

|                            |  |  |
|----------------------------|--|--|
| Species                    | <b>Species Data:</b><br><i>Mimulus patulus</i> | <b>Index Result:</b><br><b>Highly Vulnerable</b> |
| English Name               | <b>stalk-leaved monkeyflower</b>               | <b>Confidence</b> <b>Moderate</b>                |
| Taxonomic Group            | Vascular Plant                                 | (confidence in species information)              |
| Geographic Area            | <b>NE Oregon (Wallowas)</b>                    |  |
| Range Rel.                 | Southern edge of range                         | Assessor      Lindsey Wise                       |
| Cave/Ground Water Obligate | No   |  |
| GRank                      | G3Q  |  |
| 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 | 3   |
|                                     | -0.119   | 90  |
|                                     | -0.096   | 7   |
|                                     | -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       | SI  |
| Dispersal/Movement                  | C1       | SI  |
| Historical thermal niche            | C2ai     | SI  |
| Physiological thermal niche         | C2aii    | N   |
| Historical hydrological niche       | C2bi     | N   |
| Physiol. hydrological niche         | C2bii    | GI  |
| 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.