hours at our Missoula Office (*see* **ADDRESSES**). In making a final decision on the proposed rule, we will take into consideration the comments and any additional information we receive. Such communications may lead to a final rule that differs from the proposal.

#### Authority

The authority for this action is the Endangered Species Act of 1973 (16 U.S.C. 1531 *et seq.*).

Dated: February 9, 2006.

# Marshall P. Jones, Jr.,

Acting Director, U.S. Fish and Wildlife Service.

[FR Doc. E6–2205 Filed 2–15–06; 8:45 am] BILLING CODE 4310–55–P

# DEPARTMENT OF THE INTERIOR

# Fish and Wildlife Service

### 50 CFR Part 17

## Endangered and Threatened Wildlife and Plants; 90-Day Finding on a Petition To List *Sidalcea hendersonii* (Henderson's checkermallow) as Threatened or Endangered

**AGENCY:** Fish and Wildlife Service, Interior.

ACTION: Notice of petition finding.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), announce a 90-day finding on a petition to list Sidalcea hendersonii (Henderson's checkermallow) under the Endangered Species Act of 1973, as amended. We find the petition does not provide substantial scientific information indicating that listing S. hendersonii may be warranted. Therefore, we will not be initiating a further status review in response to this petition, however, we ask the public to submit to us any new information that becomes available concerning the status of the species or threats to it.

**DATES:** The finding announced in this document was made on February 16, 2006.

**ADDRESSES:** You may submit information by any of the following methods:

(1) E-mail: *Liz\_Kelly@fws.gov*. Include *Sidalcea hendersonii* (Henderson's checkermallow) in the subject line of the message.

(2) Fax: 503-231-6195.

(3) Mail: Kemper McMaster, State Supervisor, Oregon Fish and Wildlife Office, U.S. Fish and Wildlife Service, 2600 SE. 98th Avenue, Suite 100, Portland, OR 97266–1398. (4) Hand Delivery/Courier: You may hand-deliver documents to our office (*see* mailing address above).

The petition and supporting information are available for public inspection, by appointment, during normal business hours at the above address.

**FOR FURTHER INFORMATION CONTACT:** Liz Kelly, Newport Field Office, U.S. Fish and Wildlife Service, 2127 SE. Marine Science Drive, Newport, OR 97365; or by electronic mail to *Liz\_Kelly@fws.gov* (telephone: 541–867–4558; fax: 541–867–4551). Persons who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 800–877–8339, 24 hours a day, 7 days a week.

# SUPPLEMENTARY INFORMATION:

## Background

Section 4(b)(3)(A) of the Act requires that we make a finding on whether a petition to list, delist, or reclassify a species presents substantial scientific information to indicate that the petitioned action may be warranted. To the maximum extent practicable, this finding is to be made within 90 days of receipt of the petition, and the finding is to be published promptly in the **Federal Register**.

This finding summarizes the information included in the petition and information available to us at the time of the petition review. Under section 4(b)(3)(A) of the Act and our regulations in 50 CFR 424.14(b), our review of a 90day finding is limited to a determination of whether the information in the petition meets the "substantial scientific information'' threshold. Our standard for substantial scientific information with regard to a 90-day listing petition finding is "that amount of information that would lead a reasonable person to believe that the measure proposed in the petition may be warranted" (50 CFR 424.14(b)).

We have to satisfy the Act's requirement that we use the best available science to make our decisions. However, we do not conduct additional research at this point, nor do we subject the petition to rigorous critical review. Rather, at the 90-day finding stage, we accept the petitioner's sources and characterizations of the information, to the extent that they appear to be based on accepted scientific principles (such as citing published and peer reviewed articles, or studies done in accordance with valid methodologies), unless we have specific information to the contrary. Our finding considers whether the petition states a reasonable case for listing on its face. Thus, our 90-day

finding expresses no view as to the ultimate issue of whether the species should be listed.

On December 29, 2003, the Service received a petition dated December 15, 2003, from Dr. Rhoda Love on behalf of The Native Plant Society of Oregon (NPSO) requesting that the Service list *Sidalcea hendersonii* (Henderson's checkermallow) as a threatened or endangered species under the Act. Action on this petition was precluded by nearly all of our listing funds being obligated to court orders and settlement agreements for other listing actions.

