## **Critical Habitat**

Definition

Critical habitat, as defined by section 3 of the Act (16 U.S.C. 1532) means (i) the specific areas within the geographical area occupied by a species at the time it is listed on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and (ii) specific areas outside the geographical area occupied by the species at the time it is listed, upon determination that such areas are essential for the conservation of the species. The term "conservation" as defined in section 3(3) of the Act, means "to use and the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this Act are no longer necessary." 16 U.S.C. 1532(3). Critical habitat, then, is to include biologically suitable areas necessary to recovery of the species. Critical habitat may be proposed for species that are already listed as threatened or endangered. Section 3 further states that in most cases the entire range of a species should not be encompassed within critical habitat.

## Primary Constituent Elements

The Act requires critical habitat designations to be based on the best scientific data available 16 U.S.C. 1533(a)(2). In determining what areas are critical habitat, the Service considers those physical and biological attributes that are essential to the conservation of the species and that may require special management considerations or protection. Such requirements include, but are not limited to, the following (1) Space for individual and population growth, and normal behavior; (2) food, water, or other nutritional or physiological requirements; (3) cover or shelter; (4) sites for breeding, reproduction, rearing of offspring, germination, or seed dispersal; and generally (5) habitats that are protected from disturbance or are representative of the historic, geographical, and ecological distributions of a species (50 CFR 424.12).

In considering the designation of critical habitat, the Service focuses on the primary physical or biological constituent elements of the area that are essential to the conservation of the species (50 CFR 424.12). Primary constituent elements may include, but are not limited to, roost sites, nesting grounds, spawning sites, feeding sites,

seasonal wetland or dryland, water quality or quantity, host species or plant pollinator, geological formation, vegetation type, tide, and specific soil types (50 CFR 424.12).

The proposed designation of critical habitat for the coastal population of the western snowy plover is based on the following physical and biological features and primary constituent elements:

- \* Space for individual and population growth.
- \* Food, water, air, light, minerals, and other nutritional or physiological requirements.
  - \* Roost sites.
- \* Sites for breeding, reproduction, and rearing of offspring.
- \* Habitats (nesting grounds and feeding sites) that are protected from disturbance and are representative of the historic geographical and ecological distribution of the species.

For all areas of critical habitat proposed for the plover, these physical and biological features and primary constituent elements are provided or will be provided by intertidal beaches (between mean low water and mean high tide), associated dune systems, and river estuaries. Important components of the beach/dune/estuarine ecosystem include surf-cast kelp, sparsely vegetated foredunes, interdunal flats, spits, washover areas, blowouts, intertidal flats, salt flats, and flat rocky outcrops. Several of these components (sparse vegetation, salt flats) are mimicked in artificial habitat types used less commonly by snowy plovers (i.e., dredge spoil sites and salt ponds and adjoining levees). Functional suitability of areas containing the features listed above is also contingent upon isolation from human disturbance and predation. These attributes are considered essential to the conservation of the coastal population of the western snowy plover.

The primary constituent elements of snowy plover nesting, foraging, and roosting habitat could occur on virtually every beach along the Pacific coast. Therefore, biologically based criteria were developed as a basis for further identifying critical habitat areas and related recovery objectives. The key components of site importance as it relates to recovery of the species were existing nesting capacity, wintering capacity, and geographic location. Those sites in Washington, Oregon, and California that currently support the majority of breeding and wintering western snowy plovers were initially selected for critical habitat designation. Several additional sites in California were selected for designation to avoid a large gap in the geographic distribution of breeding or wintering birds.

Important nesting and wintering sites were identified from Page and Stenzel (1981), Page et al. (1986), Page et al. (1991), Washington Department of Wildlife (1993), and Oregon Department of Fish and Wildlife (1994); and through personal communications with professionals in the field.

Proposed Critical Habitat Designation

The Service has identified 28 critical habitat areas totalling approximately 20,000 acres and about 210 miles of coastline, or about 10 percent of the coastline of California, Oregon, and Washington. Of the 28 areas, 19 critical habitat areas are proposed in California, 7 in Oregon, and 2 in Washington. Within the last decade, these sites provided habitat for about 65 percent of nesting and 60 percent of wintering western snowy plovers in California; 95 percent of nesting and 95 percent of wintering plovers in Oregon; and 100 percent of nesting and about 90 percent of wintering plovers in Washington. Protection and special management of these sites are essential to recovery of the coastal population of the western snowy plover and will form the cornerstone of a recovery plan.

In California, approximately 25 percent of proposed critical habitat occurs on Federal lands. About 50 percent of critical habitat proposed on non-Federal lands is State-owned, with the California Department of Parks and Recreation being the primary land manager. In Oregon about 45 percent of proposed critical habitat areas occurs on Federal land with the remainder controlled primarily by State agencies. Of the two sites proposed in the State of Washington, one is State property, and the second includes State lands adjacent to Willapa National Wildlife

Refuge.

The Service excluded from proposed critical habitat designation, lands that already provide adequate protection for the western snowy plover. These sites include lands that provide plover nesting and wintering habitat within three National Wildlife Refuge complexes—Willapa National Wildlife Refuge in Washington, and Salinas National Wildlife Refuge and the Southern California Coastal Complex in California. Programs currently exist on these refuges to protect snowy plovers. Also excluded are lands owned and/or managed by the National Park Service. Important plover nesting areas on National Park Service lands (such as Santa Rosa Island) are relatively inaccessible by the public. Any recreational use impacts or other identifiable impacts on breeding and wintering birds or their habitat would