

Heritage Ranking Form - State Rank

Scientific Name: *Corydalis aquae-gelidae*

Common Name: Cold-water corydalis

Classification: Vascular Plant

Range Extent: E = 5,000-20,000 sq km (~2,000-8,000 sq mi)

Comments: 2130 sq. mi., convex hull

Area of Occupancy: E = 26-125 4-km² grid cells

Comments: 59 grid cells

Number of Occurrences: C = 21 - 80

Comments: 30 occurrences (1 km separation distance)

Population Size: F = 10,000 - 100,000 individuals

Comments: 32000 estimated

Good Viability: C = Few (4-12) occurrences with excellent or good viability or ecological integrity

Comments: 6 occurrences considered with good or excellent viability, 4 with plant numbers >1000, 2 with over 500.

Environmental

Specificity: B = Narrow. Specialist or community with key requirements common

Comments: Known habitat requirements include water temperature (between 6 to 14 C), water level (-18 to 86 cm horizontal and -7 to 21 cm vertical distance), canopy cover/light levels (70 to 90% closed) and substrate (cobbly to sandy, no organic layer) (Stein 1998).

Short Term Trends: U = Unknown

Comments: None

Long Term Trends: F = Decline of 10 - 30%

Comments: Almost all extant populations occur within areas that have been harvested for timber. Assumed that there has been some impact from these activities, direct plant destruction or habitat alteration (vegetation composition, canopy cover, other microsite features). The largest population is along the Oak Grove Fork of the Clackamas River which supports two hydroelectric projects. Because the current population is sandwiched between these two dams and reservoirs, the assumption is that some parts of this population have been extirpated.

Threat Impact: C = Medium

Comments: Federal agency management has improved their management of riparian area.

Intrinsic Vulnerability: Not Evaluated

Comments: None

Heritage Rank: S3

Comments: Known only from the northern half of the West Cascades region, limited in plant number and occurrences; threats considered moderate.

Rank Notes: None

Reference: Stein, M. 1998. Conservation assessment for *Corydalis aquae-gelidae* Peck & Wilson. Unpublished document, USDA Forest Service Reg. 6 and USDI Bureau of Land Management, Oregon and Washington.

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