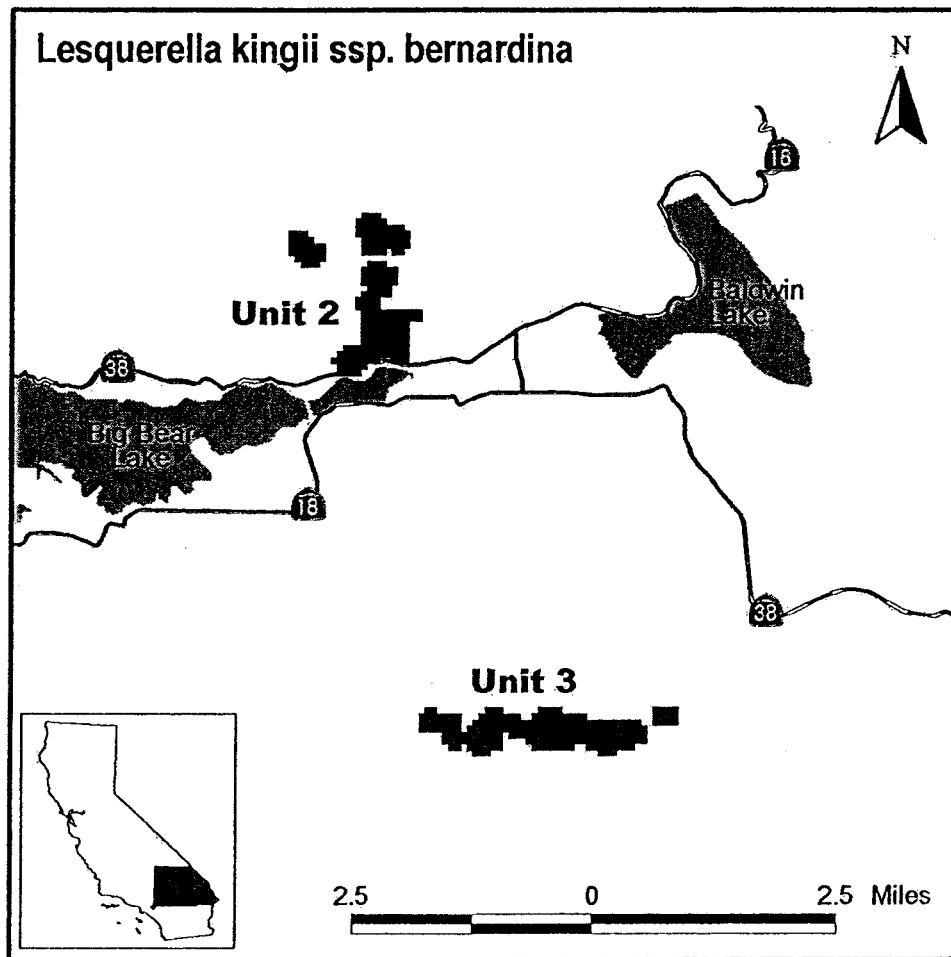
Subunit 3a: land bounded by the following UTM11 NAD27 coordinates (E, N): 512700, 3785700; 512900,

3785700; 512900, 3785600; 513300, 3785600; 513300, 3785300; 513400, 3785300; 513400, 3785400; 513500, 3785400; 513500, 3785500; 513600, 3785500; 513600, 3785600; 513700, 3785600; 513700, 3785700; 514000, 3785700; 514000, 3785600; 514300, 3785600; 514300, 3785500; 514500, 3785500; 514500, 3785600; 514600, 3785600; 515000, 3785700; 515000, 3785600; 515400, 3785600; 515400, 3785500; 516300, 3785500; 516300, 3785400; 516400, 3785400; 516400, 3785100; 516200, 3785100; 516200, 3785000; 515900, 3785000; 515900, 3784900; 515600, 3784900; 515600, 3785000; 515400, 3785000; 515400, 3785100; 515200, 3785100; 515200, 3785000; 514500,

3785000; 514500, 3785100; 514400, 3785100; 514400, 3785200; 514100, 3785200; 514100, 3785300; 514000, 3785300; 514000, 3785000; 513800, 3785000; 513800, 3784900; 513500, 3784900; 513500, 3785000; 513400, 3785000; 513400, 3785100; 513300, 3785100; 513300, 3785000; 513100, 3785000; 513100, 3785100; 513000, 3785100; 513000, 3785300; 512600, 3785300; 512600, 3785600; 512700, 3785600; and 512700, 3785700.

Subunit 3b: land bounded by the following UTM11 NAD27 coordinates (E, N): 516500, 3785700; 516900, 3785700; 516900, 3785400; 516500, 3785400; and 516500, 3785700.

(2) *Lesquerella kingii* ssp. *bernardina* Map follows.



Family Fabaceae: *Astragalus albens* (Cushenbury Milk-Vetch)

(A) Critical habitat units are depicted for San Bernardino County, California, on the maps below.

(B) The primary constituent elements of critical habitat for *Astragalus albens*, are those habitat components that are

essential for the primary biological needs of the species. Based on our current knowledge of this species, the primary constituent elements of critical habitat for this species are listed below and consist of, but are not limited to:

(1) Soils derived primarily from the upper and middle members of the Bird

Spring Formation and Undivided Cambrian parent materials that occur on hillsides or along rocky washes with limestone outwash/deposits at elevations between 1,171 and 2,013 m (3,864 and 6,604 ft);

(2) Soils with intact, natural surfaces that have not been substantially altered

by land use activities (e.g., graded, excavated, re-contoured, or otherwise altered by ground-disturbing equipment); and

(3) Associated plant communities that have areas with an open canopy cover and little accumulation of organic material (e.g., leaf litter) on the surface of the soil.

(C) Critical habitat does not include existing features and structures, such as buildings, mines that are active at the time of this rule's publication, paved or unpaved roads, other paved or cleared areas, lawns, and other urban landscaped areas that do not contain one or more of the primary constituent elements. Federal actions limited to those areas, therefore, would not trigger a section 7 consultation, unless they may affect the species and/or primary constituent elements in adjacent critical habitat.

(D) Northeastern Slope Unit, San Bernardino County, California.

(1) From USGS 1:24,000 quadrangle maps Fawnskin, Big Bear City, Rattlesnake Canyon, and Cougar Buttes, California.

Subunit 1a: land bounded by the following UTM11 NAD27 coordinates (E, N): 503300, 3801900; 503600, 3801900; 503600, 3801700; 503700, 3801700; 503700, 3801600; 503800, 3801600; 503800, 3801500; 503900, 3801500; 503900, 3801200; 503800, 3801100; 503900, 3801100; 503900, 3800900; 504000, 3800900; 504000, 3800800; 504100, 3800800; 504100, 3800500; 504000, 3800500; 504000, 3800300; 503900, 3800300; 503900, 3800200; 503500, 3800300; 503400, 3800300; 503400, 3800400; 503300, 3800400; 503300, 3800600; 503200, 3800600; 503200, 3801800; 503300, 3801800; and 503300, 3801900.

Subunit 1b: land bounded by the following UTM11 NAD27 coordinates (E, N): 507000, 3801600; 507400, 3801600; 507400, 3801300; 507500, 3801300; 507500, 3800900; 507600, 3800900; 507600, 3800500; 507500, 3800500; 507500, 3800400; 507400, 3800400; 507300, 3800300; 507300, 3800200; 507200, 3800200; 507200, 3800100; 507100, 3800100; 507100, 3800200; 507000, 3800200; 507000, 3800500; 506800, 3800500; 506800, 3800600; 506700, 3800600; 506700, 3801100; 506900, 3801100; 506900, 3801000; 507100, 3801000; 507100, 3801300; 507000, 3801300; and 507000, 3801600.

Subunit 1c: land bounded by the following UTM11 NAD27 coordinates (E, N): 513100, 3803700; 513600, 3803700; 513600, 3803100; 513500, 3803100; 513500, 3803000; 513400,

3803000; 513400, 3802900; 513300, 3802900; 513300, 3802800; 513100, 3802800; 513100, 3802900; 513000, 3802900; 513000, 3803000; 512900, 3803000; 512900, 3803400; 513000, 3803400; 513000, 3803500; 513100, 3803500; and 513100, 3803700.

Subunit 1d: land bounded by the following UTM11 NAD27 coordinates (E, N): 516000, 3803300; 516300, 3803300; 516300, 3803000; 516000, 3803000; and 516000, 3803300.

Subunit 1e: land bounded by the following UTM11 NAD27 coordinates (E, N): 514800, 3802600; 515200, 3802600; 515200, 3802200; 515100, 3802200; 515100, 3801900; 515300, 3801900; 515300, 3802000; 515400, 3802000; 515400, 3801900; 515500, 3801900; 515500, 3801600; 515100, 3801600; 515100, 3801500; 514800, 3801500; 514800, 3801600; 514700, 3801600; 514700, 3801900; 514600, 3801900; 514600, 3802000; 514500, 3802000; 514500, 3802300; 514600, 3802400; 514700, 3802400; 514700, 3802500; 514800, 3802500; and 514800, 3802600.

