

habitat designations do not signal that habitat outside the designation is unimportant or may not be required for recovery. Areas that support newly discovered populations in the future, but are outside the critical habitat designation, will continue to be subject to section 7 and the prohibitions of section 9(a)(1) of the Act. 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 necessarily control the direction and substance of future recovery plans, HCPs, or other species conservation planning efforts.

Methods

In determining areas that are essential to conserve the gnatcatcher, we used the best scientific and commercial data available. This included data from research and survey observations published in peer reviewed articles; regional (GIS) coverages; habitat evaluation models for the San Diego County MSCP, the MHCP, and the North County Subarea of the MSCP for unincorporated San Diego County; approved HCPs; and data collected from reports submitted by biologists holding section 10(a)(1)(A) recovery permits. Following the listing of the species, a concerted effort was undertaken to survey significant portions of the species' range in San Diego and Orange counties for the purpose of developing and implementing regional HCPs, and more recently, surveys of varying intensity have been conducted in Los Angeles, Riverside, San Bernardino, and Ventura counties. As part of an intensive effort to gather range and abundance information, the Service sampled a large number of random points for gnatcatchers within coastal sage scrub vegetation in Orange and San Diego Counties. A habitat model was also developed that helped us refine essential breeding habitat in Orange, Riverside, and San Diego counties (see discussion below under Criteria Used To Identify Critical Habitat).

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 are required to base critical habitat determinations on the best scientific data available and to consider those physical and biological features that are essential to the conservation of the species and that may require special

management considerations and protection. Such requirements 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; and habitats that are protected from disturbance or are representative of the historic geographical and ecological distributions of a species.

We are proposing to designate as critical habitat areas that provide those habitat components essential for the conservation of the gnatcatcher.

The primary constituent elements for the coastal California gnatcatcher are those habitat components that provide for foraging, nesting, rearing of young, intraspecific communication, roosting, dispersal, genetic exchange, or sheltering (Atwood 1990). Primary constituent elements are provided in undeveloped areas that support, through natural successional processes (e.g., post-fire recovery), various types of sage scrub or chaparral, grassland, and riparian habitats where they may be utilized for biological needs such as breeding, foraging, or dispersal (Atwood *et al.* 1998; Campbell *et al.* 1998). Primary constituent elements associated with the biological needs of dispersal are also found in undeveloped areas that provide connectivity or linkage between larger core areas, including open space and ruderal (weedy areas that contain introduced plant species) disturbed areas that may receive only periodic use. Probable dispersing individuals have been documented in vegetation dominated by such species as *Brassica* spp. (wild mustard), annual grasses, *Salsola tragus* (Russian thistle), *Baccharis salicifolia* (mule fat), *Salix* spp. (willow), and *Tamarix* spp. (salt cedar) (Campbell *et al.* 1998). Some of these species may also be used seasonally by territorial birds as coastal sage scrub dries during the summer drought (Campbell *et al.* 1998).

Primary constituent elements include, but are not limited to, the following plant communities: Venturan coastal sage scrub, Diegan coastal sage scrub, maritime succulent scrub, Riversidean sage scrub, Riversidean alluvial fan scrub, southern coastal bluff scrub, and coastal sage-chaparral scrub (Holland 1986; Kirkpatrick and Hutchinson 1977; Westman 1983). Based upon dominant species, these communities have been further divided into series such as black sage, brittlebush, California buckwheat, California buckwheat-white sage, California encelia, California sagebrush, California sagebrush-black sage,

California sagebrush-California buckwheat, coast prickly-pear, mixed sage, purple sage, scalebroom, and white sage (Sawyer and Keeler-Wolf 1995). Dominant species within these plant communities include *Artemisia californica*, *Eriogonum fasciculatum*, *Encelia californica*, *Salvia mellifera*, *S. apiana*, and *S. leucophylla*. Other commonly occurring plants include *Isocoma menziesii* (coast goldenbush), *Viguiera laciniata* (San Diego sunflower), *Baccharis pilularis* (coyote brush), *Baccharis sarothroides* (broom baccharis), *Mimulus aurantiacus* (bush monkeyflower), *Sambucus mexicana* (Mexican elderberry), *Isomeris arborea* (bladderpod), *Lotus scoparius*, *Malosma laurina* (laurel sumac), *Rhus integrifolia* (lemonadeberry), and *Rhus ovata* (sugarbush). Species such as *Lycium* spp. (boxthorn), *Euphorbia misera* (cliff spurge), *Simmondsia chinensis* (jojoba), and *Opuntia littoralis* (prickly pear), *O. prolifera* (cholla), and *Ferocactus viridescens* (coast barrel cactus), and *Dudleya* spp. (live-forever) are represented in maritime succulent scrub, coast prickly-pear scrub, and southern coastal bluff scrubs. In areas of coastal influence, chamise chaparral has also been documented to support breeding pairs (Campbell *et al.* 1998). Mesic sites dominated by *Baccharis salicifolia* and other *Baccharis* species such as *Baccharis pilularis* and *Baccharis sarothroides* may also support breeding pairs (Campbell *et al.* 1998).

Criteria Used To Identify Critical Habitat

We considered several qualitative criteria in the selection and proposal of specific areas or units for gnatcatcher critical habitat. Such criteria focused on designating units: (1) Throughout the geographical and elevational range of the species; (2) within various occupied plant communities, such as Venturan coastal sage scrub, Diegan coastal sage scrub, maritime succulent scrub, Riversidean sage scrub, Riversidean alluvial fan scrub, southern coastal bluff scrub, and coastal sage-chaparral scrub; and (3) in documented areas of large, contiguous blocks of occupied habitat (i.e., core population areas); and/or in areas that link core populations areas (i.e., linkage areas). These criteria are similar to criteria used to identify reserve/preserve lands in approved regional HCPs covering the gnatcatcher.

To help predict gnatcatcher occurrences throughout the range of the species, especially in areas with limited survey information, we commissioned a spatial habitat evaluation model incorporating habitat parameters used by the gnatcatcher during the breeding