

accepted during the regional office normal hours of operation, and special arrangements should be made for deliveries of boxed information. The regional office official hours of business are Monday through Friday, 8:30 a.m. to 4:30 p.m., excluding Federal holidays.

Please see the direct final rule which is located in the Final Rules section of this **Federal Register** for detailed instructions on how to submit comments.

**FOR FURTHER INFORMATION CONTACT:**

Douglas Aburano, Environmental Engineer, Criteria Pollutant Section, Air Programs Branch (AR-18J), Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604, (312) 353-6960, [aburano.douglas@epa.gov](mailto:aburano.douglas@epa.gov).

**SUPPLEMENTARY INFORMATION:** In the Final Rules section of this **Federal Register**, EPA is approving the State's SIP submittal as a direct final rule without prior proposal because EPA views this as a noncontroversial submittal and anticipates no adverse comments. A detailed rationale for the approval is set forth in the direct final rule. If no adverse comments are received in response to this rule, no further activity is contemplated. If EPA receives adverse comments, the direct final rule will be withdrawn and all public comments received will be addressed in a subsequent final rule based on this proposed rule. EPA will not institute a second comment period; therefore, any parties interested in commenting on this action should do so at this time. Please note that if EPA receives adverse comment on an amendment, paragraph, or section of this rule and if that provision may be severed from the remainder of the rule, EPA may adopt as final those provisions of the rule that are not the subject of an adverse comment. For additional information, see the direct final rule which is located in the Final Rules section of this **Federal Register**.

Dated: August 4, 2009.

**Bharat Mathur,**

*Acting Regional Administrator, Region 5.*

[FR Doc. E9-19467 Filed 8-17-09; 8:45 am]

**BILLING CODE 6560-50-P**

**DEPARTMENT OF THE INTERIOR**

**Fish and Wildlife Service**

**50 CFR Part 17**

[Docket No. FWS-R2-ES-2008-0131; MO 9221050083-B2]

**Endangered and Threatened Wildlife and Plants; Partial 90-Day Finding on a Petition To List 206 Species in the Midwest and Western United States as Threatened or Endangered with Critical Habitat**

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

**ACTION:** Notice of 90-day petition finding.

**SUMMARY:** We, the U.S. Fish and Wildlife Service (Service), announce a 90-day finding on 38 species from a petition to list 206 species in the mountain-prairie region of the United States as threatened or endangered under the Endangered Species Act of 1973, as amended (Act). For 9 of the 38 species, we find that the petition did not present substantial information indicating that listing may be warranted. For 29 of the 38 species, we find that the petition does present substantial scientific or commercial information indicating that listing may be warranted. Therefore, with the publication of this notice, we are initiating a status review of the 29 species to determine if listing is warranted. To ensure that the review is comprehensive, we are soliciting scientific and commercial information regarding these 29 species.

**DATES:** To allow us adequate time to conduct a status review, we request that we receive information on or before October 19, 2009.

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

- *Federal rulemaking Portal:* <http://www.regulations.gov>. Follow the instructions for submitting comments to Docket no. FWS-R2-ES-2008-0131.

- *U.S. Mail or hand delivery:* Public Comments Processing, Attn: FWS-R6-ES-2008-0131, Division of Policy and Directives Management, U.S. Fish and Wildlife Service, 4401 N. Fairfax Drive, Suite 222, Arlington, VA 22203.

We will post all information received on <http://www.regulations.gov>. This generally means that we will post any personal information you provide us (see the Information Solicited section below for more information).

**FOR FURTHER INFORMATION CONTACT:** Ann Carlson, Listing Coordinator, Mountain-Prairie Regional Ecological Services

Office (see **ADDRESSES**); telephone 303-236-4264. If you use a telecommunications device for the deaf (TDD), please call the Federal Information Relay Service (FIRS) at 800-877-8339.

**SUPPLEMENTARY INFORMATION:**

**Information Solicited**

When we make a finding that a petition presents substantial information indicating that a species may be warranted, we are required to promptly commence a review of the status of the species. To ensure that the status review is complete and based on the best available scientific and commercial information, we are soliciting information concerning the status of the 29 species for which we found that the petition provides substantial information that listing may be warranted. We request information from the public, other concerned governmental agencies, Tribes, the scientific community, industry, or any other interested parties concerning the status of the species. We are seeking information regarding the species' historical and current status and distribution, their biology and ecology, ongoing conservation measures for the species and their habitats, and threats to the species or their habitats.

