## Species Data:

*Sidalcea hickmanii ssp. petraea*

### Index Result:

**Less Vulnerable**

**Confidence** Very High

(based on entered data)

- **GRank:** G3
- **SRank:** S1

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**Species**

*Sidalcea hickmanii ssp. petraea*

**English Name**

Neil Rock sidalcea

**Taxonomic Group**

Vascular Plant

**Geographic Area**

Jackson county

**Cave/Ground Water Obligate**

No

**Migratory area included in assessment:**

No

**Assessor**

Caitlin Lawrence

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### Climate Change Vulnerability Index Values:

(greatest shown when range was selected)

<table>
<thead>
<tr>
<th>Category</th>
<th>Factor</th>
<th>Score</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature Scope</td>
<td>A &gt;6.0F</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A 5.5F</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A 5.1F</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A 4.5F</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A 3.9F</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A &lt;3.9F</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Hamon AET:PET Moisture Scope</td>
<td>&lt; -0.119</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-0.119</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-0.096</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-0.073</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-0.05</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&gt;-0.028</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Sea level rise</td>
<td>B1</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Natural barriers</td>
<td>B2a</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Anthropogenic barriers</td>
<td>B2b</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Climate Change mitigation</td>
<td>B3</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Dispersal/Movement</td>
<td>C1</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Historical thermal niche</td>
<td>C2ai</td>
<td>SI</td>
<td>Can't rate range, only one occurrence</td>
</tr>
<tr>
<td>Physiological thermal niche</td>
<td>C2aii</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Historical hydrological niche</td>
<td>C2bi</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td>Physiol. hydrological niche</td>
<td>C2bii</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Disturbance dependence</td>
<td>C2c</td>
<td>SI</td>
<td>May be fire dependent.</td>
</tr>
<tr>
<td>Ice/snow dependence</td>
<td>C2d</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Physical habitat restrictions</td>
<td>C3</td>
<td>N</td>
<td>Other subspecies associated with serpentine but this one apparently not. (Hill and Halse 2014).</td>
</tr>
<tr>
<td>Other spp create habitat</td>
<td>C4a</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Dietary Versatility</td>
<td>C4b</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td>Pollinator Versatility</td>
<td>C4c</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Other spp for dispersal</td>
<td>C4d</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Pathogen sensitivity</td>
<td>C4e</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Competition sensitivity</td>
<td>C4f</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Interspecific Relationship</td>
<td>C4g</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td>Measured genetic variation</td>
<td>C5a</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td>Bottlenecks</td>
<td>C5b</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td>Plant reproductive system</td>
<td>C5c</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td>Phenological response</td>
<td>C6</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td>Documented response</td>
<td>D1</td>
<td>U</td>
<td></td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th>Affect to Vulnerability:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GI = Greatly increase</td>
<td></td>
</tr>
<tr>
<td>Inc = Increase</td>
<td></td>
</tr>
<tr>
<td>SI = Somewhat increase</td>
<td></td>
</tr>
<tr>
<td>N = Neutral</td>
<td></td>
</tr>
<tr>
<td>U = Unknown</td>
<td></td>
</tr>
</tbody>
</table>

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.