Subunit 1f: land bounded by the following UTM11 NAD27 coordinates (E, N): 516000, 3802500; 516200, 3802500; 516200, 3802400; 516300, 3802400; 516300, 3802100; 516200, 3802100; 516200, 3801900; 515800, 3801900; 515800, 3801800; 515700, 3801800; 515700, 3801900; 515600, 3801900; 515600, 3802100; 515500, 3802100; 515500, 3802200; 515600, 3802200; 515600, 3802300; 515900, 3802300; 515900, 3802400; 516000, 3802400; and 516000, 3802500.

Subunit 1g: land bounded by the following UTM11 NAD27 coordinates (E, N): 513700, 3800000; 514100, 3800000; 514100, 3799900; 514300, 3799900; 514300, 3799800; 514700, 3799800; 514700, 3799500; 514800, 3799500; 515000, 3799600; 515000, 3799500; 515100, 3799500; 515100, 3799200; 515000, 3799200; 515000, 3799100; 514800, 3799100; 514800, 3799200; 514700, 3799200; 514700, 3799300; 514600, 3799300; 514600, 3799400; 514500, 3799400; 514100, 3799300; 514100, 3799500; 514000, 3799500; 514000, 3799400; 513800, 3799400; 513800, 3799500; 513700, 3799500; and 513700, 3800000.

Subunit 1h: land bounded by the following UTM11 NAD27 coordinates (E, N): 515200, 3801300; 515500, 3801300; 515500, 3801200; 515600, 3801200; 515600, 3800800; 515500, 3800800; 515500, 3800700; 515400, 3800700; 515300, 3800400; 515300, 3800300; 515400, 3800300; 515400, 3800200; 515500, 3800200; 515500, 3799600; 515600,

3799600; 515600, 3799500; 515900, 3799500; 515900, 3799400; 516300, 3799400; 516300, 3799200; 516500, 3799200; 516500, 3799000; 516700, 3799000; 516700, 3799600; 517100, 3799600; 517100, 3799400; 517200, 3799400; 517200, 3799300; 517100, 3799300; 517100, 3799200; 517200, 3799200; 517200, 3798900; 517100, 3798900; 517100, 3798900; 517100, 3798600; 516500, 3798600; 516500, 3798900; 516400, 3798900; 516400, 3798800; 516200, 3798800; 516200, 3798900; 515400, 3798900; 515400, 3799000; 515300, 3799000; 515300, 3799100; 515200, 3799100; 515200, 3799600; 515100, 3799600; 515100, 3799700; 515000, 3799700; 515000, 3800100; 514900, 3800100; 514900, 3800800; 514800, 3800800; 514800, 3800700; 514600, 3800700; 514500, 3800800; 514500, 3800800; 514500, 3801000; 514600, 3801000; 514600, 3801100; 514800, 3801100; 514800, 3801000; 514900, 3801000; 514900, 3801100; 515100, 3801100; 515100, 3801200; 515200, 3801200; and 515200, 3801300.

Subunit 1i: land bounded by the following UTM11 NAD27 coordinates (E, N): 517200, 3802800; 517700, 3802800; 517700, 3802400; 517600, 3802400; 517600, 3802100; 517500, 3802100; 517500, 3802000; 517400, 3802000; 517400, 3801900; 517200, 3801900; 517200, 3802000; 517100, 3802000; 517100, 3802700; 517200, 3802700; and 517200, 3802800.

Subunit 1j: land bounded by the following UTM11 NAD27 coordinates (E, N): 517800, 3802200; 518200, 3802200; 518200, 3801900; 518100, 3801900; 518100, 3801800; 517800, 3801800; and 517800, 3802200.

Subunit 1k: land bounded by the following UTM11 NAD27 coordinates (E, N): 517700, 3801500; 518300, 3801500; 518300, 3801200; 518200, 3801200; 518200, 3801100; 518100, 3801100; 518100, 3801000; 518000, 3801000; 518000, 3800900; 517900, 3800900; 517900, 3800800; 517800, 3800800; 517800, 3800600; 517700, 3800600; 517700, 3800500; 517800, 3800500; 517800, 3800000; 517700, 3800000; 517700, 3799900; 517300, 3799900; 517300, 3800000; 517200, 3800000; 517200, 3799900; 516800, 3799900; 516800, 3800000; 516700, 3800000; 516700, 3800200; 517100, 3800200; 517100, 3800900; 517200, 3800900; 517200, 3801000; 517400, 3801000; 517400, 3801200; 517500, 3801200; 517500, 3801400; 517700, 3801400; and 517700, 3801500.

Subunit 1l: land bounded by the following UTM11 NAD27 coordinates (E, N): 517800, 3799800; 518600, 3799800; 518600, 3799500; 518500, 3799500; 518500, 3799400; 518400,

3799400; 518400, 3799300; 518200, 3799300; 518200, 3799100; 517900, 3799100; 517900, 3798700; 517500, 3798700; 517500, 3798900; 517400, 3798900; 517400, 3799600; 517700, 3799600; 517700, 3799700; 517800, 3799700; and 517800, 3799800.

Subunit 1m: land bounded by the following UTM11 NAD27 coordinates (E, N): 520200, 3801000; 520600, 3801000; 520600, 3800700; 520500, 3800700; 520500, 3800600; 520600, 3800600; 520600, 3800500; 520800, 3800500; 520800, 3800400; 520900, 3800400; 520900, 3800300; 521100, 3800300; 521100, 3800200; 521200, 3800200; 521200, 3800000; 521100, 3800000; 521100, 3799900; 520800, 3799900; 520800, 3800100; 520300, 3800100; 520300, 3800200; 520200, 3800200; 520200, 3800300; 520100, 3800300; 520100, 3800200; 519800, 3800200; 519800, 3800700; 520100, 3800700; 520100, 3800600; 520200, 3800600; and 520200, 3801000.

Subunit 1n: land bounded by the following UTM11 NAD27 coordinates (E, N): 519300, 3799300; 519600, 3799300; 519600, 3798900; 519300, 3798900; 519300, 3799000; 519200, 3799000; 519200, 3799200; 519300, 3799200; and 519300, 3799300.

Subunit 1o: land bounded by the following UTM11 NAD27 coordinates (E, N): 520100, 3800000; 520400, 3800000; 520400, 3799900; 520500, 3799900; 520500, 3799700; 520400, 3799700; 520400, 3799600; 520000, 3799600; 520000, 3799500; 520100, 3799500; 520100, 3799400; 520200, 3799400; 520200, 3799300; 520300, 3799300; 520300, 3799400; 520600, 3799400; 520300, 3799100; 520300, 3799200; 520100, 3799200; 520100, 3799000; 520200, 3799000; 520200, 3798900; 520300, 3798900; 520300, 3798800; 520700, 3798800; 520700, 3798700; 521500, 3798700; 521500, 3798800; 521400, 3798800; 521400, 3799000; 521300, 3799000; 521300, 3799100; 521200, 3799100; 521200, 3799200; 521500, 3799200; 521500, 3799300; 521800, 3799300; 521800, 3798600; 521600, 3798600; 521600, 3798500; 521500, 3798500; 521500, 3797900; 521100, 3797900; 521100, 3798000; 521000,

3798000; 521000, 3797900; 520900, 3797900; 520900, 3797800; 520600, 3797800; 520600, 3797900; 520500, 3797900; 520500, 3798000; 520300, 3798000; 520300, 3798300; 520200, 3798300; 520200, 3798200; 519900, 3798200; 519900, 3798300; 519800, 3798300; 519800, 3798400; 519700, 3798400; 519700, 3799000; 519800, 3799000; 519800, 3799100; 519700, 3799100; 519700, 3799600; 519900, 3799600; 519900, 3799900; 520100, 3799900; and 520100, 3800000.

Subunit 1p: land bounded by the following UTM11 NAD27 coordinates (E, N): 521900, 3799000; 522200, 3799000; 522200, 3798600; 521900, 3798600; and 521900, 3799000.

