

ATTACHMENT SS2

REGION 2 SENSITIVE SPECIES EVALUATION FORM

Species: <i>Gutierrezia elegans</i> (Lone Mesa snakeweed)			
Criteria	Rank	Rationale	Literature Citations
1 Distribution within R2	A	<p>This species was described in 2008 (Schneider, Lyon and Nesom) and is currently known from four occurrences in Dolores County, CO (Colorado Natural Heritage Program 2008). At least two of the occurrences are found in Lone Mesa State Park, with other locations found on San Juan National Forest and Bureau of Land Management land adjacent to the State Park. All occurrences are within a radius of approximately 3 miles of each other. Occurrences are found on barren Mancos shale outcrops, side slopes of shallow washes and in sites with deeper soil over the shale. Three new species have been found nearby in similar habitat and none have been found elsewhere, indicating that habitat is rare (Lyon 2008). It has been tentatively ranked by the Colorado Natural Heritage Program as a G1/S1 species (Spackman Panjabi 2009).</p> <p>Confidence in Rank High</p>	<ul style="list-style-type: none"> <li>Schneider, Lyon and Nesom 2008.</li> <li>Colorado Natural Heritage Program 2008.</li> <li>Spackman Panjabi 2009.</li> <li>Lyon 2008.</li> </ul>
2 Distribution outside R2	A	<p>Not known outside of Dolores County, CO.</p> <p>Confidence in Rank High</p>	
3 Dispersal Capability	B	<p>It is likely that this species grows only in a specific habitat and that dispersal is only through suitable habitat. This habitat is limited. The dispersal ability of this species has not been investigated. The achenes of this species are equipped with pappus scales (Schneider, Lyon and Nesom 2008), which may aid in wind- and animal-mediated dispersal. This species does not spread vegetatively.</p> <p>Confidence in Rank High</p>	<ul style="list-style-type: none"> <li>Schneider, Lyon and Nesom 2008.</li> </ul>
4 Abundance in R2	A	<p>Total estimated individuals (includes all 4 locations) is 2500.</p> <p>Confidence in Rank High</p>	<ul style="list-style-type: none"> <li>Colorado Natural Heritage Program 2008.</li> <li>Lyon 2008.</li> </ul>

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5 Population Trend in R2	D	A permanent monitoring plot was established this year to assess long-term trend (Lyon 2008), but no trend data is available yet since the species was discovered in 2008.  Confidence in Rank High or Medium or Low	<ul style="list-style-type: none"> <li>Lyon 2008.</li> </ul>
6 Habitat Trend in R2	A	The habitat and habitat quality is currently in a downward trend due to human impacts in the area (see number 7 below).  Confidence in Rank High	
7 Habitat Vulnerability or Modification	A	Potential water development of Plateau Creek could extirpate all four occurrences (on NFS lands and other lands) (Lyon 2008). Also, habitat threats for <i>Physaria pulvinata</i> , a R2 Sensitive Species that occurs with <i>Gutierrezia elegans</i> in the barren shale habitat were described as: grazing, recreational use, off-road vehicle traffic and mining the soil for road surfacing (O'kane and Reveal 2006). At least one <i>G. elegans</i> occurrence is located adjacent to a road and could be impacted by future road maintenance.  Confidence in Rank High	<ul style="list-style-type: none"> <li>Lyon 2008.</li> <li>O'Kane and Reveal 2006.</li> </ul>
8 Life History and Demographics	D	No studies of life history or demographics of this species have been conducted.  Confidence in Rank	
Evaluator(s): Cara MacMillan and Peggy Lyon			Date: 1/20/09

National Forests in the Rocky Mountain Region where species is KNOWN (K) or LIKELY (L)<sup>1</sup> to occur:

<sup>1</sup> Likely is defined as more likely to occur than not occur on the National Forest or Grassland. This generally can be thought of as having a 50% chance or greater of appearing on NFS lands.

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Species Name: <i>Gutierrezia elegans</i>																					
<u>Colorado NF/NG</u>				<u>Kansas NF/NG</u>				<u>Nebraska NF/NG</u>				<u>South Dakota NF/NG</u>				<u>Wyoming NF/NG</u>					
	Known	Likely			Known	Likely			Known	Likely			Known	Likely			Known	Likely			
Arapaho-Roosevelt NF																					
White River NF																					
Routt NF																					
Grand Mesa, Uncompahgre, Gunnison NF																					
San Juan NF	x																				
Rio Grande NF																					
Pike-San Isabel NF																					
Comanche NG																					
Pawnee NG																					

Literature Cited:

Colorado Natural Heritage Program. 2008. Element Occurrence Records for *Gutierrezia elegans*.

Lyon, P. 2008. Interim Report, Rare Plant Survey of Lone Mesa State Park, Dolores County, Colorado. Unpublished Report prepared by the Colorado Natural Heritage Program for Lone Mesa State Park.

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

Schneider, A., Lyon, P., and Nesom, G. 2008. *Gutierrezia elegans* sp. nov. (Asteraceae: Astereae), a shale barren endemic of southwestern Colorado.

Spackman Panjabi, S. 2009. Personal Communication with Cara MacMillan.