

## **5-YEAR REVIEW**

### **Keck's checkermallow (*Sidalcea keckii*)**

#### **GENERAL INFORMATION:**

**Species:** Keck's checkermallow (*Sidalcea keckii*)

**Date listed:** February 16, 2000

**FR citation:** 65 FR 7757

**Classification:** Endangered

#### **BACKGROUND:**

##### **Most recent status review:**

U.S. Fish and Wildlife Service (Service). 2012. *Sidalcea keckii* (Keck's checkermallow) 5-Year Review: Summary and Evaluation. U.S. Fish and Wildlife Service, Sacramento, California. Finalized June 2012. 20 pp.

##### **FR Notice citation announcing this status review:**

U.S. Fish and Wildlife Service (Service). 2019. Endangered and Threatened Wildlife and Plants; Initiation of 5-Year Status Reviews of 58 Species in California, Nevada, and the Klamath Basin of Oregon. Federal Register 84:36116–36118. Published July 26, 2019.

#### **ASSESSMENT:**

##### **Information acquired since the last status review:**

This 5-year review was conducted by the U.S. Fish and Wildlife Service's (Service) Sacramento Fish and Wildlife Office. Data for this review were solicited from interested parties through a Federal Register notice announcing this review and the opening of a 60-day public comment period on July 26, 2019; however, we did not receive any information about this species from the public in response to the notice. We also contacted State and Federal agencies, species experts, universities, and other partners to request any data or information we should consider in our review. Additionally, we conducted a literature search, a review of information in our files, and obtained data from the California Natural Diversity Database (Diversity Database).

The overall species distribution of Keck's checkermallow remains the same as described in our 2012 review (Service 2012), and no new threats have been reported. According to the Diversity Database, there are four extant Keck's checkermallow occurrences in Fresno and Tulare counties (Diversity Database 2019). Additional Keck's checkermallow occurrences have been reported in Yolo, Napa, Lake, Colusa, Glenn, Solano, and Merced counties. However, the identity of those plants has not been confirmed. The unconfirmed individuals exhibit some physical characteristics that are not diagnostic of either Keck's checkermallow or the closely-related fringed checkermallow (*Sidalcea diploscypha*). Genetic studies, currently in progress, suggest that these plants may represent a previously-undescribed taxon (D. Potter *in litt.* 2019). Because we have no new information on these or other occurrences within the range of the species, we

assume the occurrences described as extant in the Diversity Database and the 2012 5-year review continue to be extant. The current abundance of each occurrence is unknown due to lack of survey efforts.

## Conservation

### *Habitat Conservation Plans*

Habitat Conservation Plans are planning documents required as part of an application for an incidental take permit. They describe the anticipated effects of the proposed taking; how those impacts will be minimized, or mitigated; and how the Habitat Conservation Plan is to be funded. Habitat Conservation Plans can apply to both listed and non-listed species, including those that are candidates or have been proposed for listing. Regional Habitat Conservation Plans develop large-scale conservation strategies within a specific region that are designed to conserve functional ecological systems and the covered species that depend on them. Such Habitat Conservation Plans aim to avoid a fragmented conservation landscape by working with local land use authorities and a designated implementing entity to conserve, enhance, and manage a preserve system. Project-level Habitat Conservation Plans are designed to fully offset the impacts associated with the permitted activity by contributing to a larger conservation design.

Being included as a covered species under a Habitat Conservation Plan can result in habitat being set aside and managed for the species as mitigation for impacts associated with covered activities, such as planned urban development, within the Habitat Conservation Plan permit area. In addition to mitigation, avoidance, minimization, and other conservation measures (e.g. monitoring, seasonal work windows, habitat management, etc.) are implemented. Habitat Conservation Plans can also utilize banks, in-lieu fee programs, or other mechanisms to preserve habitat in perpetuity and contribute to a regional conservation strategy.

There is one Habitat Conservation Plan that includes Keck's checkermallow as a covered species. This is the PG&E San Joaquin Valley Operations & Maintenance Habitat Conservation Plan, permit issued in 2007. More information about this plan can be found at: <https://ecos.fws.gov/ecp0/profile/speciesProfile?sId=5704>

### *Recovery Permits*

Recovery permits, also referred to as 10(a)(1)(A) permits, allow scientists to take listed species as a means to ultimately contribute to the recovery of the listed species. The data acquired from some actions covered under recovery permits (e.g., occurrence, abundance, distribution, etc.) allow the Service to make informed decisions for the species that will enhance their survival and recovery. Recovery permits can be issued for activities that directly aid the recovery of a species, such as captive breeding, reintroductions, habitat restoration, removal or reduction of threats, and educational programs. The Service's recovery permitting program aids in the conservation of listed species by ensuring permittees have adequate field experience and qualifications for conducting activities with the target listed species and, for most species, ensures that permittees are following standardized protocols while surveying. The recovery permitting application process ensures that scientific proposals are crafted using the recommended actions laid out in

the Recovery Plan for the target species. Minimum qualifications and species specific protocols can be found at: <https://www.fws.gov/sacramento/es/Permits/>.

**Conclusion:**

After reviewing the best available scientific information, we conclude that Keck’s checkermallow (*Sidalcea keckii*) remains an endangered species. We have not received any new information since the last 5-year review and without additional information we assume there is no change in the species status. As described below, we recommend surveys at known occurrences to determine the status of the species at these locations. Therefore, without new threat or survey information, the evaluation of threats affecting the species under the factors in 4(a)(1) of the Act and analysis of the status of the species in our 2012 5-year review remains an accurate reflection of the species current status.

**RECOMMENDATIONS FOR FUTURE ACTIONS:**

The following recommendations for future actions are from the 2012 5-year review, scientific literature, and as a result of discussions with species experts.

1. Protect existing habitat in the San Joaquin Valley for Keck’s checkermallow.
2. Conduct genetic evaluations to determine taxonomic status of Keck’s checkermallow outside of the San Joaquin Valley.
3. Survey both extant and extirpated occurrences that have not been visited in the past few years to determine the status of these occurrences. Conduct yearly surveys at extant locations utilizing a standardized methodology to determine trends in the range-wide status as well as population/occurrence abundance.

**Field Supervisor, Sacramento Fish and Wildlife Office**

**JOSHUA HULL**

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Approve \_\_\_\_\_ Date \_\_\_\_\_

## LITERATURE CITED

[Diversity Database] California Natural Diversity Database. 2019. Natural Heritage Division. California Department of Fish and Wildlife, State of California. Element Occurrence Reports for *Sidalcea keckii*. Unpublished cumulative data current to 2019.

[Service] U.S. Fish and Wildlife Service. 2000. Endangered and threatened wildlife and plants; determination of endangered status for *Sidalcea keckii* (Keck's checker-mallow) from Fresno and Tulare Counties, California. Federal Register 65: 7757-7764. February 16, 2000.

[Service] U.S. Fish and Wildlife Service. 2008. *Sidalcea keckii* (Keck's checkermallow) 5-Year Review: Summary and Evaluation. U.S. Fish and Wildlife Service, Sacramento, California. Finalized January 2008. 14 pp.

[Service] U.S. Fish and Wildlife Service. 2012. *Sidalcea keckii* (Keck's checkermallow) 5-Year Review: Summary and Evaluation. U.S. Fish and Wildlife Service, Sacramento, California. Finalized June 2012. 20 pp.

### *In litteris*

Potter, D. 2019. Professor, Department of Plant Sciences, University of California, Davis, California. Electronic communication with Ellie DeMarse, U.S. Fish and Wildlife Service, Sacramento, California.