



Frequently Asked Questions about Proposed Critical Habitat for Thread-leaved Brodiaea

Q. What is *Brodiaea filifolia* (Thread-leaved brodiaea)?

A member of the lily family, thread-leaved brodiaea is a purple-flowered perennial that is associated with clay soils and other soils with clay lenses or clay substrates. The plant is found in portions of Los Angeles, Orange, San Bernardino, Riverside and San Diego counties, California, at elevations between 100 feet and 2,500 feet above sea level.



Brodiaea filifolia Photo Credit: K.Clark/USFWS

Thread-leaved brodiaea grows about 8 to 16 inches tall and generally flowers in May and June. This plant is self-incompatible - meaning a particular thread-leaved brodiaea plant can only set seed if it is pollinated by another plant that is genetically distinct.

Currently, 84 populations of the plant exist on Federal, state, local, and privately owned lands in southern California.

Q. What is critical habitat?

Critical habitat is a term in the Endangered Species Act. It identifies geographic areas that contain features essential for the conservation of a threatened or endangered species and may require special management considerations or protection.

We must first identify, to the extent known, the physical or geological features essential to the conservation of the species. These needs may include one or more of the following:

- ◆ space for individual and population growth, and for normal behavior;
- ◆ food, water, light, air, minerals or other nutritional or physiological needs;
- ◆ cover or shelter;
- ◆ sites for breeding, reproduction, and rearing of offspring; and
- ◆ habitat that is protected from disturbance or is representative of the historical geographic and ecological distribution of a species.

We then determine which areas occupied by the species contain these features, whether these may need special management or protection, and then which of them are important enough to the

species to warrant being designated as critical habitat. In the event we determine that occupied habitat by itself is not enough to conserve the species, we may then examine suitable habitat unoccupied by the species to determine if it is essential to the conservation of the species and so should be included in the designation.

Q. What are primary constituent elements essential to the conservation of thread-leaved brodiaea?

The primary constituent elements for thread-leaved brodiaea are those habitat components essential for the primary biological needs of the plant and its seeds, including space for individual and population growth; food, water, air, light, minerals, or other nutritional or physiological requirements; and suitable habitat for pollinators.

Primary constituent elements for thread-leaved brodiaea include appropriate soils and associated vegetation at suitable elevations to provide for seed dispersal, germination, and seed deposition, and which support pollinators to facilitate gene flow within and among populations.

For a more detailed description of the primary constituent elements, please refer to the proposed rule to designate critical habitat (69 FR 71284).

All lands proposed as critical habitat support known populations of the plant and/or contain one or more of the primary constituent elements that provide for the life cycle needs of the species.

Q. What areas have been proposed as critical habitat?

The Service identified 84 known occurrences of thread-leaved brodiaea, of which 57 are eligible for proposed designation as critical habitat. The 57 essential occurrences are located on about 9,403 acres of land in portions of Los Angeles, Orange, San Bernardino, Riverside, and San Diego counties.

Based on Habitat Conservation Plans and other management plans that are in place and which address the conservation needs of the plant, the Service is proposing 4,690 acres of land as critical habitat. The areas proposed as critical habitat support 31 of the 57 essential occurrences of the plant and also contain one or more of the primary constituent elements essential to its conservation.

Lands proposed as critical habitat are identified in 10 geographically separate units, as follows:

Unit 1: Los Angeles County

This unit encompasses about 294 acres divided into two subunits – one subunit includes 96 acres of private land in the City of Glendora that is owned and managed by the Glendora Community Conservancy. The other subunit is 198 acres of mostly private land in the City of San Dimas, with about 20 acres occurring on land managed by the U.S. Forest Service’s Angeles National Forest.

Unit 2: Arrowhead Hot Springs

89 acres of privately owned land are included in this unit which is located at the southwestern base of the San Bernardino Mountains. This unit includes the only remaining occurrences of the

plant in the foothills of the San Bernardino Mountains.