The petition contained detailed information on the natural history of Sidalcea hendersonii, its population status, and existing threats to the species. Potential threats discussed in the petition include destruction and modification of habitat, predation, inadequacy of existing regulatory mechanisms, and other natural and manmade factors such as flooding and siltation. In response to the petitioner's request to list *S. hendersonii*, the Service sent a letter to the petitioner dated February 13, 2004, explaining that initial review of the petition did not indicate that an emergency listing was warranted and that the Service would review the petition and determine whether or not the petition presents substantial scientific information indicating that listing S. hendersonii may be warranted.

On January 17, 2006, we received additional information from the NPSO dated January 7, 2006, related to the petition. The additional information included an analysis of the Washington Natural Heritage Program (WNHP) 2005 report on the Washington Status of *Sidalcea hendersonii* (Henderson's checkermallow).

## **Species Information**

Sidalcea hendersonii was first recorded in 1841 by botanist William Breckenridge in southwestern Washington. Two more specimens were collected from British Columbia on Saturna Island in 1858 and Vancouver Island in 1883. Originally identified as either S. malvaeflora or S. campestris, the specimens were not recognized as S. hendersonii until examined by Eva M. F. Roush for her 1931 monograph on the genus. Sidalcea hendersonii did not gain its scientific name until 1887. In Oregon, the plant was first collected by Louis F. Henderson on July 3, 1887, on the Columbia River estuary "near Clatsop Bay." Two weeks earlier on June 15, 1887, the plant had been collected by Thomas Jefferson Howell at the mouth of the Umpqua River and labeled as S. campestris Greene. The

plant was re-annotated in 1930 as *S. hendersonii* Watson by Eva Roush and then later in 1952 by C. Leo Hitchcock (Gisler and Love 2005; H. Kesner, pers. comm. 2005).

Sidalcea hendersonii, in the mallow family (Malvaceae), is a perennial herb with pinkish-lavender to pinkish-purple flowers borne in clusters at the end of 1.6 to 5 foot (ft) (0.5 to 1.5 meter (m)) tall stems. Inflorescences (flowering parts of the plant) are spikelike (Hitchcock and Cronquist 1973). The flower is distinguished from other Sidalcea species primarily by its habitat and by its glabrous (lacking hairs) foliage and smooth carpels (modified leaf forming the ovary) (Gisler and Love 2005). Sidalcea hendersonii is a gynodioecious species, which means that the plants have either perfect flowers (male and female) or pistillate (female) flowers. The plant can reproduce vegetatively by rhizomes (horizontal underground stems) and produces seeds that drop near the parent plant (Hitchcock and Cronquist 1973). Flowering typically occurs from June to August.

Sidalcea hendersonii occurs sporadically in coastal areas from Douglas County, Oregon, to Chilkat Peninsula, Alaska. Prior to 2003, when it was discovered in Howard Bay on the southern tip of the Chilkat Peninsula, the known range only extended as far north as southwestern British Columbia, Canada.

The historical record contains uncertainty as to the number of sites that supported Sidalcea hendersonii populations. In Oregon, 10 locations were documented (Gisler and Love 2005); in Washington there were 47 documented sites (WNHP 2005). Based on surveys from 2002-2005, 23 extant populations have been documented in Washington. If populations found since 1980 (but not necessarily revisited in 2002-2005) are included, Washington may support as many as 32 populations (WNHP 2005). Populations in British Columbia appear to be less intensively studied, with at least 30 extant populations today (J. Penny, pers. comm. 2005a). We do not have information on the number of historical populations for British Columbia. The single population discovered in Alaska in 2003 is well-documented.

Based on information in our files, nine of the ten historical populations of *Sidalcea hendersonii* found in Clatsop, Tillamook, Lane, and Douglas Counties may have been extirpated from Oregon. The record for the remaining population cited in the petition, the Siuslaw River estuary population in Lane County, is unclear. As documented by L.F.

Henderson in 1931, the location is described as "Sandy flats of Siuslaw Bay just above tide, Florence'' (Table 1 in NPSO 2003). Based on this description, a single population may no longer be in existence, and may have shifted to form two extant populations associated with Cox Island in the Siuslaw River estuary and Bull Island in the North Fork Siuslaw River. In addition to these two populations in Oregon, introductions of S. hendersonii occurred in 2005 at Siletz Bay National Wildlife Refuge, Lincoln County and at Blacks and Goose Islands, Umpqua River, Douglas County (M.Gisler, pers. comm. 2005), resulting in a total of four populations in Oregon.

