

**Rare Plant Status Review**  
***Epilobium howellii***

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*Epilobium howellii* is an endemic, perennial herb in the Onagraceae. It is known from wet meadows, mossy seeps, and mesic places in subalpine coniferous forest habitat from approximately 2000 to 2700 meters in elevation. It is included in *The Jepson Manual* (1993) and will be included in *The Jepson Manual* (2<sup>nd</sup> Edition, pending confirmation from author). *E. howellii* flowers between July and August.

*E. howellii* is known from 99 occurrences in Alpine, El Dorado, Fresno, Madera, Mono, Nevada, Sierra, Tuolumne counties. Only one of these occurrences is considered historical and has not been documented for at least 20 years. Out of the 98 recent occurrences (those that have been documented in the past 20 years) a total of 58 are currently ranked as either “good” or “excellent” by CNDDDB. 28 out of 98 recent occurrences are ranked as either “fair” or “poor” by CNDDDB. The occurrence rank is unknown for 13 occurrences. Suitable habitat within and beyond its known range should be searched for new occurrences. Please see the table below for a summary of occurrence data.

Occurrence Statistics for <i>Epilobium howellii</i> Data from CNDDDB, July 2009											
Total # of Known Element Occurrences	Element Occurrence Ranks						Population Status		Presence		
	A	B	C	D	X	U	Historic >20 years	Recent <=20 years	Present, Extant	Possibly Extirpated	Extirpated
99	15	43	27	1	0	13	1	98	99	0	0

The population size of *E. howellii* is fairly well known. Data are available for 88 occurrences. Counts/estimates conducted between 2002 and 2008 indicate that the population size at occurrences of *E. howellii* varies greatly (from 3 plants at EO# 94 to as many as 1,000,000 plants at EO# 15). Population count/estimate data is available in the “Populations” worksheet the “Locations\_EpilobiumHowellii” spreadsheet.

*E. howellii* was first included on List 1B (plants rare, threatened or endangered in California and elsewhere) in the Fifth Edition of The CNPS Inventory (1994), and it has remained on that list ever since.

Occurrences of *E. howellii* are threatened by foot traffic, grazing, logging, vehicles, and road/trail construction/maintenance. Information on the long-term population trends at occurrences of *E. howellii* and how this species responds to persistent disturbance is needed to fully assess its conservation status.

The large number of total occurrences (99) of *E. howellii*, the number of occurrences ranked “good” or “better”, and population data seems to indicate that it is too common to be included on List 1B. Generally speaking, List 1B contains plants that are known from fewer than 50 occurrences ranked as “good” or “excellent” by CNDDDB. Consequently, it appears that, there are sufficient data to support re-ranking *E. howellii* to List 4.

Based on the current information, CNPS and CNDDDB recommend that *E. howellii* be re-ranked to List 4.2

### **Recommended Actions**

**CNPS:** Re-rank in CNPS from List 1B.3 to 4.2

**CNDDDB:** Re-rank from G2, S2.3 to G4, S4

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### **Revised CNPS *Inventory* record:**

*Epilobium howellii* Hoch

subalpine fireweed

Onagraceae

List 4.2

Alpine (ALP), El Dorado (ELD), Fresno (FRE), Madera (MAD), Mono (MNO), Nevada (NEV), Sierra (SIE), Tuolumne (TUO)

Meadows and seeps (Medws), Subalpine coniferous forest (SCFrS)/mesic; elevation 2000-2700 meters.

Perennial, stoloniferous herb, blooms July-August.

foot traffic, grazing, logging, vehicles, and road/trail construction/maintenance. See *Phytologia* 73(6):460-462 (1992) for original description.

Element Code: PDONA06180  
Changed from CNPS List 1B.3 to 4.3 on 2009-09-28