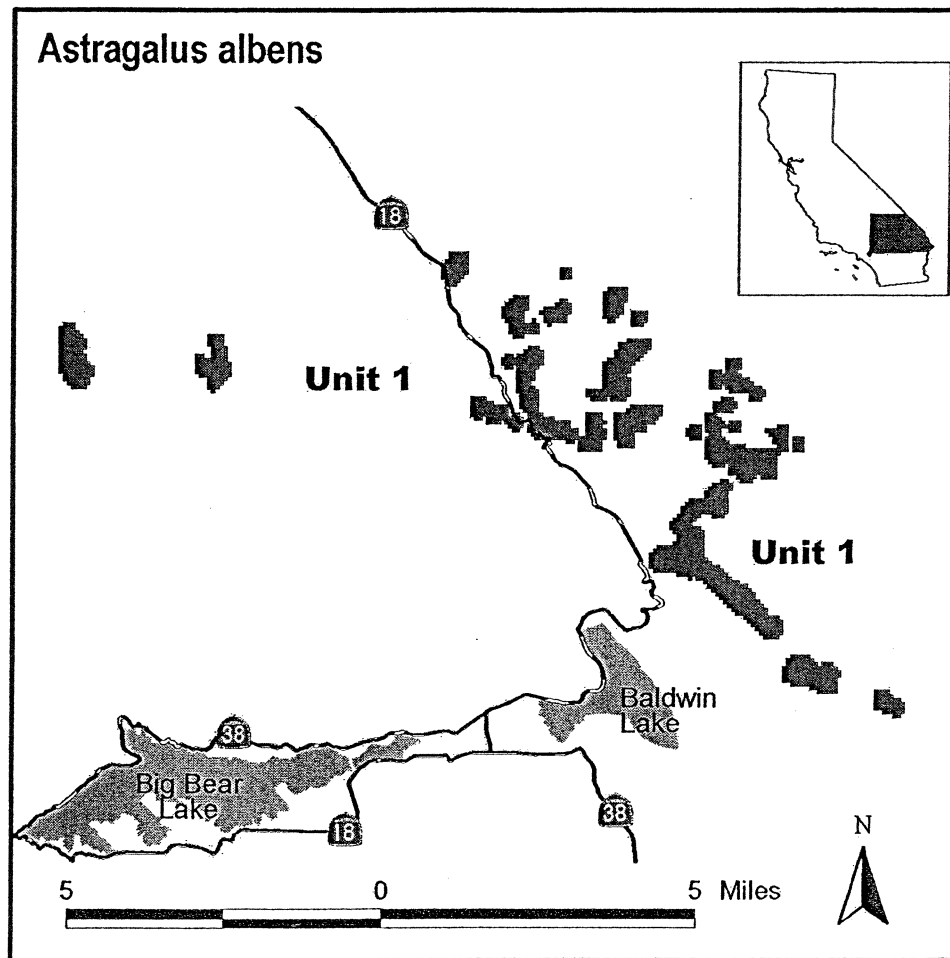
Subunit 1q: land bounded by the following UTM11 NAD27 coordinates (E, N): 520100, 3797900; 520300, 3797900; 520300, 3797800; 520400, 3797800; 520400, 3797600; 520300, 3797600; 520300, 3797000; 520200, 3797000; 520200, 3796900; 519900, 3796900; 519900, 3797000; 519600, 3797000; 519600, 3796900; 519500, 3796900; 519500, 3796800; 519400, 3796800; 519400, 3796700; 519600, 3796700; 519600, 3796600; 519700, 3796600; 519700, 3795900; 519800, 3795900; 519900, 3795800; 519900, 3795700; 520100, 3795700; 520100, 3795600; 520200, 3795600; 520200, 3795500; 520300, 3795500; 520300, 3795400; 520400, 3795400; 520400, 3795300; 520600, 3795300; 520600, 3795200; 520800, 3795200; 520800, 3795100; 520900, 3795100; 520900, 3795000; 521000, 3795000; 521000, 3794800; 521100, 3794800; 521100, 3794700; 521200, 3794700; 521200, 3794600; 521300, 3794600; 521300, 3794400; 521600, 3794400; 521600, 3794300; 521700, 3794300; 521700, 3793900; 521600, 3793900; 521600, 3793800; 521200, 3793800; 521200, 3793900; 521100, 3793900; 521100, 3793900; 521100, 3794000; 521000, 3794000; 520900, 3794100; 520900, 3794200; 520800, 3794200; 520800, 3794300; 520700, 3794300; 520700, 3794400; 520500, 3794400; 520500, 3794500; 520400, 3794500; 520400, 3794600; 520300, 3794600; 520300, 3794700; 520200, 3794700; 520200, 3794800; 520100,

3794800; 520100, 3794900; 520000, 3794900; 520000, 3795000; 519900, 3795000; 519900, 3795100; 519800, 3795100; 519700, 3795100; 519800, 3795200; 519700, 3795200; 519700, 3795300; 519500, 3795300; 519500, 3795400; 519400, 3795400; 519400, 3795300; 519300, 3795300; 519300, 3795400; 519000, 3795400; 519000, 3795500; 518400, 3795500; 518400, 3795600; 518300, 3795600; 518300, 3796000; 518400, 3796000; 518400, 3796100; 518500, 3796100; 518500, 3796200; 518900, 3796200; 518900, 3796300; 519000, 3796300; 519000, 3796500; 518900, 3796500; 518900, 3796600; 518800, 3796600; 518800, 3796800; 518900, 3796800; 518900, 3796900; 519000, 3796900; 519000, 3797000; 519100, 3797000; 519100, 3797200; 519200, 3797200; 519200, 3797300; 519300, 3797300; 519300, 3797400; 519700, 3797400; 519700, 3797600; 519800, 3797600; 519800, 3797700; 519900, 3797700; 519900, 3797800; 520100, 3797800; and 520100, 3797900.

Subunit 1r: land bounded by the following UTM11 NAD27 coordinates (E, N): 521900, 3793400; 522400, 3793400; 522400, 3793300; 522500, 3793300; 522500, 3793200; 522600, 3793200; 522600, 3793100; 522700, 3793100; 522700, 3793200; 523000, 3793200; 523000, 3793100; 523100, 3793100; 523100, 3793000; 523200, 3793000; 523200, 3792800; 523100, 3792800; 523100, 3792400; 522600, 3792400; 522600, 3792500; 522400, 3792500; 522400, 3792600; 521900, 3792600; 521900, 3792700; 521700, 3792700; 521700, 3793100; 521800, 3793100; 521800, 3793300; 521900, 3793300; and 521900, 3793400.

Subunit 1s: land bounded by the following UTM11 NAD27 coordinates (E, N): 524100, 3792500; 524500, 3792500; 524500, 3792400; 524600, 3792400; 524600, 3792300; 524800, 3792300; 524800, 3792200; 524900, 3792200; 524900, 3791900; 524800, 3791900; 524800, 3791800; 524600, 3791800; 524600, 3791900; 524300, 3791900; 524300, 3792000; 524100, 3792000; and 524100, 3792500.

(2) *Astragalus albens* Map follows.



Family Polygonaceae: *Eriogonum ovalifolium* var. *vineum* (Cushenbury Buckwheat)

(A) Critical habitat units are depicted for San Bernardino County, California, on the maps below.

(B) The primary constituent elements of critical habitat for *Eriogonum ovalifolium* var. *vineum* are those habitat components that are essential for the primary biological needs of the species. Based on our current knowledge of this species, the primary constituent elements of critical habitat for this species are listed below and consist of, but are not limited to:

(1) Soils derived primarily from the upper and middle members of the Bird Spring Formation and Bonanza King Formation parent materials that occur on hillsides at elevations between 1,400 and 2,400 m (4,600 and 7,900 ft);

(2) Soils with intact, natural surfaces that have not been substantially altered by land use activities (e.g., graded, excavated, re-contoured, or otherwise altered by ground-disturbing equipment); and

(3) Associated plant communities that have areas with an open canopy cover

(generally less than 15 percent cover) and little accumulation of organic material (e.g., leaf litter) on the surface of the soil.

(C) Critical habitat does not include existing features and structures, such as buildings, mines that are active at the time of this rule's publication, paved or unpaved roads, other paved or cleared areas, lawns, and other urban landscaped areas that do not contain one or more of the primary constituent elements. Federal actions limited to those areas, therefore, would not trigger a section 7 consultation, unless they may affect the species and/or primary constituent elements in adjacent critical habitat.

(D) Northeastern Slope Unit, San Bernardino County, California.

(1) From USGS 1:24,000 quadrangle maps Fawnskin, Big Bear City, Rattlesnake Canyon, Butler Peak, and Onyx Peak, California.

Subunit 1a: land bounded by the following UTM11 NAD27 coordinates (E, N): 497000, 3803000; 497200, 3803000; 497200, 3802900; 497300, 3802900; 497300, 3802500; 497000, 3802500; 497000, 3802600; 496900,

3802600; 496900, 3802900; 497000, 3802900; and 497000, 3803000.

Subunit 1b: land bounded by the following UTM11 NAD27 coordinates (E, N): 498000, 3800800; 498600, 3800800; 498600, 3800400; 498200, 3800400; 498200, 3800500; 498000, 3800500; and 498000, 3800800.

Subunit 1c: land bounded by the following UTM11 NAD27 coordinates (E, N): 503400, 3801200; 503700, 3801200; 503700, 3801100; 503900, 3801100; 503900, 3800800; 504000, 3800800; 504000, 3800400; 503900, 3800400; 503900, 3800300; 503700, 3800300; 503700, 3800400; 503400, 3800400; 503400, 3800600; 503300, 3800600; 503300, 3800700; 503200, 3800700; 503200, 3801000; 503300, 3801000; 503300, 3801100; 503400, 3801100; and 503400, 3801200.

Subunit 1d: land bounded by the following UTM11 NAD27 coordinates (E, N): 505200, 3800400; 505500, 3800400; 505500, 3800300; 506000, 3800300; 506000, 3800200; 506100, 3800200; 506100, 3799900; 506000, 3799900; 506000, 3800000; 505700, 3800000; 505700, 3799900; 505600, 3799900; 505600, 3799600; 505200,

3799600; 505200, 3800100; 505100, 3800100; 505100, 3800300; 505200, 3800300; and 505200, 3800400.