Sidalcea hendersonii occurs in a habitat unlike that occupied by other members of its genus. It is found in tidally-influenced high salt marsh or the brackish transition zone of coastal marshes (WNHP 2005; Gisler and Love 2005). The top seven indicators of suitable habitat for S. hendersonii in Oregon and Washington at five sites were Argentina egedii (Potentilla pacifica) (silverweed), Juncus balticus (Baltic rush), Angelica lucida (seawatch), Achillea millefolium (yarrow), Galium asparine (cleavers), Deschampsia caespitosa (tufted hairgrass), and Hordeum brachyantherum (meadow barley) (Gisler and Gisler 2005).

In British Columbia, Sidalcea hendersonii primarily occurs in tidal marshes as well as salt-water influenced ditches and man-made channels. Associated species in natural habitats include Rumex spp. (sorrel), Carex lyngbyei (Lyngbye's sedge), Aster subspicatus (Douglas' aster), Lycopus europaeus (gypsywort), Lythrum salicaria (purple loosestrife), Caltha palustris (marsh marigold), Cardamine pratensis (cuckoo flower), Juncus balticus, Triglochin maritime (seaside arrowgrass), Typha latifolia (broadleaf cattail), Iris pseudacorus (vellow flag), Argentina egedii, Festuca rubra (red fescue), and Phalaris arundinacea (reed canary grass) (J. Penny, pers. comm. 2005a).

In Alaska, Sidalcea hendersonii was found in the transitional habitat areas of beach meadow/forest habitats. The beach meadow was dominated by Geranium erianthum (geranium), Lathyrus palustris (beach pea), and Lupinus nootkatensis (Nootka lupine). The adjacent forest edge was dominated by Alnus viridis spp. sinuate (Sitka alder), Picea sitchensis (Sitka spruce), Rubus spectabilis (salmonberry), and Heracleum lanatum (cow parsnip) (Stensvold 2005).

## **Population Status**

Sidalcea hendersonii occurs in up to 67 locations rangewide (NPSO 2003; WNHP 2005; J. Penny, pers. comm. 2005; Stensvold 2005). Records in our files indicate that there are at least 5,000 to 10,000 plants in Washington, approximately 1,200 to 1,400 plants in Oregon, and 3 plants in Alaska. At least 30 populations with an unknown number of individuals are believed to exist in British Columbia (J. Penny, pers. comm. 2005a). Precise counts of S. hendersonii are difficult to obtain due to observer subjectivity and the use of incomparable metrics to quantify population numbers (WNHP 2005). For example, during surveys conducted by the NPSO and The Nature Conservancy (TNC) in Oregon (Appendix 1 in NPSO 2003), the terms "stems" and "individuals" were used interchangeably. In Washington, individual plants were defined as having either individual or multiple stems (WNHP 2005).

Sidalcea hendersonii is currently considered globally rare, uncommon or threatened, but not immediately imperiled (G3) and is considered critically imperiled (S1) in Oregon by the NatureServe and Natural Heritage Network (Oregon Natural Heritage Information Center (ONHIC) 2004). The ONHIC (2004) ranks S. hendersonii with the group of taxa that are threatened with extinction or thought to be extinct throughout their range (List 1). Washington recently recommended S. hendersonii as vulnerable (S3), and it will continue to be maintained on the State's Watch List (WNHP 2005).

In British Columbia, *Sidalcea hendersonii* is listed as "blue" or vulnerable (NatureServe 2005). Taxa on Canada's "blue list" are considered at risk, but not extinct, endangered, or threatened. Due to rarity in Alaska, *S. hendersonii* is ranked as critically imperiled (S1) (Alaska Natural Heritage Program (ANHP) 2005).

The following is a summary of the current information on *Sidalcea hendersonii*'s population status.

#### Oregon

According to the petition and our files, at least ten Oregon sites for *Sidalcea hendersonii* were identified from the 1880s to 1950, and the species has disappeared from nine of these sites since the 1950s. In 2003, a survey organized by the NPSO occurred in June, July, and August. As stated in the petition, at least "23 trained botanists" searched for the plant at historical locations and in other likely coastal habitat in Clatsop, Tillamook, Lane and Douglas Counties. As described in the petition, S. hendersonii was found at a single, known location in Lane County with 900 to 1,100 individuals. Although the petitioner provided information on survey results, survey methodology was not submitted. Regarding the site where the plant was found in Lane County, the petition does state that this area is the only site where monitoring of the species regularly takes place. According to the petition, this scattered population is divided into five "aggregations," with only two aggregations (Cox Island and nearby Wilbur Island) considered viable (NPSO 2003).

