

Species: *Physaria pulvinata* (Cushion Bladderpod)

Criteria	Rank	Rationale	Literature Citations
1- Distribution within R2	A	This species was described in 2006 and is currently known from two occurrences in San Miguel and Dolores Counties, Colorado. One of these is (in part) on the San Juan National Forest. This occurrence is also within Lone Mesa State Park and on private land. Another occurrence was documented in Miramonte SWA, and the third is entirely on private land. It is found on scattered outcrops of grayish, argillaceous shale. It is ranked critically imperiled (G1S1) by NatureServe and the Colorado Natural Heritage Program. It is possible that other occurrences remain undiscovered. Confidence in Rank: Medium	O’Kane and Reveal 2006, Colorado Natural Heritage Program 2007
2- Distribution outside R2	A	Not known outside of two Colorado counties. Confidence in Rank: High	
3- Dispersal Ability	D	The dispersal ability of this species has not been investigated. The fruits and seeds of this species, like other members of <i>Physaria</i> , do not have obvious adaptations to animal- or wind-mediated dispersal. Confidence in Rank:	O’Kane and Reveal 2006
4- Abundance	A	This species is known from approximately 4000 individuals. Confidence in Rank: Medium	Colorado Natural Heritage Program 2007
5- Population Trend in R2	D	Unknown; populations have not been monitored or revisited to assess population trend. Confidence in Rank: Low	
6- Habitat Trend in R2	A	The habitat and habitat quality is currently in a downward trend due to extensive human impacts in this area (see number 7 below). Confidence in Rank: High	Colorado Natural Heritage Program 2007
7- Habitat	A	The following is a quote from O’Kane and	O’Kane and

vulnerability or modification		<p>Reveal (2006): “Without exception, all of these populations are subject to immediate and on-going threats from over-grazing, intense recreational use, and soil disturbance. It is the latter that has had the greatest impact on the extant populations, as the shale to which the plant is confined is mined and used to surface local gravel roads. Portions of populations are presently protected from active soil removal because they are near lakeshores or along power line right-of-ways. Nonetheless, off-road vehicle traffic still takes a toll. Until a thorough search for the cushion bladderpod is conducted, federal and state agencies should curtail their use of the shale where the plant occurs. We urge an immediate survey to ascertain the full extent of the distribution of <i>P. pulvinata</i> beyond what is mentioned here.”</p> <p>Confidence in Rank: High</p>	Reveal 2006
8- Life history and demographics	D	<p>There have been no studies of the demography and life history of this species. Members of <i>Physaria</i> are typically rather short-lived perennials.</p> <p>Confidence in Rank: medium</p>	Anderson and Lavender 2007

Authors: David G. Anderson and Susan Spackman Panjabi. February 12, 2006

Literature Cited:

Anderson and Lavender. 2007. Monitoring and Conservation Status Survey of *Physaria bellii* in City of Fort Collins Natural Areas. Unpublished report prepared for the City of Fort Collins.

Colorado Natural Heritage Program. 2007. Biodiversity and Conservation Tracking System.

O’Kane, S.L. and J.L. Reveal. 2006. *Physaria pulvinata* (Brassicaceae), a new species from southwestern Colorado. *Brittonia* 58(1): 74-77.