

Sidalcea keckii was presumed extinct until it was rediscovered in 1992 at a site near Mine Hill in Tulare County (Stebbins 1992). The Mine Hill population contained about 60 plants growing on private land around a serpentine rock outcrop on 20 to 40 percent slopes at about 229 meters (m) (750 feet (ft)) in elevation. Associated plants included *Achyrochaena mollis* (blow-wives), *Bromus madritensis* ssp. *rubens* (red brome), *Lepidium nitidum* (shining peppergrass), *Senecio vulgaris* (common groundsel), *Plantago erecta* (California plantain), and *Silene gallica* (windmill pink) (Kirkpatrick 1992; Cypher 1998). We have received information that the standing population at Mine Hill may have been extirpated by conversion of the habitat to an orange grove (J. Stebbins, *in litt.*, 2002). Much of the area around the original population at Mine Hill remains potentially viable however, and may contain a seed bank or standing plants.

Using habitat information from the Mine Hill site, botanists resurveyed a location in the Piedras area of Fresno County where *Sidalcea keckii* had been documented in 1939, and rediscovered the population in 1998 (Service 1997; CNDDDB 2001). This population spans a mix of private and Federal land, much of which has since been purchased by Sierra Foothill Conservancy (SFC) to provide a reserve for the plant (SFC 2001). Although initially only 217 plants were found at the site (Service 2000), subsequent surveys have found 500 to 1,000 plants in 8 separate patches ranging in elevation from 183 to 305 m (600 to 1,000 ft) (Cypher 1998; C. Peck, SFC, *in litt.*, 2002). Associated plants at this site include *Bromus heartaches* (soft chess), *Dichelostemma capitatum* (blue dicks), *Gilia tricolor* (bird's eye gilia), *Trileleia ixioides* (pretty face), *Trileleia laxa* (Ithuriel's spear), *Asclepias* sp. (milkweed), and *Madia* sp. (tarweed) (Cypher 1998). Another population was discovered near Piedra in 2002, but we do not yet have details regarding its exact location (J. Stebbins, *in litt.*, 2002).

Sidalcea keckii is threatened by urban development, competition from non-native grasses, agricultural land conversion, and random events (S. Hill, pers. comm., 2002; C. Peck, *in litt.*, 2002; Service 2000). Cattle grazing at the current level does not appear to be detrimental, and may reduce encroachment by non-native grasses (C. Peck, *in litt.*, 2002; Weiss 1999). Cattle have been observed to cause some damage to *S. keckii* by eating or trampling it, although the damage was barely noticeable a week later (Cypher 1998). However, unmanaged increases

in grazing during months of flowering, seed-set, or seed maturation, could potentially reduce local population viability and thereby affect long term conservation. The plant's low population numbers, particularly at Mine Hill, leave it vulnerable to random environmental events such as extreme weather, disease, or insect infestations (Shaffer 1981, 1987; Menges 1991). The isolation of *S. keckii* populations exacerbates these vulnerabilities by reducing the likelihood of recolonization of extirpated populations. Inbreeding depression and loss of genetic variability may also be causes for concern in such small isolated populations (Ellstrand and Elam 1993).

Previous Federal Action

Federal action on *Sidalcea keckii* began when the Secretary of the Smithsonian Institution, as directed by section 12 of the Endangered Species Act of 1973, as amended (Act) (16 U.S.C. 1531 *et seq.*), prepared a report on those native plants considered to be endangered, threatened, or extinct in the United States. This report (House Doc. No. 94-51) was presented to Congress on January 9, 1975, and included *S. keckii* as threatened. On July 1, 1975, we published a notice in the **Federal Register** (40 FR 27823) accepting the report as a petition within the context of section 4(c)(2) (now section 4(b)(3)) of the Act, and of our intention to review the status of the plant taxa named in the report. On June 16, 1976, we published a proposed rule in the **Federal Register** (41 FR 24523) determining approximately 1,700 vascular plant species to be endangered pursuant to section 4 of the Act. *Sidalcea keckii* was not included on this initial list.

We addressed the remaining plants from the Smithsonian report in a subsequent Notice of Review (NOR) on December 15, 1980 (45 FR 82479). In that NOR, we determined *Sidalcea keckii* to be a category 1 candidate species, which we defined as a species for which we had enough information on biological vulnerability and threats to support preparation of a listing proposal. We published updates of the plant candidate lists in NORs dated September 27, 1985 (50 FR 39526), February 21, 1990 (55 FR 6184), and September 30, 1993 (58 FR 51144), each time maintaining *S. keckii* as a category 1 species. In the NOR published February 28, 1996 (61 FR 7596), we discontinued the use of different categories of candidates, and defined "candidate species" as those meeting the definition of former category 1. We maintained *S. keckii* as a candidate

species in that NOR, as well as in subsequent NORs published September 19, 1997 (62 FR 49398), and October 25, 1999 (64 FR 57533).

On July 28, 1997, we published a proposed rule to list *Sidalcea keckii* as an endangered species under the Act (62 FR 40325). On June 17, 1999, our failure to issue a final rule and to make a critical habitat determination for *S. keckii* was challenged in *Southwest Center for Biological Diversity, et al., v. U.S. Fish and Wildlife Service, et al.* (N.D. Cal) (Case No. C99-2992 CRB). On February 16, 2000, we published a final rule listing *S. keckii* as an endangered species (65 FR 7757). A May 22, 2000, court order, based on a joint stipulation with the plaintiffs, required us to complete a proposed critical habitat designation by September 30, 2001. The court extended the deadline to propose critical habitat for this species, based on a further settlement agreement reached by the parties. In a consent decree issued October 2, 2001, the court required us to complete a proposed critical habitat designation for *S. keckii* and certain other species by June 10, 2002, and to issue a final critical habitat designation for the species by March 10, 2003 (*Center for Biological Diversity, et al., v. Gale Norton, et al.* (D.D.C.) (Case No. Civ. 01-2063)).

We published a proposed rule for *Sidalcea keckii* in the **Federal Register** June 19, 2002 (67 FR 41669). In the proposal, we determined that it was prudent to designate approximately 438 hectares (ha) (1,085 acres (ac)), consisting of three separate units: one unit in Fresno County, 206 ha (510 ac), and two units in Tulare County, one of 86 ha (213 ac) and one of 146 ha (362 ac). Publication of the proposed rule opened a 60-day public comment period, which closed on August 19, 2002. On October 31, 2002, we published a notice announcing the reopening of the comment period on the proposal to designate critical habitat for *S. keckii*, and a notice of availability of the draft economic analysis on the proposed determination (67 FR 66378). This second public comment period closed on December 2, 2002.

Summary of Comments and Recommendations

In the June 19, 2002, proposed critical habitat designation (67 FR 41669), we requested all interested parties to submit comments on the specifics of the proposal including information related to biological justification, economics, proposed critical habitat boundaries, and proposed projects. The initial 60-day comment period closed on August 19, 2002. The comment period was