Based on information from the petition and our files, we now believe there are four populations of Sidalcea hendersonii in Oregon. According to the maps provided in the petition, the Siuslaw River estuary population appears to be two populations. One large population exists in the Siuslaw River estuary on Cox Island and nearby Wilbur Island. Cox Island is located on TNC property and supports a population of 545 stems NPSO 2003). The peninsula northeast of Cox Island is under unknown ownership and supports scattered individuals (see TNC Report, Summer 2003, Appendix 1 in NPSO 2003). Wilbur Island is private property adjacent to Cox Island, and supports an estimated 300 to 500 stems (see TNC Report, July 9, 2003, Appendix 1 in NPSO 2003).

A second small population is found in the North Fork Siuslaw River, and is comprised of the "North Fork" site and Bull Island. The "North Fork" site is located on private property and supports 13 individuals (*see* NPSO Report, July 3, 2003, Appendix 1 in NPSO 2003). The Bull Island site is located on Oregon Department of Fish and Wildlife property and contains 31 stems (NPSO 2003). The confluence of the North Fork Siuslaw River with the Siuslaw River estuary is downriver from both populations and the two populations are at least one mile apart.

Since the petition was submitted, two introductions of *Sidalcea hendersonii* were made on sites with suitable habitat in Oregon; at Siletz Bay National Wildlife Refuge (131 plants) in Lincoln County and at Blacks and Goose Islands, Umpqua River estuary (154 plants) in Douglas County (M. Gisler, pers. comm. 2005). It is unknown if either of these locations were historical sites.

As included in the petition, the NPSO (2003) speculated that *Sidalcea hendersonii* declined in Oregon due to a number of factors, including conversion of wetlands for agricultural purposes, livestock grazing, weed invasions, urban and rural development, highway and bridge construction, offroad vehicle use, and recreational activities.

# Washington

In Washington, 47 current and historical sites of Sidalcea hendersonii have been documented (WNHP 2005), twenty-seven of which were revisited from 2002 to 2005 through incidental surveys, or during a status review conducted by the Washington Natural Heritage Program in 2004 to 2005 and documented in the 2005 Status Report (WNHP 2005). These surveys described 23 extant populations with a total of 18,000 to 20,000 stems. Distribution was concentrated along the coastal areas of Grays Harbor and Pacific County, with scattered populations in Clallam, Island, Snohomish, and San Juan Counties (WNHP 2005). If populations found since 1980 (but not revisited in 2002 to 2005) are included, Washington may support as many as 32 populations and 5,000 to 10,000 plants (WNHP 2005). The Status Report stated that any of the populations may be much larger than the area surveyed and that "there is little evidence of population decline or loss, and the habitat appears currently stable and secure, despite the large proportion of populations on private land.'

#### British Columbia and Alaska

In British Columbia, the most recent estimate of *Sidalcea hendersonii* populations is that there are 21 populations (69 percent) located along the coast of the lower mainland (greater Vancouver) and 7 populations (24 percent) are found on Vancouver Island. There are two locations on the Gulf Islands (North Pender Island and Briola Island) and one on Trial Island, off of Oak Bay, Victoria (J. Penny, pers. comm. 2005a). Inventory is incomplete so there is a likelihood of finding more locations (J. Penny, pers. comm. 2005a).

In Alaska in 2003, two *Sidalcea hendersonii* were discovered at one location on the Chilkat Peninsula, Tongass National Forest. This was the first record of a plant within the family Malvaceae for the State. Three *S. hendersonii* were found at the same location in 2005 (Stensvold 2005).

#### **Threats Analysis**

Pursuant to section (4) of the Act, we may list a species, subspecies, or vertebrate taxa distinct population segment (DPS) on the basis of any of the following five factors: (A) Present or threatened destruction, modification, or curtailment of habitat or range; (B) overutilization for commercial, recreational, scientific, or educational

purposes; (C) disease or predation; (D) inadequacy of existing regulatory mechanisms; or (E) other natural or manmade factors affecting its continued existence. In making this finding, we evaluated whether the information related to Sidalcea hendersonii presented in the petition, or in our files, suggests that the petitioned action may be warranted. The Act identifies the five factors to be considered, either singly or in combination, to determine whether a species may be threatened or endangered. Our evaluation of these threats, based on information provided in the petition and available in our files, is presented below.

## A. Present or Threatened Destruction, Modification, or Curtailment of the Species' Habitat or Range

The petition states that the historical range of Sidalcea hendersonii extended from Vancouver Island, British Columbia, to Umpgua River estuary, Oregon, and based on the available scientific evidence, approximately 40 sites currently exist for the species. The petitioner states that, based on the decrease in S. hendersonii's range in Oregon alone, the species is in clear danger of extinction within a significant portion of its range. The petition also states that, based on the plight and lack of protection of S. hendersonii. the species is in danger of extinction throughout its range.