Please note that comments merely stating support or opposition to the action under consideration without providing supporting information, although noted, will not be considered in making a determination, as section 4(b)(1)(A) of the Act (16 U.S.C. 1533(b)(1)(A)) directs that determinations as to whether any species is a threatened or endangered species must be made "solely on the basis of the best scientific and commercial data available." At the conclusion of the status review, we will issue a 12-month finding on the petition, as provided in section 4(b)(3)(B) of the Act (16 U.S.C. 1533(b)(3)(B)).

You may submit your information concerning this 90-day finding or the 29 species by one of the methods listed in the **ADDRESSES** section. We will not consider submissions sent by e-mail or fax or to an address not listed in the **ADDRESSES** section.

If you submit information via <http://www.regulations.gov>, your entire submission—including any personal identifying information—will be posted on the website. If your submission is made via a hardcopy that includes personal identifying information, you may request at the top of your document that we withhold this information from public review. However, we cannot guarantee that we will be able to do so.

We will post all hardcopy submissions on <http://www.regulations.gov>.

Information and materials we receive, as well as supporting documentation used in preparing this 90-day finding, will be available for public inspection on <http://www.regulations.gov>, or by appointment, during normal business hours, at the U.S. Fish and Wildlife Service, Mountain-Prairie Regional Ecological Services Office (see **FOR FURTHER INFORMATION CONTACT**).

### Background

Section 4(b)(3)(A) of the Act (16 U.S.C. 1531 *et seq.*) requires that we make a finding on whether a petition to list, delist, or reclassify a species presents substantial scientific or commercial information indicating that a petitioned action may be warranted. We are to base this finding on information provided in the petition. To the maximum extent practicable, we are to make the finding within 90 days of our receipt of the petition, and publish our notice of this finding promptly in the **Federal Register**.

Our standard for “substantial information,” as defined in the Code of Federal Regulations at 50 CFR 424.14(b), with regard to a 90-day 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.” If we find that substantial information was presented, we are required to promptly commence a status review of the species.

In making this finding, we based our decision on information provided by the petitioner that we determined to be reliable after reviewing sources referenced in the petition and otherwise available in our files. We evaluated that information in accordance with 50 CFR 424.14(b). Our process for making this 90-day finding under section 4(b)(3)(A) of the Act is limited to a determination of whether the information in the petition meets the “substantial information” threshold.

### Petition

On July 30, 2007, we received a formal petition dated July 24, 2007, from Forest Guardians (now WildEarth Guardians) requesting that the Service: (1) Consider all full species in our Mountain Prairie Region ranked as G1 or G1G2 by the organization NatureServe, except those that are currently listed, proposed for listing, or candidates for listing; and (2) list each species as either endangered or threatened. The petition incorporated all analysis, references, and documentation provided by

NatureServe in its online database at <http://www.natureserve.org/> into the petition. The petition clearly identified itself as a petition and included the identification information, as required in 50 CFR 424.14(a). We sent a letter to the petitioners, dated August 24, 2007, acknowledging receipt of the petition and stating that, based on preliminary review, we found no compelling evidence to support an emergency listing for any of the species covered by the petition.

On March 19, 2008, WildEarth Guardians filed a complaint (1:08–CV–472–CKK) indicating that the Service failed to comply with its mandatory duty to make a preliminary 90-day finding on their two multiple species petitions—one for mountain-prairie species, and one for southwest species. We subsequently published two initial 90-day findings on January 6, 2009 (74 FR 419), and February 5, 2009 (74 FR 6122). On March 13, 2009, the Service and WildEarth Guardians filed a stipulated settlement in the District of Columbia Court, agreeing that the Service would submit to the **Federal Register** a finding as to whether WildEarth Guardians’ petition presents substantial information indicating that the petitioned action may be warranted for 38 mountain-prairie species by August 9, 2009. This finding meets that portion of the settlement.

On June 18, 2008, we received a petition from WildEarth Guardians, dated June 12, 2008, to emergency list 32 species under the Administrative Procedure Act (APA) and the Endangered Species Act. Of those 32 species, 11 were included in the July 24, 2007, petition to be listed on a non-emergency basis. Although the Act does not provide for a petition process for an interested person to seek to have a species emergency listed, section 4(b)(7) of the Act authorizes the Service to issue emergency regulations to temporarily list a species. In a letter dated July 25, 2008, we stated that the information provided in both the 2007 and 2008 petitions and in our files did not indicate that an emergency situation existed for any of the 11 species. The Service’s decisions whether to exercise its authority to issue emergency regulations to temporarily list a species are not judicially reviewable. See *Fund for Animals v. Hogan*, 428 F.3d 1059 (DC Cir. 2005).

