

	Species Data:	Index Result:
Species	<i>Calochortus greenei</i>	Moderately Vulnerable
English Name	Greene's mariposa lily	Confidence Very High
Taxonomic Group	Vascular Plant	(based on entered data)
Geographic Area	Jackson and Klamath counties	
		GRank G3
Cave/Ground Water Obligate	No	SRank S3
Migratory area included in assessment:	No	Assessor Caitlin Lawrence

Climate Change Vulnerability Index Values: (greatest shown when range was selected)

Category	Factor	Score	Comments	
Temperature Scope (predicted increase)	A >6.0F	0		
	A 5.5F	0		
	A 5.1F	0		
	A 4.5F	0		
	A 3.9F	70		
	A <3.9F	30		
Hamon AET:PET Moisture Metric Scope	< -0.119	0		
	-0.119	0		
	-0.096	100		
	-0.073	0		
	-0.05	0		
	>-0.028	0		
Migratory Exposure: Climate Change Exposure Index	>7			
	6-7			
	4-5			
	<4			
Sea level rise Natural barriers Anthropogenic barriers Climate Change mitigation	B1	N		
	B2a	N		
	B2b	N		
	B3	N		
Dispersal/Movement	C1	Inc	The genus <i>Calochortus</i> appears to have poor seed dispersal; fruits are borne close to the ground, and seeds are relatively heavy with no apparent morphological adaptations promoting long-distance dispersal (Patterson and Givnish 2003). Exists in range from 33 - 20 inches. Changes in fire regime could affect the species.	
	Historical thermal niche	C2ai		SI
	Physiological thermal niche	C2aii		N
	Historical hydrological niche	C2bi		SI
	Physiol. hydrological niche	C2bii		N
	Disturbance dependence	C2c		SI
	Ice/snow dependence	C2d		N
	Physical habitat restrictions	C3		SI
	Other spp create habitat	C4a		U
	Dietary Versatility	C4b		U
	Pollinator Versatility	C4c		N
Other spp for dispersal	C4d	N		
Pathogen sensitivity	C4e	N		

Competition sensitivity	C4f	U	
Interspecific Relationship	C4g	U	
Measured genetic variation	C5a	U	
Bottlenecks	C5b	U	
Plant reproductive system	C5c	U	
Phenological response	C6	U	
Documented response	D1	U	
Modeled change	D2	U	
Modeled overlap	D3	U	
Modeled protected areas	D4	U	

Data Sources and Notes:

Climate and precipitation data from Climate Wizard using the A1B emissions scenario and ensemble average general circulation model. Historical = past 50 years; Future = mid-century (2050s). Species data from ORBIC database. Assessment performed in conjunction with the Element Rank Calculator. Other resources consulted: NREL national wind resources, 50m resolution (http://www.nrel.gov/gis/data_analysis_background.html); SILVIS lab Wildland Urban Interface 2010 layer (http://silvis.forest.wisc.edu/maps/wui_main); Oregon Department of Geology and Mineral Industries geologic map (<http://www.oregongeology.org/sub/publications/GMS/gms.htm>); US mining claims on federal lands (<http://mrddata.usgs.gov/mine-claim/>); Oregon Protected Areas Database (<http://gapanalysis.usgs.gov/padus/data/>).

Detailed definitions of criteria and methodology can be found in the documentation at <http://www.natureserve.org/conservation-tools/climate-change-vulnerability-index>

Legend and Definitions

Affect to Vulnerability:
GI = Greatly increase
Inc = Increase
SI = Somewhat increase
N = Neutral
U = Unknown

Index Scores:

Extremely Vulnerable: Abundance and/or range extent within geographical area assessed extremely likely to substantially decrease or disappear by 2050.

Highly Vulnerable: Abundance and/or range extent within geographical area assessed likely to decrease significantly by 2050.

Moderately Vulnerable: Abundance and/or range extent within geographical area assessed likely to decrease by 2050.

Less Vulnerable: Available evidence does not suggest that abundance and/or range extent within the geographical area assessed will change (increase/decrease) substantially by 2050. Actual range boundaries may change.

Insufficient Evidence: Information entered about a species' vulnerability is inadequate to calculate an Index