There is little information regarding the historical population size or viability for *Sidalcea hendersonii* prior to the 1980s, particularly for Oregon. Records prior to 2003 may not accurately reflect the species' historical distribution because they were not collected in a systematic, comprehensive manner with the goal of determining species distribution and abundance. The petition does not provide comprehensive information on the current range of *S. hendersonii* within estuarine ecosystems.

It appears that in nine of the ten known historical locations in Oregon the species is no longer present. A single population of *Sidalcea* hendersonii as identified in the petition has recently been recognized as two extant populations at the Siuslaw River estuary location. In 2005, a population of S. hendersonii was introduced in Lincoln County and another was introduced in Douglas County. The four populations are located on protected lands, private land, or on relatively inaccessible islands, and do not appear to be at risk from threats such as wetlands conversion, weed invasions, development, or recreational activities. The locations where S. hendersonii

populations are no longer found were located on the north coast of Oregon, and constitute a relatively minor geographic area in relation to the species' range. In view of the fact that the net loss of 6 locations in Oregon represents only 9 percent of the 67 existing locations rangewide, we do not consider the loss of the Oregon populations to be a significant loss to the rangewide existence of *S. hendersonii.* There are no major geographic areas where *S. hendersonii* was once viable but no longer is viable.

Although the petition states that Sidalcea hendersonii evolved in Oregon, no published or peer-reviewed articles were provided in support of the species' evolutionary origin. The petitioner states that S. hendersonii is the only member of its genus that has adapted to an environment between salt and fresh water, thereby limiting its distribution to estuaries from central Oregon to southwestern British Columbia. The petition claims S. hendersonii has been subject to population losses and declines due to various land management practices such as conversion of wetlands for agricultural purposes, livestock grazing, weed invasions, urban and rural development, highway and bridge construction, off-road vehicle use, and recreational activities. Based on these, and other threats, the petitioner claims that S. hendersonii is in danger of extinction throughout its entire range, and provides the following information to substantiate this claim.

The petitioner cites wetland conversion for agriculture and grazing purposes as a threat to Sidalcea *hendersonii*. Wetland conversion was reported as a factor in the extirpation of S. hendersonii at five of the ten sites investigated by the NPSO (Table 1 in NPSO 2003) in Oregon. Surveyors noted channelization and diking at three sites in Clatsop County. Grazing was cited as a threat at one site in Lane County and one site in Douglas County. Forestry practices and grazing in the Umpqua River estuary, Oregon, have impacted wetland habitat (Miller 2003). Henderson (1891) described hundreds of acres of estuarine habitat that have since been converted to pasture in Tillamook County. Although the petition provided a list of sites where anthropogenic threats to habitat exist, the petition did not provide information on wetland conversion for portions of the S. hendersonii's range where S. hendersonii is known to exist or to have existed.

The information in the petition suggests that conversion of wetlands for agricultural and grazing purposes has been, in part, responsible for the reduction of high salt marsh habitat in Oregon. The petitioner provides general statements regarding wetland loss, but does not cite specific examples of losses in specific areas where the *Sidalcea hendersonii* has been found.

In Washington during the 2004–2005 survey, two marsh areas were noted as being actively grazed and no longer providing habitat to Sidalcea hendersonii due to diking and associated changes in hydrology. However, the grazing had been on-going for 100 years and would not likely be responsible for the recent declines in the population (WNHP 2005). No information was available in the petition or in our files on wetland loss for current or historical sites in British Columbia. No wetland loss has occurred where *S. hendersonii* was recently discovered in Alaska. However, the loss of high salt marsh habitat is a factor that likely contributed to population declines in Oregon and some individual populations rangewide (Adamus et al. 2005; WNHP 2005).

## **Invasive Plants**

The petition claims weed invasions pose a threat to Sidalcea hendersonii throughout its range. In Oregon, invasive weeds were reported as threats at three of the ten sites surveyed for Sidalcea hendersonii (NPSO 2003). The petitioner claims that invasive weedy competitors such as Phalaris arundinacea, Cytisus scoparius (scotch broom), Lythrum salicaria, Festuca arundinacea (tall fescue), Erechtites minima (coastal burnweed), and Spartina patens (saltmeadow cordgrass) invade the Sidalcea hendersonii habitat. Spartina patens has become established at Cox Island and is the target of TNC control efforts (Pickering 2000). The petition does not provide specific information on the threat of invasive weeds in other portions of Sidalcea hendersonii's range.