Subunit 1e: land bounded by the following UTM11 NAD27 coordinates (E, N): 506800, 3799900; 507000, 3799900; 507000, 3799800; 507100, 3799800; 507100, 3799600; 506900, 3799600; 506900, 3799200; 507200, 3799300; 507500, 3799300; 507500, 3799200; 507600, 3799200; 507600, 3799000; 507500, 3799000; 507500, 3798900; 507400, 3798900; 507400, 3798700; 507300, 3798700; 507300, 3798600; 506800, 3798600; 506800, 3798800; 506200, 3798800; 506200, 3799200; 506500, 3799200; 506500, 3799300; 506600, 3799300; 506600, 3799500; 506700, 3799500; 506700, 3799800; 506800, 3799800; and 506800, 3799900.

Subunit 1f: land bounded by the following UTM11 NAD27 coordinates (E, N): 506800, 3798100; 507000, 3798100; 507000, 3798000; 507500, 3798000; 507500, 3797700; 507600, 3797700; 507600, 3797400; 507500, 3797400; 507500, 3797300; 507400, 3797300; 507400, 3797200; 507000, 3797200; 507000, 3797300; 506800, 3797300; 506800, 3797600; 506700, 3797600; 506700, 3797600; 506700, 3798000; 506800, 3798000; and 506800, 3798100.

Subunit 1g: land bounded by the following UTM11 NAD27 coordinates (E, N): 508100, 3798200; 508300, 3798200; 508300, 3798100; 508400, 3798100; 508400, 3797900; 508300, 3797900; 508300, 3797800; 508000, 3797800; 508000, 3798100; 508100, 3798100; and 508100, 3798200.

Subunit 1h: land bounded by the following UTM11 NAD27 coordinates (E, N): 507900, 3797600; 508400, 3797600; 508400, 3797200; 508300, 3797200; 508300, 3797100; 508200, 3797100; 508200, 3796800; 507800, 3796800; 507800, 3797100; 507700, 3797100; 507700, 3797500; 507900, 3797500; and 507900, 3797600.

Subunit 1i: land bounded by the following UTM11 NAD27 coordinates (E, N): 508400, 3797200; 508700, 3797200; 508700, 3796900; 508400, 3796900; and 508400, 3797200.

Subunit 1j: land bounded by the following UTM11 NAD27 coordinates (E, N): 508300, 3800600; 508600, 3800600; 508600, 3800500; 508700, 3800500; 508700, 3800200; 508600, 3800200; 508600, 3800100; 508100, 3800100; 508100, 3800500; 508300, 3800500; and 508300, 3800600.

Subunit 1k: land bounded by the following UTM11 NAD27 coordinates (E, N): 508100, 3799800; 508500, 3799800; 508500, 3799400; 508400, 3799400; 508400, 3799300; 508200, 3799300; 508200, 3799400; 508000,

3799400; 508000, 3799700; 508100, 3799700; and 508100, 3799800.

Subunit 1l: land bounded by the following UTM11 NAD27 coordinates (E, N): 508700, 3799400; 509200, 3799400; 509200, 3799100; 509100, 3799100; 509100, 3798900; 508700, 3798900; and 508700, 3799400.

Subunit 1m: land bounded by the following UTM11 NAD27 coordinates (E, N): 509400, 3800700; 509700, 3800700; 509700, 3800600; 509800, 3800600; 509800, 3800500; 510300, 3800500; 510300, 3800400; 510400, 3800400; 510400, 3800300; 510600, 3800300; 510600, 3800100; 510200, 3800100; 510200, 3800300; 510100, 3800300; 510100, 3800400; 509900, 3800400; 509900, 3800200; 509500, 3800200; 509500, 3800100; 509200, 3800300; 509100, 3800300; 509100, 3800500; 509200, 3800500; 509200, 3800600; 509400, 3800600; and 509400, 3800700.

Subunit 1n: land bounded by the following UTM11 NAD27 coordinates (E, N): 510500, 3801200; 510700, 3801200; 510700, 3800900; 510500, 3800900; 510500, 3800800; 510400, 3800800; 510400, 3800700; 510600, 3800700; 510600, 3800600; 510300, 3800600; 510300, 3800700; 510200, 3800700; 510200, 3800800; 510300, 3800800; 510300, 3801000; 510400, 3801000; 510400, 3801100; 510500, 3801100; and 510500, 3801200.

Subunit 1o: land bounded by the following UTM11 NAD27 coordinates (E, N): 510900, 3800700; 511300, 3800700; 511300, 3800500; 510900, 3800500; and 510900, 3800700.

Subunit 1p: land bounded by the following UTM11 NAD27 coordinates (E, N): 511900, 3801000; 512200, 3801000; 512200, 3800800; 512300, 3800800; 512300, 3800700; 512500, 3800700; 512500, 3800600; 512700, 3800600; 512700, 3800800; 513000, 3800800; 513000, 3800300; 512900, 3800300; 512900, 3800100; 512800, 3800100; 512800, 3799900; 512900, 3799900; 512900, 3799800; 513000, 3799800; 513000, 3799700; 513100, 3799700; 513100, 3799500; 513000, 3799500; 513000, 3799400; 512700, 3799400; 512700, 3799500; 512500, 3799500; 512500, 3799600; 512300, 3799600; 512300, 3799700; 512200, 3799700; 512200, 3799800; 512100, 3799800; 512100, 3799600; 512200, 3799600; 512200, 3799500; 512300, 3799500; 512300, 3799200; 511800, 3799200; 511800, 3799500; 511700, 3799500; 511700, 3799400; 511400, 3799400; 511400, 3799500; 511300, 3799500; 511300, 3799600; 511200, 3799600; 511200, 3799700; 511100, 3799700; 511100, 3799800; 511000, 3799800; 511000, 3800100; 511200,

3800100; 511200, 3800000; 511300, 3800000; 511300, 3799900; 511700, 3799900; 511700, 3799800; 511700, 3799800; 511800, 3799800; 511800, 3799900; 512000, 3799900; 512000, 3800100; 511900, 3800100; 511900, 3800500; 512000, 3800500; 512000, 3800700; 511900, 3800700; and 511900, 3801000.

Subunit 1q: land bounded by the following UTM11 NAD27 coordinates (E, N): 513200, 3800300; 513500, 3800300; 513500, 3800200; 513900, 3800200; 513900, 3800100; 514000, 3800100; 514000, 3800000; 514100, 3800000; 514100, 3799900; 514200, 3799900; 514200, 3800000; 514600, 3800000; 514600, 3799800; 514500, 3799800; 514500, 3799300; 514100, 3799300; 514100, 3799600; 514000, 3799600; 514000, 3799400; 513700, 3799400; 513500, 3799500; 513500, 3799400; 513600, 3799400; 513600, 3799300; 513900, 3799300; 513900, 3799200; 514000, 3799200; 514000, 3798900; 513600, 3798900; 513600, 3798800; 513500, 3798800; 513500, 3798700; 513300, 3798700; 513300, 3798800; 513200, 3798800; 513200, 3799000; 513100, 3799000; 513100, 3799500; 513200, 3799500; 513200, 3799800; 513400, 3799800; 513100, 3799900; 513100, 3800200; 513200, 3800200; and 513200, 3800300.

Subunit 1r: land bounded by the following UTM11 NAD27 coordinates (E, N): 514200, 3800800; 514500, 3800800; 514500, 3800500; 514200, 3800500; and 514200, 3800800.

Subunit 1s: land bounded by the following UTM11 NAD27 coordinates (E, N): 515500, 3802100; 515900, 3802100; 515900, 3801900; 516000, 3801900; 516000, 3801800; 516100, 3801800; 516100, 3801600; 516000, 3801600; 516000, 3801500; 516500, 3801500; 516500, 3801200; 516400, 3801200; 516400, 3801100; 516200, 3801100; 516200, 3800900; 516100, 3800900; 516100, 3800800; 516000, 3800800; 516000, 3800700; 515800, 3800700; 515800, 3800600; 516200, 3800600; 516200, 3800700; 516500, 3800700; 516500, 3800700; 516500, 3799800; 516400, 3799800; 516400, 3799700; 516300, 3799700; 516300, 3799800; 516100, 3799800; 516100, 3799900; 515800, 3799900; 515800, 3799800; 515600, 3799800; 515600, 3799700; 515300, 3799700; 515000, 3799700; 515000, 3799900; 514900, 3799900; 514900, 3800100; 515000, 3800100; 515000, 3800200; 515300, 3800200; 515300, 3800300; 515600, 3800300; 515600, 3800200; 515800, 3800200; 515800, 3800300; 515700, 3800300; 515700, 3800600; 515600,

3800600; 515600, 3800800; 515100, 3800800; 515100, 3800700; 515200, 3800700; 515200, 3800400; 515100, 3800400; 515100, 3800400; 515100, 3800300; 514700, 3800300; 514700, 3800400; 514600, 3800400; 514600, 3800800; 514500, 3800800; 514500, 3800900; 514400, 3800900; 514400, 3801100; 514500, 3801100; 514500, 3801200; 514600, 3801200; 514600, 3801300; 514800, 3801300; 514800, 3801400; 515200, 3801400; 515200, 3801300; 515700, 3801300; 515700, 3801500; 515600, 3801500; 515600, 3801600; 515500, 3801600; 515500, 3801700; 515400, 3801700; 515400, 3802000; 515500, 3802000; and 515500, 3802100.

