	Species Data:	Index Result:	
Species	*Horkelia hendersonii*	**Extremely Vulnerable**	
English Name	**Henderson's horkelia**	**Confidence**	**Very High**
Taxonomic Group	Vascular Plant	(based on entered data)	
Geographic Area	SW Oregon		
		GRank	G1G2
Cave/Ground Water Obligate	No	SRank	S1S2
Migratory area included in assessment:	No	Assessor	Sue Vrilakas

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	0	
	A <3.9F	100	
Hamon AET:PET Moisture Metric Scope	< -0.119	0	
	-0.119	91	
	-0.096	9	
	-0.073	0	
	-0.05	0	
	>-0.028	0	
Sea level rise	B1	N	
Natural barriers	B2a	N	
Anthropogenic barriers	B2b	N	
Climate Change mitigation	B3	N	
Dispersal/Movement	C1	GI	high site fidelity; found on highest peaks of Siskiyo
Historical thermal niche	C2ai	Inc	
Physiological thermal niche	C2aii	GI	Highest peaks of Siskiyou Mts. (Mt. Ashland area,
Historical hydrological niche	C2bi	SI	Maximum 56.0112, minimum 43.6364
Physiol. hydrological niche	C2bii	GI	Suspected to depend on spring rainfall
Disturbance dependence	C2c	N	
Ice/snow dependence	C2d	N	
Physical habitat restrictions	C3	Inc	Granitic substrate limited in SW OR to the Mt. Ash
Other spp create habitat	C4a	N	
Dietary Versatility	C4b	U	
Pollinator Versatility	C4c	U	
Other spp for dispersal	C4d	N	
Pathogen sensitivity	C4e	N	
Competition sensitivity	C4f	N	
Interspecific Relationship	C4g	N	
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://mrdata.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 Vulterable: 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 score.