Unit 3: Aliso Canyon

All of the 151 acres of proposed critical habitat in this unit is publicly owned as part of the Aliso-Wood Canyon Regional Park in the City of Laguna Niguel in Orange County. One occurrence of thread-leaved brodiaea is found in this proposed critical habitat unit.

Unit 4: Orange County

There are 1,861 acres of land in this unit, divided into 9 subunits. Most of the land proposed as critical habitat in this unit is privately owned, including land owned by Rancho Mission Viejo. In unit 4, there are 12 occurrences of thread-leaved brodiaea eligible for critical habitat designation.

Unit 5: Northern San Diego County

In this unit there are about 1,527 acres of land proposed as critical habitat in northern San Diego County near the border with Riverside County. There are two occurrences of thread-leaved brodiaea in Unit 5, one of which is estimated to contain about 20,000 plants.

Unit 6: Oceanside

A total of 199 acres of land are proposed as critical habitat in this unit, all of which are privately owned. Land in this unit is divided into 4 subunits all of which are found in the City of Oceanside. Each of the subunits proposed as critical habitat support one occurrence of thread-leaved brodiaea.

Unit 7: Carlsbad

This unit totals about 125 acres of land in the City of Carlsbad. All of the land proposed as critical habitat is privately owned and is divided into two subunits.

Unit 8: San Marcos

This proposed unit is divided into 5 separate subunits totaling about 315 acres. All of the land proposed as critical habitat lies within the boundaries of the City of San Marcos and is all privately owned.

Unit 9: Double LL Ranch

There are 57 acres proposed as critical habitat in this unit which lies within the boundaries of the City of Encinitas. Areas proposed for critical habitat designation are privately owned and support an occurrence of thread-leaved brodiaea.

Unit 10: Highland Valley

In the community of Ramona, the Service is proposing 74 acres of privately owned land as critical habitat for thread-leaved brodiaea. The occurrence of thread-leaved brodiaea that is found in this proposed unit is the only known occurrence of the plant on alkali soils in San Diego County and is the easternmost known occurrence of the plant within its geographic range.

Q. What areas have been excluded from the proposed designation of critical habitat?

We have excluded approximately 4,713 acres of essential habitat that supports 26 occurrences of thread-leaved brodiaea from proposed critical habitat designation. Most of the eligible habitat excluded from the proposed rule lies within the boundaries of approved Habitat Conservation Plans (HCP) that include thread-leaved brodiaea as a covered species.

Eligible habitat that is found on Marine Corps Base, Camp Pendleton has also been excluded from proposed critical habitat to ensure the military can continue conducting mission-essential training activities without risk of delays due to any potential requirement to initiate or reinstate consultations with the Service under section 7 of the Endangered Species Act.

The exclusion of these lands from critical habitat designation will not result in the extinction of the species; however, the Service is accepting comments and information about the exclusion of these lands from proposed critical habitat designation.

Q. What about lands where regional HCPs are being developed or will be developed in the future?

The proposed designation of critical habitat for thread-leaved brodiaea should not impede ongoing efforts to develop and implement new HCPs in southern California, including the development of subarea plans for the cities of Encinitas, San Marcos and Oceanside in conjunction with the Multiple Species Habitat Conservation Plan.

We will continue to work closely with these cities on their respective subarea plans to address the conservation needs of thread-leaved brodiaea.

Q. Does the designation of critical habitat create preserves?

No. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve or preserve. It does not allow government or public access to private lands and will not result in closure of the area to all access or use.

Q. What happens if my private property is proposed as critical habitat for thread-leaved brodiaea?

The designation of critical habitat does not affect private landowners unless they are undertaking projects that require Federal authorization, permits, or funding. If a project involves a Federal nexus then the agency issuing the permit, authorization or funding would consult with the Service if it is determined that the project may affect designated critical habitat.

Q. Did the Service prepare an economic analysis of the designation of critical habitat?

The Service is currently preparing a draft economic analysis that will analyze past and potential future impacts associated with conservation activities for thread-leaved brodiaea, including the combined costs associated with listing and designation of critical habitat. The draft analysis will be released for public review and comment through a separate notification in the *Federal Register*.

