

Species	<b>Species Data:</b> <i>Castilleja oresbia</i>	<b>Index Result:</b> <b>Not Vulnerable/Presumed Stable</b>
English Name	<b>Pale Wallowa Indian-paintbrush</b>	<b>Confidence</b> <b>Very High</b>
Taxonomic Group	Vascular Plant	(confidence in species information)
Geographic Area	<b>NE Oregon, NW Idaho</b>	
Range Rel.	Entire range	Assessor                      Lindsey Wise
Cave/Ground Water Obligate	No	
GRank	0	
SRank	0	

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

Temperature Scope	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	25
	-0.119	45
	-0.096	30
	-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	N
Historical thermal niche	C2ai	N
Physiological thermal niche	C2aii	SI
Historical hydrological niche	C2bi	N
Physiol. hydrological niche	C2bii	N
Disturbance dependence	C2c	N
Ice/snow dependence	C2d	N
Physical habitat restrictions	C3	N
Other spp create habitat	C4a	N
Dietary Versatility	C4b	N/A
Pollinator Versatility	C4c	N
Other spp for dispersal	C4d	N
Other spp interaction	C4e	N
Genetic variation	C5a	U
Genetic bottleneck	C5b	U
Phenological response	C6	U
Documented response	D1	U
Modeled change	D2	U
Modeled overlap	D3	U
Modeled protected Areas	D4	U

<b>Affect to Vulnerability:</b>
<b>GI = Greatly Increase</b>
<b>Inc = Increase</b>
<b>SI = Somewhat Increase</b>
<b>N = Neutral</b>
<b>SD = Somewhat Decrease</b>
<b>Dec = Decrease</b>
<b>U = Unknown</b>

**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.  
**Not Vulnerable/Presumed Stable:** 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.  
**Not Vulnerable/Increase Likely:** Available evidence suggests that abundance and/or range extent within geographical area assessed is likely to increase by 2050.

Assessment 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.

Index Notes: Species range may shift and perhaps leave the assessment area.