Changed from Rank 1B.2 to Rank 4.2 on June 29, 2011

Rare Plant Status Review: *Calystegia subacaulis* ssp. *episcopalis* List change from List 1B.2 to List 4.2

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Background

Calystegia subacaulis ssp. episcopalis is a perennial rhizomatous herb in the Convolvulaceae known mostly from San Luis Obispo County, California. It is included in *The Jepson Manual* (1993) and will be included in *The Jepson Manual*, Second Edition (available online at:

http://ucjeps.berkeley.edu/tjm2/review/treatments/convolvulaceae_all.html#49575). *Calystegia subacaulis* ssp. *episcopalis* occurs in clay soil of chaparral, cismontane woodland, coastal prairie, and valley and foothill grassland at an approximate elevation of 30 to 500 meters. It is known to flower from March to July.

Calystegia subacaulis ssp. episcopalis was added to List 3 (plants about which we need more information) of the *Inventory, Fourth Edition* (1988), and was moved to List 1B (plants rare, threatened, or endangered in California) of the *Inventory, Fifth Edition* (1994), where it remains today (available online at: http://www.rareplants.cnps.org/detail/122.html). It has a CNPS threat rank of 0.2 (fairly endangered in California), and is ranked G3T1 / S1.2 by NatureServe.

Calystegia subacaulis ssp. episcopalis is currently known from 25 CNDDB mapped occurrences. However, there are at least 45 additional sites that are likely separate occurrences which have not been mapped. The recent review of *C. subacaulis* ssp. episcopalis records from the Robert F. Hoover Herbarium, the Consortium of California Herbaria, and associated literature (Sims 2010, Walgren et al. 2008) as well as a review of submitted field survey forms, has increased the number of known occurrences by nearly triple of what was previously documented.

Although formerly thought to be a San Luis Obispo County endemic, *C. subacaulis* ssp. *episcopalis* is also documented from Vandenberg Air Force Base and the Solomon Hills of northwestern Santa Barbara County (*D. Keil 24118* – OBI054692, *C.F. Smith 10870* – SBBG51577, etc.). Additional populations of *C. subacaulis* ssp. *episcopalis* occur up into the hills on clay soils throughout Hearst Ranch (D. Keil pers. comm. 2011). Furthermore, there are likely additional undocumented occurrences of *C. subacaulis* ssp. *episcopalis* throughout private parcels within the vicinity of the Morro Bay area and Los Osos Valley, due in part to the abundance of preferred habitat as well as the commonness of this taxon at numerous adjacent sites (A. E. Sims personal observation). Dave Hacker (pers. comm. 2011) declares that "its [CNPS] 1B listing may be inappropriate: a result of a lack of understanding of its true frequency and distribution", and according to David Keil (pers. comm. 2011), *C. subacaulis* ssp. *episcopalis* is too common for List 1B status and List 4 seems much more appropriate.

Calystegia subacaulis ssp. episcopalis is threatened on private properties by development. It is possibly threatened at Camp San Luis Obispo by military activities, alteration of fire regimes, feral pigs, grazing, non-native plants, and pipeline construction. Possible threats in other areas include mining, trampling, and vehicles; and it is also potentially threatened by foot traffic.

Based on the available information, CNPS and CNDDB recommend that *Calystegia subacaulis* ssp. *episcopalis* be re-ranked from List 1B.2 to List 4.2.

Recommended Actions

CNPS: Change *Calystegia subacaulis* ssp. *episcopalis* from CNPS List 1B.2 to List 4.2

CNDDB: Change *Calystegia subacaulis* ssp. *episcopalis* from CNDDB, G3T1 / S1.2 to G3T3 / S3

The revised CNPS Inventory record is below. Please respond Yes or No on the proposal to change the rank of this taxon in the Inventory and CNDDB, and provide any edits/comments on the proposed change.

Revised CNPS *Inventory* record:

Calystegia subacaulis Hook. & Arn. ssp. episcopalis Brummitt Cambria morning-glory

List 4.2

San Luis Obispo, Santa Barbara

Arroyo Grande NE (221A) 3512025, Atascadero (246B) 3512046, Cambria (271D) 3512151, Cayucos (247B) 3512048, Lopez Mtn. (246D) 3512035, Morro Bay North (247A) 3512047, Morro Bay South (247D) 3512037, Nipomo (220C) 3512014, Orcutt (195C) 3412074, Pico Creek (271C) 3512152, Piedras Blancas (272A) 3512163, Pismo Beach (221B) 3512026, San Luis Obispo (246C) 3512036, San Simeon (271B) 3512162, Santa Margarita (246A) 3512045, Sisquoc (195D) 3412073

Chaparral, cismontane woodland, coastal prairie, valley and foothill grassland/usually clay; elevation 30-500 meters.

Perennial rhizomatous herb, blooms March to July

Threatened by development. Possibly threatened by alteration of fire regimes, feral pigs, grazing, mining, trampling, military activities, non-native plants, vehicles, and pipeline construction. Potentially threatened by foot traffic. Intergrades with *C. collina* ssp. *venusta*. See *Kew Bulletin* 35(2):327 (1980) for original description.