The following discussion presents our evaluation of a portion of the species included in the July 24, 2007, petition, based on information provided in the petition and our current understanding of the species.

The 2007 petition included a list of 206 species. Two species, *Cymopterus beckii* (pinnate spring-parsley) and *Camissonia gouldii* (Diamond Valley suncup), also were included in a separate petition to list 475 species in our Southwest Region that we received on June 18, 2007. We reviewed the species files for *Cymopterus beckii* and *Camissonia gouldii* under the June 18, 2007, petition, and in an initial response to the petition for 475 species included them in a 90-day finding for 270 species published on January 6, 2009 (74 FR 419), concluding that the petition did not present substantial scientific or commercial information indicating that listing of the species may be warranted.

We addressed an additional 165 species (from the petition to list 206 species) in a 90-day finding that published on February 5, 2009 (74 FR 6122), concluding that the petition did not present substantial scientific or commercial information indicating that listing of the species may be warranted.

The petitions for 206 and 475 species each included *Sphaeralcea gierischii* (Gierisch mallow). We found this species is currently a candidate species for listing and that action was initiated through a candidate assessment completed by the Southwest Region headquartered in Albuquerque, New Mexico. We have sufficient information on biological vulnerability and threats to support a proposal to list as endangered or threatened (*i.e.*, it met our definition of a candidate species); however, preparation and publication of a proposed rule is precluded by higher-priority listing actions—existing candidates with listing priority numbers of 2 and additional factors such as International Union for Conservation of Nature (IUCN) rankings. The species was included in the Candidate Notice of Review that published on December 10, 2008 (73 FR 75176). The threats to *S. gierischii* are high in magnitude, because survival of the species is threatened throughout its entire range in Arizona by gypsum mining, and the two largest populations exist in areas that are being actively mined. Loss of those two populations would significantly reduce the total number of individuals throughout the range, threatening the long-term viability of the species. The threats are imminent, because they are ongoing in Arizona. Therefore, we assigned a listing priority number of 2 to this species.

### Species Information

The petitioners presented two tables that collectively listed the 206 species for consideration and requested that the Service incorporate all analysis,

references, and documentation provided by NatureServe in its online database into the petition. The information presented by NatureServe (<http://www.natureserve.org/>) is found in peer-reviewed professional journal articles and is considered to be a reputable source of scientific information. We judge this source to be reliable with regard to the information it presents. However, NatureServe indicates on their Web Site that information in their database is not intended for determining whether species are warranted for listing under the Act, and we found that the information cited was limited in its usefulness for this process.

We accessed the NatureServe database on August 10, 2007. We saved hardcopies of each species' file and used this information, including references cited within these files, during our review. Therefore, all information we used from the species files in NatureServe was current to that date. All of the petitioned species were ranked by NatureServe as G1 (critically imperiled) or G1G2 (between critically imperiled and imperiled).

We reviewed all references cited in the NatureServe database species files that were available to us. Some literature cited was not readily available through known sources, and we requested these directly from the

petitioner. For some species in NatureServe, there is a "Local Programs" link to the Web Sites of the State programs that contribute information to NatureServe. We found this "Local Programs" link to have additional information for very few of the 206 species. We reviewed information in references cited in NatureServe and information readily available in our files that was directly relevant to the information raised in the petition.

We have already assessed 168 of the 206 species. This petition addresses the remaining 38 species, which are listed below in Table 1.

