Rare Plant Status Review: *Eriogonum nudum var. psychicola* Proposed New Add to List 1B.2 1, G5T1 S1

Nicholas Jensen (CNPS) and Roxanne Bittman (CNDDB) April 21, 2010

Changes are in blue.

Background

Eriogonum nudum var. psychicola is an herbaceous perennial in the Polygonaceae endemic to a small area of Contra Costa County. It is described as a new taxon by James Reveal in *Phytologia* 89:287 (2007) (see

http://www.phytologia.org/Phytologia%20PDFs/89%283%29pdfFiles/Reveal89%283%29287-289Eriogonum.pdf), and is included in *The Jepson Manual*, 2nd Edition (available online at http://ucjeps.berkeley.edu/tjm2/review/treatments/polygonaceae-fp-reveal.html#80051). According to Reveal (2007), *E. nudum var. psychicola* is "allied to those varieties of *Eriogonum nudum* in California that have leaves with rather strongly crisped leaf margins that sheath up a glabrous flowering stem," and "may be recognized by its densely pubescent flowers." *E. nudum* var. *psychicola* flowers between July and October.

E. nudum var. *psychicola* is only known from a single occurrence from the "Antioch sand dunes area east of Antioch and just south of the San Joaquin River in northern Contra Costa Co" (Reveal 2007). Suitable habitat within and beyond the known range of *E. nudum* var. *psychicola* should be searched for additional occurrences.

E. nudum var. psychicola is known from inland dune habitat within coastal grassland plant communities from approximately 3 to 20 meters in elevation. According to Reveal (2007) it grows in "association with an atypical form of Lupinus albifrons Benth., Gutierrezia californica (DC.) Torr. & A. Gray, Quercus agrifolia Née, several introduced invasive species (Bromus diandrus Roth, Centaurea solstitialis L., Lactuca serriola L.), and two federally protected plants, Oenothera deltoides Torr. & Frém. var. howellii Munz (Antioch Dunes evening primrose) and Erysimum asperum (Nutt.) DC. var. angustatum (Rydb.) B. Boivin (Contra Costa wallflower)." E. nudum var. psychicola is the primary host plant for the endangered Lange's metalmark butterfly.

Historically, much of the habitat in the Antioch Dunes was impacted by industrial development and sand mining. The remaining habitat is located in the Antioch Dunes National Wildlife Area, managed by the U.S. Fish and Wildlife Service. *E. nudum* var. *psychicola* is possibly threatened by non-native plants.

Based on this information CNPS and CNDDB recommend that *E. nudum* var. *psychicola* be added to CNPS List 1B.1, G5T1 S1.

Recommended Actions

CNPS: Add to CNPS List 1B.1

CNDDB: Add to CNDDB as G5T1 / S1

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

Eriogonum nudum Douglas ex Benth. var. *psychicola* Reveal "Antioch Dunes buckwheat"

Polygonaceae

List 1B.1

Contra Costa

Antioch North (481D) 3812121

InDns; elevation 3-20 meters.

Herbaceous perennial. Blooms Jul-Oct.

Known from a single occurrence in the Antioch Dunes. Possibly threatened by non-native plants. See *Phytologia* 89:287 (2007) for original description.