Rare Plant Status Review: *Phacelia ramosissima ssp. austrolitoralis*Kristi Lazar (CNPS) and Roxanne Bittman (CNDDB) January 2, 2007

Information in red text has been added since the original status review was sent out.

Background

Phacelia ramosissima ssp. austrolitoralis is a perennial herb in the Boraginaceae. This subspecies was formerly in the Hydrophyllaceae; however, it will be included in the new *Jepson Manual* under the Boraginaceae. While the author for the new Jepson Manual treatment for *Phacelia* mentions that *P. ramosissima* is a complex group and needs critical study, he (and the other authors of the *Phacelia* genus) will continue to recognize the various subspecies of *P. ramosissima* until there is evidence to suggest otherwise (pers. comm. R. Patterson). This subspecies is distinguished from the other subspecies of *P. ramosissima* by having hair below the inflorescence with the hair being coarse, stiff, long, spreading and bulb-based (see *The Jepson Manual* 1993, pg. 692).

P. ramosissima ssp. *austrolitoralis* is thought to be endemic to California; however, there has been a single unconfirmed report of it from Baja California. This species is known from approximately 39 occurrences from Alameda, Los Angeles, Monterey, Orange, Santa Barbara (including Santa Cruz Island, Santa Rosa Island, and San Miguel Island), San Luis Obispo, San Diego, Tulare, and Ventura Counties. Alameda, Monterey, and Tulare County, each have only a single collection of this subspecies from more than 100 years ago and the likelihood of at least the Alameda and Monterey occurrences remaining extant is low. The Tulare County occurrence was documented in 1896; however, it was collected in Sequoia National Park, so habitat probably exists to still support this species. The reference for the occurrence from San Luis Obispo County came from *The Vascular Plants of San Luis Obispo County, California* by R. Hoover (1970); however, this occurrence may actually represent a different subspecies of *P. ramosissima*.

There are other older occurrences documented from densely populated areas and so the likelihood of these occurrences still being extant is also low. These include occurrences from the Encinitas area of San Diego County (specimen collected in 1881), Manhattan Beach in Los Angeles County (specimen collected in 1929) as well as the Newport Bay area of Orange County (specimen collected in 1932). However, there are other historical occurrences that still contain habitat to support this species. These areas include Santa Cruz Island, Santa Rosa Island, San Miguel Island, and Sequoia National Park (documented here in 1896). In addition, two occurrences receive at least some protection: one from Torrey Pines State Park and another from the Laguna Coast Wilderness Park in Orange County.

CNPS and CNDDB are proposing this species as a List 4 even though there are less than 50 known occurrences because it appears there is additional habitat for this species and more records will be found. However, if records on this species continue to be sparse in the future, then we can re-evaluate the listing status of *P. ramosissima* ssp. *austrolitoralis*.

P. ramosissima ssp. *austrolitoralis* occurs most commonly in sandy coastal areas; however, it is also known from chaparral and coastal salt marsh habitats. The majority of occurrences of this species are in Los Angeles, Orange, Santa Barbara, and San Diego Counties. However, it is also known from scattered occurrences in Alameda, Monterey, San Luis Obispo, and Tulare Counties.

This species is currently known in California from 39 occurrences and requires review for inclusion in both the CNPS Inventory and the CNDDB.

Recommended Actions

CNPS: Add to CNPS List 4.2

CNDDB: Add to CNDDB as G5?T3 / S3.2

Please review the draft CNPS Inventory record below, respond Yes or No on the proposal to add this species to the Inventory and CNDDB, and provide any edits/comments. If responding No, please provide supporting information.

Draft CNPS Inventory Record

Phacelia ramosissima Lehm. ssp. austrolitoralis Munz

Boraginaceae

"south coast branching phacelia"

List 4.2

Alameda (?), Los Angeles, Monterey (?), Orange, San Diego, San Luis Obispo (?), Santa Barbara, Tulare, Ventura

022B (Del Mar/3211782), 035C (Rancho Santa Fe/3311712), 036A (San Luis Rey/3311723), 036D (Encinitas/3311713), 052B (Dana Point/3311746), 070C (San Juan Capistrano/3311756), 071B (Newport Beach/3311768), 088B? (La Habra/3311788), 088C? (Anaheim/3311778), 090B (Venice/3311884), 113C (Triunfo Pass/3411818), 113D (Point Dume/3411817), 114D (Point Mugu/3411911), 141D (Ventura/3411933), 142A (Carpinteria/3411945), 142B (Santa Barbara/3411946), 143B (Dos Pueblos Canyon/3411948), 143A (Goleta/3411947), 145B? (Point Conception/3412044), 170B (Lompoc/3412064), 171A (Surf/3412065), 171C (Point Arguello/3412056), 171D (Tranquillon Mtn./3412055), 194D (Zaca Lake/3412071), 195C (Orcutt/3412074), 196D (Casmalia/3412075), 220C? (Nipomo/3512014), 221D? (Oceano/3512015), 366C (Monterey/3612158), SCZB (Santa Cruz Island B/3311986), SCZD (Santa Cruz Island D/3311984), SMIE (San Miguel Island East/3312083), SMIW (San Miguel Island West/3312084)

Chaparral, coastal scrub, coastal dunes, marshes and swamps (coastal salt) / sandy, sometimes rocky; elevation 6-300 meters.

Perennial herb, blooms March-August.

Occurrences from Monterey and San Luis Obispo Counties may be misidentified. Many collections old; need field surveys. Threatened by development.