TABLE 1—LIST OF 38 SPECIES INCLUDED IN THIS FINDING

Scientific name	Common name	Range	Group
Species for which Substantial Information was not Presented:			
<i>Amnicola</i> sp. 2 .....	Washington duskysnail .....	ID, MT, WA .....	Mollusk.
<i>Camissonia exilis</i> .....	Cottonwood Spring suncup ..	AZ, UT .....	Plant.
<i>Discus brunsoni</i> .....	Lake disc .....	MT .....	Mollusk.
<i>Frasera gypsicola</i> .....	Sunnyside green-gentian .....	NV, UT .....	Plant.
<i>Lomatium latilobum</i> .....	Canyonlands lomatium .....	CO, UT .....	Plant.
<i>Lygodesmia doloresensis</i> .....	Dolores River skeletonplant ..	CO, UT .....	Plant.
<i>Oreohelix</i> sp. 4 .....	Drummond mountainsnail .....	MT .....	Mollusk.
<i>Oreohelix amariradix</i> .....	Bitterroot mountainsnail .....	MT .....	Mollusk.
<i>Oreohelix carinifera</i> .....	Keeled mountainsnail .....	MT .....	Mollusk.
Species for which Substantial Information was Presented:			
<i>Abronia ammophila</i> .....	Yellowstone sand verbena ....	WY .....	Plant.
<i>Agrostis rossiae</i> .....	Ross' bentgrass .....	WY .....	Plant.
<i>Astragalus hamiltonii</i> .....	Hamilton milkvetch .....	CO, UT .....	Plant.
<i>Astragalus iselyi</i> .....	Isely milkvetch .....	UT .....	Plant.
<i>Astragalus microcymbus</i> .....	Skiff milkvetch .....	CO .....	Plant.
<i>Astragalus proimanthus</i> .....	Precocious milkvetch .....	WY .....	Plant.
<i>Astragalus sabulosus</i> .....	Cisco milkvetch .....	UT .....	Plant.
<i>Astragalus schmolliae</i> .....	Schmoll milkvetch .....	CO .....	Plant.
<i>Boechera (Arabis) pusilla</i> .....	Fremont County rockcress ....	WY .....	Plant.
<i>Catinella gelida</i> .....	Frigid ambersnail .....	IA, IL, IN, KY (Extirpated), MI, MO, MS, OH, SD, WI.	Mollusk.
<i>Corispermum navicula</i> .....	Boat-shaped bugseed .....	CO .....	Plant.
<i>Cryptantha semiglabra</i> .....	Pine Springs cryptantha .....	AZ, UT .....	Plant.
<i>Draba weberi</i> .....	Weber whitlowgrass .....	CO .....	Plant.
<i>Eriogonum brandegeei</i> .....	Brandegee's wild buckwheat .....	CO .....	Plant.
<i>Eriogonum soredium</i> .....	Frisko buckwheat .....	UT .....	Plant.
<i>Ironoquia plattensis</i> .....	Platte River caddisfly .....	NE .....	Invertebrate.
<i>Lednia tumana</i> .....	Meltwater lednian stonefly ....	CAN: MB USA: MT, ND, WA	Invertebrate.
<i>Lepidium ostleri</i> .....	Ostler's peppergrass .....	UT .....	Plant.
<i>Lepidomeda copei</i> .....	Northern leatherside Chub ....	ID, NV, UT, WY .....	Fish.
<i>Lesquerella navajoensis</i> .....	(No common name) .....	AZ, NM, NN, UT .....	Plant.
<i>Oreohelix</i> sp. 3 .....	Bearmouth mountainsnail .....	MT .....	Mollusk.
<i>Oreohelix</i> sp. 31 .....	Byrne Resort mountainsnail ..	MT .....	Mollusk.
<i>Penstemon flowersii</i> .....	Flowers penstemon .....	UT .....	Plant.
<i>Penstemon gibbensii</i> .....	Gibben's beardtongue .....	CO, UT, WY .....	Plant.
<i>Pyrgulopsis anguina</i> .....	Longitudinal gland pyrg .....	NV, UT .....	Mollusk.
<i>Pyrgulopsis hamlinensis</i> .....	Hamlin Valley pyrg .....	UT .....	Mollusk.
<i>Pyrgulopsis saxatilis</i> .....	Sub-globose snake pyrg .....	UT .....	Mollusk.
<i>Sisyrinchium sarmentosum</i> .....	Pale blue-eyed grass .....	ND, OR, WA .....	Plant.
<i>Trifolium friscanum</i> .....	Frisko clover .....	UT .....	Plant.

### Five-Factor Evaluation

Section 4 of the Act (16 U.S.C. 1533) and its implementing regulations at 50 CFR 424 set forth the procedures for adding species to the Federal Lists of

Endangered and Threatened Wildlife and Plants. A species, subspecies, or distinct population segment of vertebrate taxa may be determined to be endangered or threatened due to one or

more of the five factors described in section 4(a)(1) of the Act: (A) The present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for

commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; or (E) other natural or manmade factors affecting its continued existence. Listing actions may be warranted based on any of the above factors, singly or in combination.

Under the Act, a threatened species is defined as a species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. An endangered species is defined as a species that is in danger of extinction throughout all or a significant portion of its range. In making this 90-day finding, we evaluated whether information on each of the 38 species, as presented in the petition and other information in our files is substantial, indicating that listing any of the 38 species as threatened or endangered may be warranted. Our evaluation is presented below.

We separately addressed each species with respect to the five factors described in section 4(a)(1) of the Act. For each species, we fully evaluated all information available to us through the NatureServe website, and in our files. Because so little information was available in our files for these, typically rare, species, we did not distinguish between information obtained from the website and our files.

