	Species Data:	Index Result:	
Species	*Pyrrocoma radiata*	**Moderately Vulnerable**	
English Name	**Snake River goldenweed**	**Confidence**	**Very High**
Taxonomic Group	Vascular Plant	(based on entered data)	
Geographic Area	Baker and Malheur 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	100	
	A 3.9F	0	
	A <3.9F	0	
Hamon AET:PET Moisture Metric Scope	< -0.119	0	
	-0.119	10	
	-0.096	40	
	-0.073	50	
	-0.05	0	
	>-0.028	0	
Sea level rise	B1	N	
Natural barriers	B2a	N	
Anthropogenic barriers	B2b	N	
Climate Change mitigation	B3	SI	Populations are in close proximity to wind turbine construction areas. (Petix et al. 2016)
Dispersal/Movement	C1	N	
Historical thermal niche	C2ai	N	
Physiological thermal niche	C2aii	N	
Historical hydrological niche	C2bi	Inc	Range of ~8.5 inches.
Physiol. hydrological niche	C2bii	SI	Located in an already dry habitat and could be threatened by decreased seasonal dryness in the winter.
Disturbance dependence	C2c	SI	Could be threatened by changes in fire frequency in its habitat.
Ice/snow dependence	C2d	N	
Physical habitat restrictions	C3	N	
Other spp create habitat	C4a	N	
Dietary Versatility	C4b	U	
Pollinator Versatility	C4c	N	
Other spp for dispersal	C4d	N	

Pathogen sensitivity	C4e	SI	Heavy insect herbivory has been observed on populations, it is not known exactly how climate changes would affect this (Petix et al. 2016)
Competition sensitivity	C4f	SI	Report suggests many of the populations are threated by exotic invasives (Petix et al. 2016)
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	Inc	Taking climate change into account, Pfingsten (2012) found that all population models projected slight P. radiata population decreases by 2050 under two different emission scenarios ("optimistic" and "pessimistic").
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 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 score.