

ATTACHMENT SS2

REGION 2 SENSITIVE SPECIES EVALUATION FORM

Species: Lesquerella pruinosa/Frosty Bladderpod and Pagosa Springs Bladderpod, Status: G2, N2, S2			
Criteria	Rank	Rationale	Literature Citations
1 Distribution within R2	A High	This species is endemic to southwest CO, being found in a small area of Archuleta and Hinsdale Counties. The San Juan is the only National Forest in R2 that this species occurs in.	<ul style="list-style-type: none"> Attached
2 Distribution outside R2	A High	This species is endemic to Region 2, but potential habitat (Mancos shale) occurs south into New Mexico (Region 3).	<ul style="list-style-type: none">
3 Dispersal Capability	B High	This species appears to occur only on lands associated with Mancos shale, so it is unlikely to disperse into or across lands where Mancos shale is absent. This species does best in disturbed, open-canopied environments (grasslands, shale barrens), which are primarily associated with very early and early-seral stages of the vegetation types found within the Mancos shale habitat.	<ul style="list-style-type: none">
4 Abundance in R2	B High	Even though some existing populations of this species contain thousands of individual plants, the limited distribution of this species makes its relative abundance in R2 uncommon or even rare. This species occurs on National Forest lands and on adjacent private lands.	<ul style="list-style-type: none">
5 Population Trend in R2	B Med	Initial monitoring indicates a stable population trend, but habitat trends and habitat vulnerability, as described below in criteria 6 and 7, could quickly change that to a downward trend as populations are adversely affected by development on private lands.	<ul style="list-style-type: none">
6 Habitat Trend in R2	A High	A decline in habitat quantity and quality on federal and private land is occurring and expected to increase due to growth and development, recreational impacts, exotic plant/weed encroachment, road improvements, weed control, vehicle traffic, and oil and gas development as described in criteria 7.	<ul style="list-style-type: none">

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7 Habitat Vulnerability or Modification	A High	Residential growth and development on private land on Mancos shale is destroying essential habitat for this species. Archuleta County is one of the fastest growing counties in the state. Residential growth and development increases demand for recreational opportunities on both private and federal lands, which poses a threat to the habitat of this species mainly from hiking and off-road-vehicle use by all-terrain-vehicles (ATVs), motorcycles, and mountain bikes. Plant competition from exotic and native plant species on federal and private land is a threat since these plants directly compete with <i>L. pruinosa</i> for space, sunlight, water, and nutrients. As the abundance and distribution of other plant species increases, colonization sites (bare soil) decrease, and a more closed canopy reduces the direct sunlight that <i>L. pruinosa</i> prefers. Since this species is often found along roads, that part of its habitat (private and federal lands) could be disturbed by road improvements, weed control, and vehicle traffic. Oil and gas development on private and federal lands is also a threat to this species and its habitat.	•
8 Life History and Demographics	C Med	Seed production does not appear to be a factor limiting populations or reproductive rates of this species. This species does not appear to be highly susceptible to disease or predation, but it is affected by competition as described above in criteria 6 and 7. This species appears to be adapted to and prefer disturbed lands.	•
Evaluator(s): Jeff Redders, Ecologist – San Juan National Forest			Date: May 14, 2001

●REFERENCES and LITERATURE CITATIONS

Anderson, J.L. 1988. Status Report for *Lesquerella pruinosa*. U.S. Fish and Wildlife Service, Grand Junction, Colorado.

Anonymous. 1990. Endangered Species Technical Bulletin. 15(10):11.

Carpenter, Alan and Schulz, Terri. 1994. Research and Monitoring Plan for the Frosty Bladderpod (*Lesquerella pruinosa*), The Nature Conservancy, on file at Pagosa Ranger District Office.

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Colorado Native Plant Society. 1989. Rare Plants of Colorado. Rocky Mountain Nature Association, Estes Park, Colorado.

Johnston, Barry 1997. Species Report Form for *Lesquerella pruinosa*.

NatureServe: An online encyclopedia of life [web application]. 2001. Version 1.4. Arlington Virginia, USA: Association for Biological Information. Available: <http://www.natureserve.org/>.

Neely, Betsy. 1990. Preserve Design for Piedra Valley. Unpublished report on file at the The Nature Conservancy, Colorado Field Office, Boulder, Colorado.

Redders, J., Erhart, D., Stewart L., and S. Brinton: 2001. Conservation Strategy Document for *Lesquerella pruinosa*.

Rollins, R.C. 1983. Studies of the Cruciferae of North America. Journal of the Arnold Arboretum 64:491-510.

Rollins, R.C. and E.A. Shaw. 1973. The genus *Lesquerella* in North America. University Press, Cambridge, Massachusetts.

Rouse, Leigh. 1992. Element Stewardship Abstract for *Lesquerella pruinosa*. The Nature Conservancy, Colorado Field Office, Boulder, Colorado.

Schulz 1997. Letter from Terri Schulz of The Nature Conservancy to Sara Brinton, USFS.

Spackman, S., B. Jennings, J. Coles, C. Dawson, M. Minton, A. Kratz, and C. Spurrier. 1997. Colorado Rare Plant Field Guide. Prepared for the Bureau of Land Management, the U.S. Forest Service and the U.S. Fish and Wildlife Service by the Colorado Natural Heritage Program.

USDA Forest Service. 1979. Proposed and Recommended Threatened and Endangered Plant Species of the Forest Service Rocky Mountain Region. Forest Service, Rocky Mountain Region, Lakewood, Colorado.

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

¹ 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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<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
		Cimmaron NG		Samuel R. McKelvie NF		Black Hills NF		Shoshone NF	
				Halsey NF		Buffalo Gap NG		Bighorn NF	
				Nebraska NF		Ft. Pierre NG		Black Hills NF	
				Ogalala NG				Medicine Bow NF	
	X							Thunder Basin NG	