

to the Field Supervisor, U.S. Fish and Wildlife Service, 2800 Cottage Way, Room E-1803, Sacramento, California 95825-1846. Comments and materials received and information used to support this proposal will be available for public inspection, by appointment, during normal business hours at the above address.

FOR FURTHER INFORMATION CONTACT: Dale Pierce, Assistant Field Supervisor, Sacramento Field Office (see **ADDRESSES** section) (telephone 916/979-2710; facsimile 916/979-2723).

SUPPLEMENTARY INFORMATION:

Background

Arctostaphylos pallida (pallid manzanita) is found only in the northern Diablo Range of California. The Diablo Range is part of the inner South Coast Range of California. The Diablo Range extends in a northwest to southeast direction as a more or less continuous mountain chain, 32 to 48 kilometers (km) (20 to 30 miles (mi)) wide, for approximately 300 km (190 mi) from San Pablo Bay in central California to Polonio Pass in northeast San Luis Obispo County. The altitude of the Diablo Range varies from 600 to 1,280 meters (m) (2,000 to 4,200 feet (ft)) and is broken by four or five east to west passes. These passes divide the Diablo Range into several distinct units: Contra Costa Hills, Mt. Diablo, Mt. Hamilton Range, Panoche Hills, San Carlos Range, and Estrella Hills (Sharsmith 1982). *Arctostaphylos pallida* occurs in the Contra Costa Hills section of the Diablo Range.

Portions of the Diablo Range are thought to have been surrounded by marine embayments since the middle Miocene era, when modern flora and fauna were developing (Sharsmith 1982). Much of the surface of the Diablo Range is comprised of rock in the Franciscan series. The soils formed from Franciscan rock are believed to control partially the present distribution of plant species in the Diablo Range (Sharsmith 1982). Serpentine rock, which is a frequent component of Franciscan rock, yields a soil rich in heavy metals and low in the nutrients required for plant growth (Kruckeberg 1984). Because of the distinctive serpentine soil and the long exposure of this land mass to colonization by plants, a distinctive group of plant species has developed in the Diablo Range.

Alice Eastwood described *Arctostaphylos pallida* in 1933 from specimens collected in 1902 by W.W. Carruth in the "East Oakland Hills." This area is believed to be Huckleberry Ridge in Alameda and Contra Costa

Counties, California. *Arctostaphylos pallida* is a member of the *A. andersonii* complex, a group of *Arctostaphylos* species found in central coastal California. The species is considered by some taxonomists to be *A. andersonii* var. *pallida* Adams ex McMinn (Amme and Havlik 1987a); McMinn reduced the species to the varietal level in 1939. However, Wells (1993) treats the species as *A. pallida*.

Arctostaphylos pallida is an upright, non-burl-forming shrub in the heath family (Ericaceae). *Arctostaphylos pallida* grows from 2 to 4 m (6.5 to 13.0 ft) high or more with rough, gray or reddish bark. The twigs are bristly. The ovate to triangular leaves are bristly, strongly overlapping, and clasping; they are 2.5 to 4.5 centimeters (cm) (1.0 to 1.8 inches (in.)) long and 2 to 3 cm (0.8 to 1.2 in.) wide. The dense, white flowers are urn-shaped and 6 to 7 millimeters (mm) (0.2 to 0.3 in.) long. Flowering period is from December to March. *Arctostaphylos tomentosa* ssp. *crustacea* commonly co-occurs with *A. pallida* but is a burl-forming species with spreading leaves (Amme *et al.* no date, Wells 1993).

Arctostaphylos pallida continues to occupy its original range in Alameda and Contra Costa Counties, where it is known from approximately 13 populations. The two largest populations are located at Huckleberry Ridge, the type locality in Alameda and Contra Costa Counties, and at Sobrante Ridge in Contra Costa County. Several other small, natural and planted populations occur in Alameda and Contra Costa Counties. The species is found from 200 to 445 m (656 to 1,460 ft) in elevation, primarily on thin soils composed of chert and shale (Amme and Havlik 1987a). Generally, the plants are found in manzanita chaparral habitat that frequently is surrounded by oak woodlands and coastal scrub (Amme *et al.* no date). The two largest occurrences occupy an area of approximately 34 hectares (ha) (82 acres (ac)). These two populations are found in maritime chaparral, a habitat with mesic soil conditions and a maritime influence. Many of the smaller populations occur in coastal scrub (B. Olson, East Bay Chapter, California Native Plant Society (CNPS), *in litt.* 1994). *Arctostaphylos pallida* is threatened by shading and competition from other plant species, fire suppression, hybridization with other *Arctostaphylos* species, herbicide spraying, habitat fragmentation resulting from past housing and road construction, unauthorized tree cutting, fungal disease, inadequate regulatory mechanisms, and stochastic events.

Previous Federal Action

Federal government action on this species began as a result of section 12 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*), which directed the Secretary of the Smithsonian Institution to prepare a report on those plants considered to be endangered, threatened, or extinct in the United States. This report, designated as House Document No. 94-51, was presented to Congress on January 9, 1975, and included *Arctostaphylos pallida* (as *Arctostaphylos andersonii* var. *pallida*) as endangered. The Service published a notice in the July 1, 1975, **Federal Register** (40 FR 27823) of its acceptance of the report of the Smithsonian Institution as a petition within the context of section 4(c)(2) (petition provisions are now found in section 4(b)(3) of the Act) and its intention thereby to review the status of the plant taxa named therein. The above taxon was included in the July 1, 1975, notice. On June 16, 1976, the Service published a proposal (42 FR 24523) to determine approximately 1,700 vascular plant species to be endangered species pursuant to section 4 of the Act. The list of 1,700 plant taxa was assembled on the basis of comments and data received by the Smithsonian Institution and the Service in response to House Document No. 94-51 and the July 1, 1975, **Federal Register** publication. *Arctostaphylos pallida* was included in the June 16, 1976, publication.

General comments received in relation to the 1976 proposal were summarized in the April 26, 1978, **Federal Register** (43 FR 17909). The Endangered Species Act Amendments of 1978 required that all proposals over 2 years old be withdrawn. A 1-year grace period was given to those proposals already more than 2 years old. In a December 10, 1979, notice (44 FR 70796), the Service withdrew the June 6, 1976, proposal along with four other proposals that had expired.

The Service published a Notice of Review for plants on December 15, 1980 (45 FR 82480). This notice included *Arctostaphylos pallida* as a Category 1 candidate species for Federal listing. Category 1 taxa are those for which the Service has on file sufficient information on biological vulnerability and threats to support preparation of listing proposals. On November 28, 1983, the Service published a supplement to the Notice of Review (48 FR 53640). This supplement changed this taxon from a Category 1 to a Category 2 candidate species. Category 2 taxa are those for which data in the Service's possession indicate listing is