Subunit 1t: land bounded by the following UTM11 NAD27 coordinates (E, N): 514800, 3799600; 515000, 3799600; 515000, 3799500; 515100, 3799500; 515100, 3799200; 515000, 3799200; 515000, 3799100; 514800, 3799100; 514800, 3799200; 514700, 3799200; 514700, 3799300; 514600, 3799300; 514600, 3799400; 514700, 3799400; 514700, 3799500; 514800, 3799500; and 514800, 3799600.

Subunit 1u: land bounded by the following UTM11 NAD27 coordinates (E, N): 516700, 3799700; 516900, 3799700; 516900, 3799600; 517100, 3799600; 517100, 3799500; 517200, 3799500; 517200, 3799000; 517300, 3799000; 517300, 3798700; 516800, 3798700; 516800, 3798600; 516400, 3798600; 516400, 3798700; 516300, 3798600; 516100, 3798600; 516100, 3798700; 516000, 3798700; 516000, 3798800; 515900, 3798800; 515900, 3798900; 515700, 3798900; 515700, 3799000; 515400, 3799000; 515400, 3799100; 515300, 3799100; 515300, 3799500; 516000, 3799500; 516000, 3799400; 516300, 3799400; 516300, 3799300; 516400, 3799300; 516400, 3799600; 516700, 3799600; and 516700, 3799700.

Subunit 1v: land bounded by the following UTM11 NAD27 coordinates (E, N): 516700, 3800500; 517100, 3800500; 517100, 3800300; 517200, 3800300; 517200, 3800000; 517100, 3800000; 517100, 3799900; 516700, 3799900; 516700, 3800000; 516600, 3800000; 516600, 3800400; 516700, 3800400; and 516700, 3800500.

Subunit 1w: land bounded by the following UTM11 NAD27 coordinates (E, N): 518600, 3799900; 519100, 3799900; 519100, 3799600; 519000, 3799600; 519000, 3799500; 518700, 3799500; 518700, 3799400; 518500, 3799400; 518500, 3799200; 518400, 3799200; 518400, 3799100; 518300, 3799000; 518200, 3799000; 518200, 3799100; 517900, 3799100; 517900, 3798900; 517800, 3798900; 517800, 3798800; 517600,

3798800; 517600, 3798900; 517500, 3798900; 517500, 3799000; 517400, 3799000; 517400, 3799300; 517300, 3799300; 517300, 3799700; 517500, 3799700; 517500, 3799800; 518100, 3799800; 518100, 3799700; 518400, 3799700; 518400, 3799800; 518600, 3799800; and 518600, 3799900.

Subunit 1x: land bounded by the following UTM11 NAD27 coordinates (E, N): 515400, 3797400; 515800, 3797400; 515800, 3797300; 516300, 3797300; 516300, 3797200; 516400, 3797200; 516400, 3796900; 515500, 3796900; 515500, 3797000; 515400, 3797000; and 515400, 3797400.

Subunit 1y: land bounded by the following UTM11 NAD27 coordinates (E, N): 519100, 3797200; 519400, 3797200; 519400, 3797100; 519500, 3796900; 519700, 3796900; 519700, 3796000; 519600, 3796000; 519600, 3795900; 519500, 3795900; 519500, 3795700; 519100, 3795700; 519100, 3796100; 519000, 3796100; 518900, 3796300; 518900, 3796600; 518800, 3796600; 518800, 3796800; 518900, 3797000; 519000, 3797000; 519000, 3797100; 519100, 3797100; and 519100, 3797200.

Subunit 1z: land bounded by the following UTM11 NAD27 coordinates (E, N): 519600, 3797600; 519800, 3797600; 519800, 3797500; 520300, 3797500; 520300, 3797100; 520200, 3797100; 520200, 3797000; 519800, 3797100; 519700, 3797100; 519700, 3797200; 519500, 3797200; 519500, 3797500; 519600, 3797500; and 519600, 3797600.

Subunit 1aa: land bounded by the following UTM11 NAD27 coordinates (E, N): 519700, 3800600; 520200, 3800600; 520200, 3800200; 520100, 3800200; 520100, 3800100; 519700, 3800100; and 519700, 3800600.

Subunit 1ab: land bounded by the following UTM11 NAD27 coordinates (E, N): 520000, 3800000; 520700, 3800000; 520700, 3799900; 520800, 3799900; 520800, 3799500; 520400, 3799500; 520400, 3799600; 519900, 3799600; 519900, 3799900; 520000, 3799900; and 520000, 3800000.

Subunit 1ac: land bounded by the following UTM11 NAD27 coordinates (E, N): 521000, 3800000; 521500, 3800000; 521500, 3799700; 521400, 3799700; 521400, 3799500; 520900, 3799500; 520900, 3799800; 521000, 3799800; and 521000, 3800000.

Subunit 1ad: land bounded by the following UTM11 NAD27 coordinates (E, N): 520000, 3799400; 520500, 3799400; 520500, 3799300; 520600, 3799300; 520600, 3799100; 520300, 3799100; 520300, 3799200; 520200, 3799200; 520200, 3799100; 520000,

3799100; 520000, 3799000; 520200, 3799000; 520200, 3798800; 520100, 3798800; 520100, 3798700; 519700, 3798700; 519700, 3798700; 519700, 3799100; 519900, 3799100; 519900, 3799300; 520000, 3799300; and 520000, 3799400.

Subunit 1ae: land bounded by the following UTM11 NAD27 coordinates (E, N): 521400, 3799000; 522000, 3799000; 522000, 3798600; 521600, 3798600; 521600, 3798500; 521500, 3798500; 521300, 3798400; 521300, 3798300; 521200, 3798300; 521200, 3798200; 520900, 3798200; 520900, 3798200; 520900, 3798300; 520700, 3798300; 520700, 3798000; 520300, 3798000; 520300, 3798300; 520400, 3798300; 520400, 3798400; 520600, 3798400; 520600, 3798500; 520400, 3798500; 520400, 3798700; 520500, 3798700; 520700, 3798800; 520800, 3798800; 520800, 3798700; 520800, 3798800; 521100, 3798800; 521100, 3798700; 521400, 3798700; 521400, 3798800; 521300, 3798800; 521300, 3798900; 521400, 3798900; and 521400, 3799000.

Subunit 1af: land bounded by the following UTM11 NAD27 coordinates (E, N): 519800, 3794600; 520100, 3794600; 520100, 3794200; 519800, 3794200; and 519800, 3794600.

Subunit 1ag: land bounded by the following UTM11 NAD27 coordinates (E, N): 520400, 3794200; 521100, 3794200; 521100, 3793900; 521000, 3793900; 521000, 3793800; 520700, 3793800; 520700, 3793700; 520400, 3793700; 520400, 3793800; 520300, 3793800; 520300, 3793700; 520000, 3793700; 520000, 3793800; 519900, 3793800; 519900, 3794000; 520000, 3794000; 520000, 3794000; 520000, 3794100; 520400, 3794100; and 520400, 3794200.

Subunit 1ah: land bounded by the following UTM11 NAD27 coordinates (E, N): 521600, 3794700; 521800, 3794700; 521800, 3794600; 521900, 3794600; 521900, 3794300; 521800, 3794300; 521800, 3794200; 521400, 3794200; 521400, 3794500; 521500, 3794500; 521500, 3794600; 521600, 3794600; and 521600, 3794700.

Subunit 1ai: land bounded by the following UTM11 NAD27 coordinates (E, N): 521300, 3793300; 521700, 3793300; 521700, 3793200; 521800, 3793200; 521800, 3793000; 521900, 3793000; 521900, 3793100; 522400, 3793100; 522400, 3793000; 522600, 3793000; 522600, 3792900; 522800, 3792900; 522800, 3792800; 523000, 3792800; 523000, 3792500; 523100, 3792500; 523100, 3792400; 523400, 3792400; 523400, 3792300; 523500, 3792300; 523500, 3791900; 523400, 3791900; 523400, 3791800; 523200, 3791800; 523200, 3791900; 523100, 3791900; 523100, 3792000; 522800,

3792000; 522800, 3792100; 522700, 3792100; 522700, 3792200; 522400, 3792200; 522400, 3792300; 522200, 3792300; 522200, 3792400; 522000, 3792400; 521900, 3792600; 521900, 3792500; 521800, 3792500; 521800, 3792600; 521700, 3792600; 521700, 3792700; 521400, 3792700; 521400, 3792900; 521200, 3793200; 521300, 3793200; and 521300, 3793300.