The petitioner provides information about general weed invasions in *Sidalcea hendersonii* habitat, and several sites where the presence of weeds may be a threat in Oregon. However, the petitioner does not provide substantial information that documents impacts by invasive species outside of Oregon.

On Cox Island, although there is some overlap in habitat of *Spartina patens* and *Sidalcea hendersonii*, Pickering (pers. comm. 2005) states that *Phalaris arundinacea* is more of a threat than *Spartina patens*. In Washington, invasive species were present at low levels within 11 populations of *Sidalcea hendersonii* (WNHP 2005). Of the greatest concern were Lythrum salicaria, Erechtites minima, Iris pseudoacorus, and Cirsium arvense (Canada thistle). Lythrum salicaria was the only invasive species that posed a major threat to Sidalcea hendersonii at one site, where it was also being actively controlled. All other invasives were considered a low threat to the Sidalcea hendersonii's viability (WNHP 2005), including Spartina patens which occurs much lower in the tidal zone and not in the high marsh where Sidalcea hendersonii occurs.

In British Columbia, the role of the introduced *Lythrum salicaria* in competition with *Sidalcea hendersonii* is unknown, although in one location *L. salicaria* seems to grow in wetter areas than those with *S. hendersonii* (J. Penny, pers. comm. 2005b).

It is likely that invasive weeds pose a significant threat to some individual populations and have contributed, in part, to the loss of populations. However, the petition does not provide substantial information on the magnitude and the extent of habitat impacts by invasive weeds such that we might conclude that they threaten the continued existence of *Sidalcea hendersonii* throughout all or a significant portion of its range.

## Urban and Rural Development

The petition identifies habitat loss from urban and rural development as a negative impact to Sidalcea hendersonii. The construction of the Columbia River jetty and Winchester Bay boat basin, resorts, industrial development and airport construction were examples cited in the petition. The infrastructure that accompanies development (*i.e.*, roads, highways, bridges) is also considered a threat. In the 2003 NPSO survey, five of the ten sites were found to have some form of development associated with them. Although the petition provides a list of sites where anthropogenic threats to habitat exist, it does not provide specific information on the threat of urban and rural development throughout S. hendersonii's range.

#### **Recreational Activities**

The petitioner claims that off-road vehicle use is a threat to *Sidalcea hendersonii*, specifically at Bob Straub State Park (Nestucca River). According to the petition, the last sighting of *S. hendersonii* in Bob Straub State Park was in 1987, when 45 stems were found, although the exact location is unknown. One stem was found at nearby Whalen Island in 2000. The petitioner also states that the potential park expansion and prospective golf course at Sand Lake are a threat to *S. hendersonii.* 

While recreational activities could be an issue in parks where heavy recreational pressure or lack of enforcement lead to trampling of habitat by users where *Sidalcea hendersonii* is found, the petition does not provide information that links the actual loss of *S. hendersonii* habitat to off-road vehicle use locally.

#### Summary of Habitat Threats

While a variety of anthropogenic activities that affect wetlands (e.g., agriculture, grazing, coastal development) are occurring across the range of Sidalcea hendersonii, the petition does not provide substantial information that these activities, either singly or in combination, are destroying or modifying S. hendersonii habitat over all or a significant portion of the species' range. Also, with limited exceptions, the petition fails to provide scientific documentation to demonstrate that the areas where habitat loss has occurred are the same areas where S. hendersonii populations have been documented.

Based on the preceding discussion, we do not believe that substantial information is available indicating that the present or threatened destruction, modification, or curtailment of habitat or range may, either singularly or in combination with other factors, rise to the level of a major threat to the continued existence of the species throughout all or a significant portion of the species' range.

# B. Overutilization for Commercial, Recreational, Scientific, or Educational Purposes

No information was presented in the petition, nor is any in our files, to suggest that *Sidalcea hendersonii* has been overutilized for commercial, recreational, scientific, or educational purposes.

#### C. Disease or Predation

The petition states that weevil predation poses a threat to *Sidalcea hendersonii* populations by impacting seedling recruitment into a population through the reduction or elimination of perfect flowers. The petition cites the following information to support these claims.

