

FIVE-YEAR REVIEW
Kneeland Prairie Penny-cress (*Noccaea fendleri* ssp. *californica*)
August 2019

GENERAL INFORMATION:

Species: Kneeland Prairie penny-cress (*Noccaea fendleri* ssp. *Californica*; formerly *Thlaspi californicum*)

Date listed: February 9, 2000

FR citation(s): Kneeland Prairie penny-cress final listing rule: 65 FR 6332 6338; ETWP Determination of Endangered Status for the Plant *Thlaspi californicum* (Kneeland Prairie Penny-Cress) from Coastal Northern California (02/09/2000)

Classification: Endangered

BACKGROUND:

Most recent status review: Kneeland Prairie Penny-cress Five-year Review: 77 FR 25112 25116 – 5-Year Reviews of Species in California and Nevada (04/27/2012).

Initiation of Kneeland Prairie Penny-cress Five-year Review: 83 FR 28251 28254 - Endangered and Threatened Wildlife and Plants; Initiation of 5-Year Status Reviews of 50 Species in California, Nevada, and the Klamath Basin of Oregon (06/18/2018).

ASSESSMENT:

This Five-year Review was conducted by the U.S. Fish and Wildlife Service's (Service) Arcata Field Office. Data for this review were solicited from interested parties through a Federal Register notice announcing this review on June 18, 2018; however, we did not receive any information from the public in response to our Federal Register notice. To request any data or information we should consider in our review, we also contacted David Imper, retired Service botanist, and Lisa Hoover, botanist with the Six Rivers National Forest. Additionally, we conducted a literature search and a review of information in our files.

Monitoring of the Kneeland Prairie penny-cress was conducted by Service staff in 2017 and 2019. The species distribution remains the same as described in the 2012 Kneeland Prairie penny-cress Five-year Review.

Conclusion

After reviewing the best available scientific information, we conclude that Kneeland Prairie penny-cress (*Noccaea fendleri* ssp. *californica*) remains an endangered species. The evaluation of threats affecting the species under the factors in 4(a)(1) of the Endangered Species Act (Act) and analysis of the status of the species in our 2012 Kneeland Prairie penny-cress Five-year Review remain an accurate reflection of the species' current status.

RECOMMENDATIONS FOR FUTURE ACTIONS:

Most of the occupied or suitable habitat within Kneeland Prairie occurs on private property owned by a single landowner. Therefore, species monitoring, management, conservation, and recovery depend on access to occupied and suitable habitat on private lands. The highest priority action for this species is to continue efforts to secure a working relationship with the landowner.

Monitoring efforts have suffered due to lack of staff time, a laborious monitoring protocol, and lack of access to a large portion of occupied habitat. Continued periodic monitoring of the portion of the population for which access is authorized is important for the following reasons: to measure progress toward meeting the numerical recovery criteria; to provide an early warning of threats to the population; to provide further evidence of the importance of climate to the health of the population; and to enable an assessment of habitat in the area for which access is not authorized. Furthermore, data collection should follow established protocols, and data should be entered into a database housed by the Service.

Recovery criteria for *Noccaea fendleri* ssp. *californica* contain specific goals with respect to the number of individuals (Service 2003). Therefore, research is needed to determine the degree of clonal growth within the population and develop a method to standardize identification of individuals for the purpose of population estimation.

Noccaea fendleri ssp. *californica* habitat should be conserved through conservation easements, and property acquisition should be pursued for populations on private lands that remain threatened by agriculture and/or development. Non-traditional recovery grants, under Section 6 of the Act, may be used to secure conservation easements or acquire property, provided there is support from the private landowner, the California Department of Fish and Wildlife, the Service, Humboldt County, the California Department of Fire and Forestry Protection, and perhaps others. However, obtaining endowment funds to cover long-term monitoring and property management is challenging, as is negotiating a price for property acquisition.

REFERENCES

- U.S. Fish and Wildlife Service. 2000. Endangered and threatened wildlife and plants: determination of endangered status for the plant *Thlaspi californicum* (Kneeland Prairie Penny-Cress) from coastal Northern California. Federal Register 65(27):6332-6338
- U.S. Fish and Wildlife Service. 2003. Recovery plan for Kneeland Prairie Penny-Cress (*Thlaspi californicum*), Arcata, California.
- U.S. Fish and Wildlife Service. 2012. Kneeland Prairie Penny-Cress Five-year Review. Federal Register 77: 25112-25116.

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