Rare Plant Status Review: Eremogone cliftonii Nicholas Jensen (CNPS) and Roxanne Bittman (CNDDB) June 27, 2008

Background

Eremogone cliftonii is a perennial herb in the Caryophyllaceae. This taxon was recently described by Richard K. Rabeler and Ronald K. Hartman in *Madroño* 54 (4): 329-333 (2007). *E. cliftonii* is included in the draft treatment of Caryophyllaceae in *The Jepson Manual* (2nd Edition) available online at http://ucjeps.berkeley.edu/tjm2/review/treatments/caryophyllaceae.html. This taxon is distinguished from other *Eremogone* of the northern Sierra Nevada based on its inflorescence architecture, large petals, and glabrous stems (L. Janeway, pers. comm. 2008). *E. cliftonii* blooms from April through September.

E. cliftonii is known from approximately 33 occurrences within a 1467 km² area of Plumas and Butte Counties. All known occurrences are within the Feather River drainage. The largest concentration of *E. cliftonii* is centered on the Flea Mountain area of the Feather River Ranger District of the Plumas National Forest (NF), and adjacent areas of the Lassen NF (L. Janeway, pers. comm. 2008).

E. cliftonii occurs within open areas (including slopes and roadcuts) in mixed conifer forest and montane chaparral habitats from 455 to 1770 meters in elevation. Open forest habitat where E. cliftonii typically occurs contains a mixture of Pinus ponderosa (ponderosa pine), P. lambertiana (sugar pine), Abies concolor (white fir), Quercus kelloggii (black oak), and Q. chrysolepis (canyon live oak). Patches of chaparral where E. cliftonii occurs are typically dominated by Arctostaphylos viscida (whiteleaf manzanita) and A. mewukka ssp. truei (True's manzanita). All but two of the know occurrences of E. cliftonii are found on decomposed granitic soils containing little organic matter. The two occurrences not found on granitic soils occur on basalt and serpentine soils, respectively.

Most of the occurrences of *E. cliftonii* are on land managed by the Plumas NF. Lawrence Janeway (pers. comm. 2008) states that even though *E. cliftonii* was just recently described, he expects, "that its distribution...is at least close to its full extent." Plumas NF forest botanists have been searching for and documenting occurrences of *E. cliftonii* since 2003. Extensive searches within and beyond the known range of the species have failed to locate additional occurrences outside of the relatively-narrow geographic range presented above. Despite its narrow geographic range, *E. cliftonii* may be relatively abundant where it occurs. The estimated total population of *E. cliftonii* is 44,000 individuals.

Threats to *E. cliftonii* include alteration of fire regime, logging, road construction and maintenance, and damage to plants caused by off-highway vehicles. The highly erodable nature of the granitic soils where most *E. cliftonii* occurs makes

its vulnerable to land management and recreational activities that result in ground disturbance. Additional field work is needed to determine the extent, and population trends of all known occurrences of *E. cliftonii*. Areas of suitable habitat within, and beyond, the known range of the species should be searched for additional occurrences.

Based on the available information CNPS and CNDDB recommend that *Eremogone cliftonii* be added to List 1B.3.

Recommended Actions

CNPS: Add to CNPS List 1B.2 1B.3 CNDDB: Add to CNDDB as G3 / S3

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

Eremogone cliftonii Rabeler & R.A. Hartman

Caryophyllaceae

List 1B.2 1B.3

Butte. Plumas

Storrie (591A) 3912183, Soapstone Hill (591D) 3912173, Brush Creek (575A) 3912163, Pulga (591C) 3912174, Kimshew Point (591B) 3912184, Onion Valley (589C) 3912078, Cascade (574B) 3912162, Jonesville (607C) 4012114 Lower montane coniferous forest, upper montane coniferous forest, chaparral / openings, usually granitic; elevation 445-1770 meters.

Perennial herb, blooms April-September

Threatened by alteration of fire regime, logging, road construction, road maintenance, and vehicles. See Madrono 54(4): 329-333 (2007) for original description.