Two species of curculionid beetles (weevils), Macrorhoptus sidalcea Sleeper and Anthonomus melancholicus Dietz, are known to parasitize the flowers of Sidalcea hendersonii in British Columbia. In populations where female plants were abundant, weevil larvae destroyed

significantly more seeds from hermaphrodite plants, substantially reducing seed production by perfect flowers overall (Marshall and Ganders 2001). In 2003, weevils were collected from S. hendersonii on Cox Island. Siuslaw River estuary, Oregon (R. Love, pers. comm. 2004), although the significance of weevils to reproduction in this population is unknown. The petition does not provide specific information on the threat of weevil predation in other portions of the S. hendersonii's range. The information presented indicates that this potential threat has been evaluated in British Columbia (although no details were provided), and that further research is needed to determine actual impacts to S. hendersonii rangewide. In Washington, weevils were found in 1 out of 14 populations searched (WNHP 2005).

Since weevils co-occur with other members of *Sidalcea*, their occurrence in habitats with *Sidalcea hendersonii* is not surprising. The petition does not present documentation to indicate that weevil predation is a significant threat to the continued existence of *S. hendersonii*.

# D. Inadequacy of Existing Regulatory Mechanisms

The petition states that State and Federal agencies have failed to conduct monitoring for Sidalcea hendersonii in most of its range and have failed to protect it from numerous direct and indirect impacts associated with conversion of wetlands for agricultural purposes, livestock grazing, and development (see Factor A above). The petition further states that mechanisms to regulate and control these various activities have failed to prevent harm to S. hendersonii habitat in a significant portion of its range. The petitioner states that in Oregon, one population is protected and actively managed on Cox Island through invasive species management by TNC. The petition also states that S. hendersonii has no known legal protection or conservation status in Washington since the majority of sites are on private land, and that in British Columbia only one population out of the 27 known sites is protected (NPSO 2003).

While many *Sidalcea hendersonii* sites are not protected, several sites are managed in a manner beneficial to the species. As stated in the petition, Cox Island receives active weed management control and protection under TNC (Pickering 2000). *Sidalcea hendersonii* was recently introduced to the Siletz Bay National Wildlife Refuge on U.S. Fish and Wildlife Service property in

Oregon to help stabilize and conserve the species (Gisler 2005). In Washington, the site that occurs on National Park Service land is managed as a natural area (L. Smith, pers. comm. 2005). Two populations on Washington Department of Natural Resources (WDNR) property are found within Natural Area Preserves. At John's River and Smith Creek on Washington Department of Fish and Wildlife (WDFW) land, conservation measures are in place for the estuarine ecosystems where S. hendersonii is found. At John's River, estuary restoration is creating an additional 200 acres (81 hectares) of tidally influenced high salt marsh with the breaching of the dike on the East side (J. Gerchak, pers. comm. 2005).

In British Columbia, *Sidalcea hendersonii* occurs in protected areas at Medicine Beach on Pender Islands, Trial Island Ecological Reserve, and in a fen (marshland) sanctuary in greater Vancouver. Most locations are likely on private land with unknown status (J. Penny, pers. comm. 2005). In Alaska, *S. hendersonii* is protected on Tongass National Forest land under the National Forest Management Act of 1976 (M. Stensvold, pers. comm. 2005).

While many areas where *Sidalcea hendersonii* occurs are not protected, a number of sites are managed in a manner consistent with conservation of the species. Therefore, we conclude that the petition does not present substantial information to indicate that *S. hendersonii* may be threatened by the inadequacy of existing regulatory mechanisms across all or a significant portion of its range.

## E. Other Natural or Manmade Factors Affecting the Species' Continued Existence

The petition mentions several other factors, not discussed above, that negatively impact *Sidalcea hendersonii* populations. Some of these are found within the text of the petition, others within the survey data provided as attachments. These factors include changes to the estuarine ecosystem, the species' breeding system, succession, browsing, and pollution.

#### Changes to the Estuarine Habitat

The petition states that estuarine habitats are susceptible to flooding, siltation, storm surges, battering by driftwood, and long-term changes in sea level. The petitioner cites the threat of these events within estuarine habitat to *Sidalcea hendersonii*, and provides the following information to support this claim. Dr. R. Frenkel from Oregon State University (NPSO 2003) states that "complicating the distribution of *S*. hendersonii is the accumulation of storm driven debris from massive debris deposition. To survive, the plant population in this zone must migrate bayward. For plants like S. hendersonii, with a vulnerable reproductive strategy, life is particularly hazardous." Glenn Miller from the Oregon Department of Agriculture (NPSO 2003) has stated that S. hendersonii has disappeared in the Umpqua River estuary partly due to "silt events during floods." Siltation events were cited as a threat at two of the ten sites surveyed by NPSO in Oregon (2003). However, aside from these two citations, the petition does not provide specific information on the threat of natural estuarine processes or sea-level changes in other portions of the S. hendersonii's range. In Washington, no direct damage from storm or flooding events was apparent at survey sites (WNHP 2005).

