

**Added to California Rare Plant Rank 1B.2 of the CNPS Inventory on June 13, 2012****Rare Plant Status Review: *Sidalcea malviflora* ssp. *dolosa*****Proposed New Add to Rank 1B.3 2, G5T2T3 / S2S3**

Danny Slakey (CNPS), Aaron Sims (CNPS) and Roxanne Bittman (CNDDDB)

May 2, 2012

Changes made to the original document appear in blue text.

**Background**

*Sidalcea malviflora* ssp. *dolosa* is a perennial rhizomatous herb in the Malvaceae family that is endemic to the San Bernardino Mountains of Southern California. It is included in *The Jepson Manual*, Second Edition (*TJM 2*, available online at [http://ucjeps.berkeley.edu/cgi-bin/get\\_IJM.pl?tid=52984](http://ucjeps.berkeley.edu/cgi-bin/get_IJM.pl?tid=52984)) and *The Jepson Manual* (1993); the *Flora of North America* treatment for Malvaceae is not yet available. *Sidalcea* taxa have long been considered taxonomically difficult due to interspecific hybridization (Hitchcock 1957). A recent study examined the DNA of *Sidalcea* taxa with the goal of elucidating past hybridization events (Andreasen and Baldwin 2003). One population of *S. malviflora* ssp. *dolosa* was placed with *Sidalcea multifida* in the 'glaucescens' clade in a phylogeny produced by this study; another population was placed in the 'malviflora' clade, which included other subspecies of *S. malviflora* as well as *S. neomexicana*. However, *S. malviflora* ssp. *dolosa* and *S. multifida* do not overlap in their distributions, and Andreasen and Baldwin (2003) do not offer an explanation for the observed close relationship between these taxa. Chromosome counts for *S. malviflora* ssp. *dolosa* could be helpful in interpreting these data, but none are available yet (Andreasen and Baldwin 2003). *Sidalcea malviflora* ssp. *dolosa* is difficult to separate from *S. sparsiflora*, which used to be treated as a subspecies of *S. malviflora* (A. Sanders pers. comm. 2012). *Sidalcea malviflora* ssp. *dolosa* is distinguished from other subspecies of *S. malviflora* by its relatively long (~2mm), non-stellate stem base hairs, fruit segments that are only weakly net-veined, relatively long rhizomes (>10cm), and a calyx that is sparsely stellate-puberulent. These characters, as well as several others, generally share some degree of overlap with the other subspecies of *S. malviflora* (*TJM 2*). Although no other subspecies of *S. malviflora* are thought to occur in the San Bernardino Mountains (*TJM 2*), there are forms of it from the south side of the range in the vicinity of Yucaipa and Oak Glen that are presumably ssp. *malviflora* (A. Sanders pers. comm. 2012). *Sidalcea malviflora* ssp. *dolosa* blooms from May to August.

*Sidalcea malviflora* ssp. *dolosa* occurs in meadows and seeps, as well as riparian zones within lower and upper montane coniferous forests (CCH 2012), and is restricted to these wetter natural communities within the San Bernardino Mountains. It has been found between 1495 and 2685 meters in elevation.

*Sidalcea malviflora* ssp. *dolosa* is known from about twenty occurrences in the San Bernardino Mountains. Only eight of these occurrences are historical (occurrences not documented in the past 20 years are considered historical by the CNDDDB), as many

specimens have been collected in recent years by botanists from Rancho Santa Ana Botanic Garden. Most of the occurrences are found within the San Bernardino National Forest, but at least one occurrence, *White & Wood – 11734*, is on private land (see the attached spreadsheet for element occurrence #20; EOs #1 and #2 may also be on private land). The occurrence at Seven Oaks Camp (*Prince & O'Brien – 598* and other collections; EO #10 in the attached spreadsheet) is apparently doing poorly, with only one individual seen in a recent survey (N. Fraga pers. comm. 2012). The plant is very abundant in Wildhorse Canyon location is one of the best populations of this plant, where there are some populations containing tens of individuals, however, it is not abundant (S. Eliason pers. comm. 2012). where It has been collected at Wildhorse Canyon numerous times at elevations ranging from 2045 to 2685 meters (*Fraga et al. – 3092* and other collections; EO# 11; N. Fraga pers. comm. 2012). Additional collections of *S. malviflora* not annotated to subspecies from the University California Riverside Herbarium (UCR) have been successfully identified as ssp. *dolosa* (UCR: 23559, 83864, 83897, 201070, and 227402), but do not represent new locations (A. Sanders pers. comm. 2012).

Although past threats have likely reduced the abundance of this plant, current immediate threats to *Sidalcea malviflora* ssp. *dolosa* should be considered are somewhat minimal. Dams were constructed on Bear Creek in 1884 and 1912 to fill Big Bear Lake, which inundated a large area of likely habitat for *S. malviflora* ssp. *dolosa* (T. Stoughton pers. comm. 2012, BigBearLake.net 2012). The first dam was built before *S. malviflora* ssp. *dolosa* had ever been collected in or near Bear Valley, although many specimens of other taxa were collected by S.B. and W.F. Parish in Bear Valley in 1882 (CCH 2012). Development may threaten a few populations of *S. malviflora* ssp. *dolosa*, particularly those on private land, if they are still extant. Nearly all occurrences of *S. malviflora* ssp. *dolosa* currently face a small or infrequent degree of threat from water extraction and diversion, and off highway vehicle travel through habitat (S. Eliason pers. comm. 2012). Furthermore, it is possibly threatened by recreational activities and foot traffic since most occurrences are in USFS lands that are recreated upon, and some occurrences may be adjacent to trails (J. Andre pers. comm. 2012, D. Bell pers. comm. 2012).

Based on the available information, CNPS and CNDDDB recommend that *S. malviflora* ssp. *dolosa* be added to California Rare Plant Rank 1B.3 2.

### Recommended Actions

CNPS: Add to CNPS 1B.3 2

CNDDDB: Add to CNDDDB G5T2T3 / S2S3

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

---

**Draft CNPS Inventory Record**

*Sidalcea malviflora* (DC.) A. Gray ssp. *dolosa* C.L. Hitchc.

Bear Valley checkerbloom

Malvaceae

Rank 1B.3 2

San Bernardino

Big Bear City (131D) 3411637, Big Bear Lake (105B) 3411628, Fawnskin (131C) 3411638, Harrison Mtn. (106B) 3411722, Moonridge (105A) 3411627, Onyx Peak (104B) 3411626

Meadows and seeps, riparian woodland, lower montane coniferous forest (meadows and seeps), upper montane coniferous forest (meadows and seeps); elevation 1495 – 2685 meters.

Perennial herb. Blooms May to August.

Known only from the San Bernardino Mtns. [Threatened by hydrological alterations, water diversions, and vehicles.](#) Possibly threatened by development, [recreational activities, and foot traffic.](#) [Similar to \*S. sparsifolia\*.](#) See *University of Washington Publications in Biology* 18:36-38 (1957) for original description.