Subunit 1aj: land bounded by the following UTM11 NAD27 coordinates (E, N): 524100, 3792500; 524300, 3792500; 524300, 3792400; 524500, 3792400; 524500, 3792300; 524700, 3792300; 524700, 3792200; 524800, 3792200; 524800, 3792100; 524900, 3792100; 524900, 3792200; 525300, 3792200; 525300, 3792100; 525400, 3792100; 525400, 3791800; 525300, 3791800; 525300, 3791600; 525500, 3791600; 525500, 3791500; 525600, 3791500; 525700, 3791300; 525700, 3791300; 525700, 3791200; 525800, 3791200; 525800, 3791500; 526200, 3791500; 526200, 3791300; 526300, 3791300; 526300, 3791200; 526500, 3791200; 526500, 3791100; 526700, 3791100; 526700, 3791100; 526700, 3791000; 526800, 3791000; 526800, 3791100; 527100, 3791100; 527100, 3791000; 527200, 3791000; 527200, 3790900; 527400, 3790900; 527400, 3790600; 527500, 3790600; 527500, 3790100; 527000, 3790100; 527000, 3790200; 526900, 3790200; 526900, 3790400; 526600, 3790400; 526600, 3790500; 526500, 3790500; 526500, 3790200; 526400, 3790200; 526400, 3790100; 526300, 3790100; 526300, 3790000; 526000, 3790000; 526000, 3790500; 525700, 3790500; 525700, 3790400; 525600, 3790400; 525600, 3790500; 525500, 3790500; 525500, 3790600; 525400, 3790600; 525400, 3790700; 525300, 3790700; 525300, 3791000; 525100, 3791000; 525100, 3791200; 524800, 3791200; 524800, 3791300; 524700, 3791300; 524700, 3791200; 524300, 3791200; 524300, 3791300; 524200, 3791300; 524200, 3791400; 524000, 3791400; 524000, 3791500; 523800,

3791500; 523800, 3791900; 524200, 3791900; 524200, 3792100; 524000, 3792100; 524000, 3792400; 524100, 3792400; and 524100, 3792500; excluding land bounded by 525900, 3791100; 525900, 3790900; 526000, 3790900; 526000, 3791100; and 525900, 3791100.

Subunit 1ak: land bounded by the following UTM11 NAD27 coordinates (E, N): 527600, 3790400; 527900, 3790400; 527900, 3790300; 528000, 3790300; 528000, 3790100; 527900, 3790100; 527900, 3790000; 527600, 3790000; and 527600, 3790400.

Subunit 1al: land bounded by the following UTM11 NAD27 coordinates (E, N): 527900, 3789600; 528200, 3789600; 528200, 3789300; 527800, 3789300; 527800, 3789500; 527900, 3789500; and 527900, 3789600.

Subunit 1am: land bounded by the following UTM11 NAD27 coordinates (E, N): 526900, 3789400; 527100, 3789400; 527100, 3789300; 527200, 3789300; 527200, 3789100; 527400, 3789100; 527400, 3789200; 527700, 3789200; 527700, 3789100; 527800, 3789100; 527800, 3789000; 528000, 3789000; 528000, 3789100; 528400, 3789100; 528500, 3789000; 528500, 3788900; 528600, 3788900; 528600, 3788700; 528700, 3788700; 528700, 3788600; 528800, 3788600; 528800, 3788400; 528900, 3788400; 528900, 3788300; 529000, 3788300; 529000, 3788100; 528900, 3788100; 528900, 3788000; 528700, 3788000; 528700, 3788100; 528100, 3788100; 528100, 3788300; 527900, 3788300; 527900, 3788400; 527800, 3788400; 527800, 3788500; 527700, 3788500; 527700, 3788600; 527600, 3788600; 527600, 3788500; 527200, 3788500; 527200, 3788700; 527100, 3788700; 526800, 3788700; 526800, 3788600; 526800, 3788700; 526600, 3788700; 526600, 3788900; 526700, 3788900; 526900, 3789000; and 526900, 3789400.

Subunit 1an: land bounded by the following UTM11 NAD27 coordinates (E, N): 529200, 3788100; 529500, 3788100; 529500, 3787700; 529400,

3787700; 529400, 3787600; 529100, 3787600; 529100, 3788000; 529200, 3788000; and 529200, 3788100.

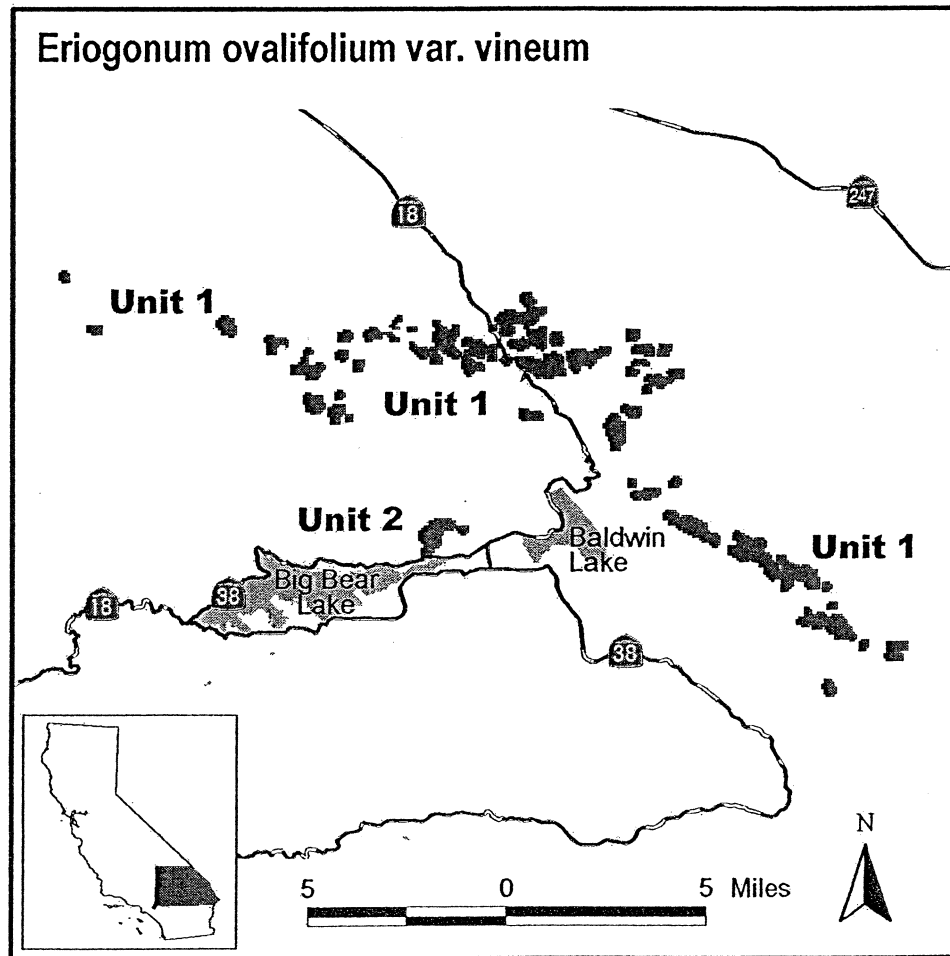
Subunit 1ao: land bounded by the following UTM11 NAD27 coordinates (E, N): 530200, 3788000; 531100, 3788000; 531100, 3787600; 530800, 3787600; 530800, 3787500; 530900, 3787500; 530900, 3787200; 530200, 3787300; 530100, 3787300; 530200, 3787500; and 530200, 3788000.

Subunit 1ap: land bounded by the following UTM11 NAD27 coordinates (E, N): 527700, 3786500; 528000, 3786500; 528000, 3786400; 528100, 3786400; 528100, 3786200; 528200, 3786200; 528200, 3785900; 528100, 3785900; 528100, 3785800; 527800, 3785800; 527800, 3785900; 527700, 3785900; 527700, 3786100; 527600, 3786100; 527600, 3786300; and 527700, 3786500.

(D) Bertha Ridge Unit, San Bernardino County, California.

(1) From USGS 1:24,000 quadrangle maps Fawnskin and Big Bear City, California, land bounded by the following UTM11 NAD27 coordinates (E, N): 512000, 3793000; 512700, 3793000; 512700, 3792900; 512900, 3792900; 512900, 3792700; 513400, 3792700; 513400, 3792400; 513300, 3792400; 513300, 3792300; 513100, 3792300; 513100, 3792400; 513000, 3792400; 513000, 3792500; 512900, 3792500; 512900, 3792600; 512800, 3792600; 512800, 3792500; 512400, 3792500; 512400, 3792300; 512300, 3792300; 512300, 3791900; 512200, 3791900; 512200, 3791800; 512000, 3791800; 512000, 3791600; 511900, 3791600; 511900, 3791400; 511500, 3791400; 511500, 3791800; 511600, 3791800; 511600, 3792000; 511500, 3792000; 511500, 3792100; 511400, 3792100; 511400, 3792500; 511500, 3792500; 511500, 3792600; 511600, 3792600; 511600, 3792700; 511800, 3792700; 511800, 3792900; 512000, 3792900; and 512000, 3793000.

(2) *Eriogonum ovalifolium* var. *vineum* Map follows.



Family Polygonaceae: *Oxytheca parishii* var. *goodmaniana* (Cushenbury *Oxytheca*)

(A) Critical habitat units are depicted for San Bernardino County, California, on the maps below.