# Breeding System

Sidalcea hendersonii is a gynodioecious species, which means that the plants have either perfect flowers (male and female) or pistillate (female) flowers. The petition claims that under this breeding system, three scenarios are likely to occur including (1) If numbers of female-only plants become low, cross pollination would become rare and inbreeding depression would occur; (2) if numbers of plants (especially female) become low, recruitment would be negatively impacted as female plants produce the most seeds, and (3) if perfect-flowered plants become scarce, this would destroy the pollen source and prevent sexual reproduction. The only evidence that the petition provided to support these claims was the presence of two small populations in the Siuslaw River estuary comprising 98 percent and 100 percent females. One of these populations did not produce any seeds in 2003 (NPSO 2003). The petition does not provide specific information on the threat of low populations of either female or perfect flowers in other portions of the S. hendersonii's range.

Poor recruitment of individuals is likely a threat locally where populations are low; however, no information exists to suggest this is a current threat to the species rangewide, or in a significant portion of the range. While the claims regarding inbreeding depression and scarcity of perfect-flowered plants are conceivable, no information exists to suggest this is a current threat to the species rangewide or in a significant portion of the range.

## Other Threats

Succession, grazing and browsing by deer, road maintenance, and pollution are threats listed either in the petition and its appendices. While discussion of these topics was not provided in the petition, road maintenance was cited as a particular threat to populations adjacent to roads and highways in Washington (see survey data in WNHP 2005). In Alaska, succession was a threat to the single population located near Sitka spruce (*Picea sitchensis*) in the upper beach meadow, which was described as undergoing relatively rapid changes toward forested successional stage (Stensvold 2005).

Based on the foregoing discussion, we do not believe that the petition has presented substantial scientific information relating the changes in geographic range and abundance of the species to the actual threats to the survival of the species. We also do not believe that the petition indicates that natural or manmade factors threaten the continued existence of Sidalcea hendersonii throughout all or a significant portion of the species' range. Consequently, we conclude that the petitioner does not present substantial information indicating that a reduction in the species' numbers or range warrants a status review.

# Additional Information Provided by Petitioner

The additional information we received on January 17, 2006, from the petitioner in support of the petitioned action claims that 90 percent of the Sidalcea hendersonii populations in Oregon and 54 percent of the populations in Washington have been lost, and provides statements about perceived threats to 23 extant populations in Washington. Although as many as nine populations have disappeared in Oregon, two extant and two introduced populations are located in the state, for a net loss of six locations. In Washington there is a total of 47 historic and current sites, of which 27 sites were surveyed between 2002 and 2005, and based on these surveys 23 populations were found. As many as 9 of the remaining 20 unsurveyed sites may have existing populations. Therefore, we do not agree that 54 percent of the populations in Washington have been lost. Although the 2002-2005 surveys were not comprehensive, the species appears to be "abundant in numerous welldistributed locations within Washington" (WNHP 2006). After reviewing the NPSO's list of specific threats to S. hendersonii, the WNHP

(2006) concluded that the "overall vigor of the populations remains high, and the existing threats are not pushing the species into rapid decline in Washington." Based on the preceding discussion, we do not believe that petitioner's new information presents substantial scientific information indicating that natural or manmade factors threaten the species' continued existence.

## Finding

We have reviewed the petition and literature cited in the petition, and evaluated that information in relation to other pertinent literature and information available in our files. Based on the current status of the species, our threats analysis, and a lack of information suggesting that the species is threatened in a significant portion of its range, we find the petition does not present substantial information indicating that listing of Sidalcea hendersonii may be warranted at this time. While we will not be initiating a status review in response to the petition, we will continue to work with others to monitor the species' status and trends and we encourage interested parties to continue to provide us with information that will assist with the conservation of the species. If you wish to provide information regarding S. hendersonii, you may submit your information or materials to the Field Supervisor, Portland Fish and Wildlife Office (see ADDRESSES section above).

# **References Cited**

A complete list of all references cited herein is available, upon request, from our Oregon Fish and Wildlife Office (*see* **ADDRESSES** section above).

#### Author

The primary author of this notice is Liz Kelly, U.S. Fish and Wildlife Service, Newport Field Office (*see* **ADDRESSES** section above).

## Authority

The authority for this action is section 4 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Dated: February 6, 2006.

#### H. Dale Hall,

Director, Fish and Wildlife Service. [FR Doc. E6–2206 Filed 2–15–06; 8:45 am] BILLING CODE 4310–55–P