(B) The primary constituent elements of critical habitat for *Oxytheca parishii* var. *goodmaniana* are those habitat components that are essential for the primary biological needs of the species. Based on our current knowledge of this species, the primary constituent elements of critical habitat for this species are listed below and consist of, but are not limited to:

(1) Soils derived primarily from upslope limestone, a mixture of limestone and dolomite, or limestone talus substrates with parent materials that include Bird Spring Formation, Bonanza King Formation, middle and lower members of the Monte Cristo Limestone, and the Crystal Pass member of the Sultan Limestone Formation at elevations between 1,440 and 2,372 m (4,724 and 7,782 ft);

(2) Soils with intact, natural surfaces that have not been substantially altered by land use activities (*e.g.*, graded,

excavated, re-contoured, or otherwise altered by ground-disturbing equipment); and

(3) Associated plant communities that have areas with an moderately open canopy cover (generally between 25 and 53 percent (Neel 2000)).

(C) Critical habitat does not include existing features and structures, such as buildings, mines that are active at the time of this rule's publication, paved or unpaved roads, other paved or cleared areas, lawns, and other urban landscaped areas that do not contain one or more of the primary constituent elements. Federal actions limited to those areas, therefore, would not trigger a section 7 consultation, unless they may affect the species and/or primary constituent elements in adjacent critical habitat.

(D) Northeastern Slope Unit, San Bernardino County, California.

(1) From USGS 1:24,000 quadrangle maps Butler Peak, Fawnskin, Big Bear City, Rattlesnake Canyon, and Onyx Peak, California.

Subunit 1a: land bounded by the following UTM11 NAD27 coordinates (E, N): 498200, 3801600; 498500,

3801600; 498500, 3801500; 498600, 3801500; 498600, 3801200; 498300, 3801200; 498300, 3801300; 498200, 3801300; and 498200, 3801600.

Subunit 1b: land bounded by the following UTM11 NAD27 coordinates (E, N): 498800, 3801200; 499400, 3801200; 499400, 3800900; 499500, 3800900; 499500, 3800800; 499600, 3800800; 499600, 3800600; 499500, 3800600; 499500, 3800500; 499400, 3800500; 499400, 3800400; 499100, 3800400; 499100, 3800300; 499000, 3800300; 499000, 3800000; 498900, 3800000; 498900, 3799900; 498700, 3799900; 498700, 3799600; 498300, 3799600; 498300, 3800000; 498400, 3800000; 498400, 3800100; 498600, 3800100; 498600, 3800300; 498500, 3800300; 498500, 3800400; 498200, 3800400; 498200, 3800500; 498000, 3800500; 498000, 3800800; 498400, 3800800; 498400, 3800900; 498700, 3800900; 498700, 3801100; 498800, 3801100; and 498800, 3801200.

Subunit 1c: land bounded by the following UTM11 NAD27 coordinates (E, N): 500200, 3799900; 500600, 3799900; 500600, 3799800; 500700, 3799800; 500700, 3799600; 500600,

3799600; 500600, 3799500; 500300, 3799500; 500300, 3799600; 500200, 3799600; and 500200, 3799900.

Subunit 1d: land bounded by the following UTM11 NAD27 coordinates (E, N): 502800, 3797400; 503400, 3797400; 503400, 3797200; 503500, 3797200; 503500, 3797000; 503400, 3797000; 503400, 3796900; 502900, 3797000; 502800, 3797000; and 502800, 3797400.

Subunit 1e: land bounded by the following UTM11 NAD27 coordinates (E, N): 503600, 3799300; 504000,

3799300; 504000, 3798600; 504300, 3798600; 504300, 3798500; 504400, 3798500; 504400, 3798400; 505300, 3798400; 505300, 3798300; 505500, 3798300; 505500, 3798000; 505300, 3798000; 505300, 3797700; 505100, 3797800; 505000, 3797800; 505000, 3798000; 504500, 3798000; 504500, 3797900; 504300, 3797900; 504300, 3798000; 504000, 3798000; 504000, 3798100; 503900, 3798100; 503800, 3798300; 503800, 3798100; 503500, 3798000; 503100, 3798000; 503100, 3798400; 503200, 3798400; 503200, 3798500; 503700, 3798500; 503700, 3798600; 503600, 3798600; and 503600, 3799300.

Subunit 1f: land bounded by the following UTM11 NAD27 coordinates (E, N): 506700, 3799500; 506900, 3799500; 506900, 3799200; 507200, 3799200; 507200, 3799300; 507500, 3799300; 507500, 3799200; 507600, 3799200; 507600, 3799000; 507500, 3799000; 507500, 3798900; 507400, 3798900; 507400, 3798800; 506900, 3798800; 506900, 3798900; 506700, 3798900; 506700, 3798800; 506000, 3798800; 506000, 3799200; 506600, 3799200; 506600, 3799400; 506700, 3799400; and 506700, 3799500.

Subunit 1g: land bounded by the following UTM11 NAD27 coordinates (E, N): 506800, 3798100; 507300, 3798100; 507300, 3797800; 507400, 3797800; 507400, 3797700; 507600, 3797700; 507600, 3797600; 507900, 3797600; 507900, 3797500; 508000, 3797500; 508100, 3797400; 508100, 3797200; 508200, 3797200; 508200, 3797000; 508300, 3797000; 508300, 3796700; 508400, 3796700; 508400, 3796600; 508500, 3796600; 508500, 3796200; 508200, 3796200; 507700, 3796200; 507700, 3796100; 507700, 3796100; 507700, 3796500; 507800, 3796500; 507800, 3796600; 507900, 3796600; 507900, 3796700; 507800, 3796700; 507800, 3796800; 507700, 3796800; 507700, 3797000; 507600, 3797000; 507600, 3797400; 507500, 3797400; 507500, 3797300; 507400, 3797300; 507400, 3797200; 507000, 3797200; 507000, 3797300; 506900,

3797300; 506900, 3797400; 506800, 3797400; 506800, 3797600; 506700, 3797600; 506700, 3798000; 506800, 3798000; and 506800, 3798100.

Subunit 1h: land bounded by the following UTM11 NAD27 coordinates (E, N): 508800, 3799300; 509000, 3799300; 509000, 3799200; 509100, 3799200; 509100, 3798800; 509000, 3798800; 509000, 3798700; 508800, 3798700; 508800, 3798800; 508700, 3798800; 508700, 3799100; 508800, 3799100; and 508800, 3799300.

Subunit 1i: land bounded by the following UTM11 NAD27 coordinates (E, N): 509300, 3801000; 509600, 3801000; 509600, 3800800; 509700, 3800800; 509700, 3800700; 509800, 3800700; 509800, 3800500; 510100, 3800500; 510300, 3800400; 510300, 3800300; 510500, 3800300; 510500, 3800000; 509900, 3800000; 509900, 3800100; 509500, 3800100; 509500, 3800400; 509600, 3800400; 509600, 3800500; 509500, 3800500; 509500, 3800600; 509400, 3800600; 509400, 3800800; 509300, 3800800; and 509300, 3801000.

Subunit 1j: land bounded by the following UTM11 NAD27 coordinates (E, N): 511000, 3800100; 511200, 3800100; 511200, 3800000; 511300, 3800000; 511300, 3799900; 511500, 3799900; 511500, 3799800; 511600, 3799800; 511600, 3799600; 511500, 3799600; 511500, 3799500; 511300, 3799500; 511300, 3799600; 511200, 3799600; 511200, 3799800; 511100, 3799800; 511100, 3799900; 511000, 3799900; and 511000, 3800100.

Subunit 1k: land bounded by the following UTM11 NAD27 coordinates (E, N): 512300, 3800600; 512600, 3800600; 512600, 3800500; 512700, 3800500; 512700, 3800100; 512600, 3799900; 512700, 3799900; 512700, 3799600; 512300, 3799600; 512300, 3799700; 512100, 3799700; 512100, 3799600; 511700, 3799600; 511700, 3799800; 511900, 3799800; 511900, 3799900; 512000, 3799900; 512000, 3799800; 512100, 3799800; 512100, 3800000; 511900, 3800000; 511800, 3800100; 511800, 3800500; 512300, 3800500; and 512300, 3800600.

Subunit 1l: land bounded by the following UTM11 NAD27 coordinates (E, N): 513300, 3799300; 513600, 3799300; 513600, 3799200; 513700, 3799200; 513700, 3798900; 513600, 3798900; 513600, 3798800; 513400, 3798800; 513400, 3798900; 513200, 3798900; 513200, 3799200; 513300, 3799200; and 513300, 3799300.

Subunit 1m: land bounded by the following UTM11 NAD27 coordinates (E, N): 513300, 3800400; 513500, 3800400; 513500, 3800200; 513700,

3800200; 513700, 3800100; 513800, 3800100; 513800, 3800000; 514000, 3800000; 514000, 3799900; 514100, 3799900; 514100, 3799700; 513800, 3799700; 513800, 3799800; 513700, 3799800; 513700, 3799900; 513300, 3799900; 513300, 3800000; 513200, 3800000; 513200, 3800300; 513300, 3800300; and 513300, 3800400.

Subunit 1n: land bounded by the following UTM11 NAD27 coordinates (E, N): 514200, 3800800; 514400, 3800800; 514400, 3800700; 514500, 3800700; 514500, 3800500; 514200, 3800500; and 514200, 3800800.

Subunit 1o: land bounded by the following UTM11 NAD27 coordinates (E, N): 514800, 3801300; 515000, 3801300; 515000, 3801200; 515100, 3801200; 515100, 3801000; 515000, 3801000; 515000, 3800900; 514700, 3800900; 514700, 3801200; 514800, 3801200; and 514800, 3801300.

Subunit 1p: land bounded by the following UTM11 NAD27 coordinates (E, N): 514600, 3799700; 514900, 3799700; 514900, 3799400; 514600, 3799400; and 514600, 3799700.

Subunit 1q: land bounded by the following UTM11 NAD27 coordinates (E, N): 515900, 3802200; 516200, 3802200; 516200, 3801900; 516100, 3801900; 516100, 3801800; 515900, 3801800; 515900, 3801900; 515800, 3801900; 515800, 3802100; 515900, 3802100; and 515900, 3802200.

Subunit 1r: land bounded by the following UTM11 NAD27 coordinates (E, N): 516100, 3801400; 516400, 3801400; 516400, 3801000; 516100, 3801000; 516100, 3801100; 516000, 3801100; 516000, 3801300; 516100, 3801300; and 516100, 3801400.

Subunit 1s: land bounded by the following UTM11 NAD27 coordinates (E, N): 515300, 3800400; 515600, 3800400; 515600, 3800300; 515700, 3800300; 515700, 3799800; 515600, 3799800; 515600, 3799700; 515300, 3799700; and 515300, 3800400.

Subunit 1t: land bounded by the following UTM11 NAD27 coordinates (E, N): 515700, 3800600; 516100, 3800600; 516100, 3800500; 516400, 3800500; 516400, 3800400; 516500, 3800400; 516500, 3799800; 516400, 3799800; 516300, 3799700; 516300, 3799700; 516100, 3799800; 516100, 3800000; 516000, 3800000; 516000, 3800100; 515800, 3800100; 515800, 3800300; 515700, 3800300; and 515700, 3800600.

Subunit 1u: land bounded by the following UTM11 NAD27 coordinates (E, N): 516800, 3800400; 517100, 3800400; 517100, 3800300; 517200, 3800300; 517200, 3800000; 516800, 3800000; and 516800, 3800400.

Subunit 1v: land bounded by the following UTM11 NAD27 coordinates (E, N): 515500, 3799600; 515900, 3799600; 515900, 3799500; 516000, 3799500; 516000, 3799400; 516400, 3799400; 516400, 3799300; 516500, 3799300; 516500, 3799100; 516700, 3799100; 516700, 3799200; 516600, 3799200; 516600, 3799400; 516700, 3799400; 516700, 3799500; 517000, 3799500; 517000, 3799300; 517100, 3799300; 517100, 3799100; 517200, 3799100; 517200, 3798700; 516500, 3798700; 516500, 3798800; 516300, 3798800; 516300, 3798900; 516200, 3798900; 516200, 3798800; 516200, 3799000; 516100, 3799000; 516100, 3799100; 515900, 3799100; 515900, 3799000; 515700, 3799000; 515700, 3798900; 515400, 3798900; 515400, 3799000; 515300, 3799000; 515300, 3799300; 515400, 3799300; 515400, 3799500; 515500, 3799500; and 515500, 3799600.

Subunit 1w: land bounded by the following UTM11 NAD27 coordinates (E, N): 517500, 3799800; 518000, 3799800; 518000, 3799700; 518300, 3799700; 518300, 3799800; 518600, 3799800; 518600, 3799700; 518800, 3799700; 518800, 3799400; 518600,

3799400; 518600, 3799300; 518700, 3799300; 518700, 3798900; 518300, 3798900; 518300, 3799000; 518200, 3799000; 518200, 3799100; 517900, 3799100; 517900, 3798800; 517800, 3798800; 517800, 3798700; 517500, 3798700; 517500, 3799000; 517400, 3799000; 517400, 3799300; 517500, 3799300; and 517500, 3799800.

Subunit 1x: land bounded by the following UTM11 NAD27 coordinates (E, N): 520900, 3798700; 521200, 3798700; 521200, 3798600; 521300, 3798600; 521300, 3798300; 521200, 3798300; 521200, 3798100; 520800, 3798100; 520800, 3798200; 520700, 3798200; 520700, 3798600; 520900, 3798600; and 520900, 3798700.

Subunit 1y: land bounded by the following UTM11 NAD27 coordinates (E, N): 526700, 3791000; 527000, 3791000; 527000, 3790900; 527300, 3790900; 527300, 3790800; 527400, 3790800; 527400, 3790600; 527000, 3790600; 527000, 3790400; 526600, 3790400; 526600, 3790700; 526700, 3790700; and 526700, 3791000.

Subunit 1z: land bounded by the following UTM11 NAD27 coordinates (E, N): 527800, 3790700; 528200,

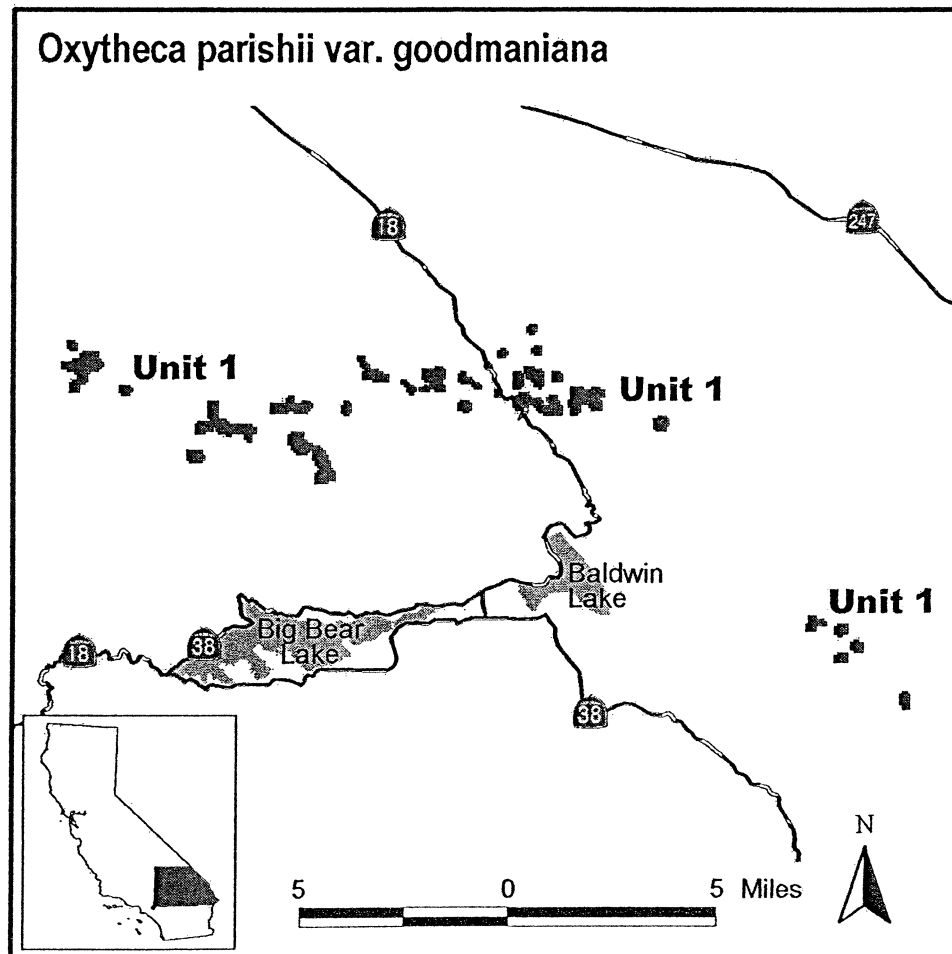
3790700; 528200, 3790300; 528000, 3790300; 528000, 3790200; 527800, 3790200; 527800, 3790300; 527700, 3790300; 527700, 3790600; 527800, 3790600; and 527800, 3790700.

Subunit 1aa: land bounded by the following UTM11 NAD27 coordinates (E, N): 527800, 3789600; 528200, 3789600; 528200, 3789200; 527700, 3789200; 527700, 3789500; 527800, 3789500; and 527800, 3789600.

Subunit 1ab: land bounded by the following UTM11 NAD27 coordinates (E, N): 528400, 3790100; 528600, 3790100; 528600, 3790000; 528800, 3790000; 528800, 3789600; 528400, 3789600; 528400, 3789700; 528300, 3789700; 528300, 3790000; 528400, 3790000; and 528400, 3790100.

Subunit 1ac: land bounded by the following UTM11 NAD27 coordinates (E, N): 530300, 3788100; 530500, 3788100; 530500, 3788000; 530600, 3788000; 530600, 3787400; 530300, 3787400; 530300, 3787600; 530200, 3787600; 530200, 3788000; 530300, 3788000; and 530300, 3788100.

(2) *Oxytheca parishii* var. *goodmaniana* Map follows.



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Dated: January 29, 2002.

Joseph E. Doddridge,

*Acting Assistant Secretary for Fish and
Wildlife and Parks.*

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