#### Species for Which Substantial Information Was Not Presented

##### *Amnicola sp. 2* (Washington Dusksnail)

Currently, three locations of the Washington dusksnail exist—two in Washington and one in Montana. Washington dusksnail (*Amnicola sp. 2*) may be the same as a species included in a separate petition to list 32 species of mollusks, also called Washington dusksnail (*Lyogyrus sp. 2*). The historical range of *Amnicola sp. 2* is hypothesized to include a larger area; according to Frest and Johannes (1995, p. 158), the species is declining in populations and number of individuals; however, this information is speculative because the authors based their analysis of the species' historical range on geographic characteristics, not on actual survey data.

**Factor A:** According to the NatureServe database, the species' survival is thought to be affected by poor water quality associated with residential development, grazing, logging, and intentional aquatic organism control activities and fish reintroductions that occur in potential

habitat or existing areas of occurrence. These activities, which potentially adversely affect water quality are general, and no quantification, verification, or subsequent effect to the species was presented.

**Factors B, C, D, and E:** No information was presented in the petition concerning threats to this species from the factors.

Based on our evaluation of the information provided in the petition and in our files, we have determined that the petition does not present substantial information to indicate that listing of Washington dusksnail may be warranted due to the present or threatened destruction, modification, or curtailment of its habitat or range due to activities affecting water quality.

##### *Camissonia exilis* (Cottonwood Spring Suncup)

*Camissonia exilis* is endemic to gypsiferous soils in Kane County, Utah, and Coconino and Mohave Counties, Arizona. The species is a narrow endemic, which may affect its ability to persist when faced with habitat reductions. Not much is known about this species.

**Factor A:** According to the NatureServe database, off-road vehicle (ORV) use and woodcutting are known to occur at some sites occupied by the species; however, no quantification, verification, or effect to the species was presented.

**Factors B, C, D, and E:** No information was presented in the petition concerning threats to this species from the factors.

Based on our evaluation of the information provided in the petition and in our files, we have determined that the petition does not present substantial information to indicate that listing of *Camissonia exilis* may be warranted due to the present or threatened destruction, modification, or curtailment of its habitat or range due to ORV use or woodcutting.

##### *Discus brunsoni* (Lake Disc)

The lake disc is a mollusk found only on the north shore of McDonald Lake in the Mission Range, Lake County, Montana. The species is a highly localized endemic. Limited survey information exists, and population trends are unknown. The species has been consistently present at the location from 1948 to 1997 (Hendricks 2003a, p. 10). Although extensive surveys have been performed, only 1 location of approximately 100 by 300 yards (91 by 274 meters) in size is known (Brunson 1956, p. 17; Hendricks 2003a, pp. 9–11). As additional information is gathered on

the requirements of the species, more occupied locations may be determined; however, the species is difficult to detect even when present and with significant survey effort (Brunson 1956, entire; Hendricks 2003b, p. 10).

**Factor A:** Fire and subsequent talus destabilization above and below the occupancy site of this species could threaten its habitat (Frest and Johannes 1995, p. 98), but substantial information on these potential threats was not presented. Much of the Mission Range has been logged, or is slated for logging, but this potential threat likely does not affect the species because it is associated with loose rock talus slopes that support lichens and mosses (Brunson 1956, p. 17), and low canopy cover but not trees (Hendricks 2003b p. 9). Other snail species are found in duff at the sides of talus slides, but the lake disc has not been found in duff (Hendricks 2003a, p. 5). Livestock generally avoid unstable rocky slopes and, therefore, the species is not likely to be affected by them (Hendricks 2003a, p. 5). A recreation trail exists at the site (Hendricks 2003a, p. 11), but effects related to it have not been documented or linked to the species.

**Factors B, C, and D:** No information was presented in the petition concerning threats to this species from the factors.

**Factor E:** The species has had a limited geographic range since 1948. However, no information was presented either in NatureServe or the petition indicating that a restricted range may be a threat to the species.

Based on our evaluation of the information provided in the petition and in our files, we have determined that the petition does not present substantial information to indicate that listing of *Discus brunsoni* may be warranted due to the present or threatened destruction, modification, or curtailment of its habitat or range due to fire, talus destabilization, logging, livestock, recreational use, or due to the species' restricted range.

##### *Frasera gypsicola* (Sunnyside Green-Gentian)

*Frasera gypsicola* grows on white calcareous barrens and Pleistocene spring-mounds in Millard County, Utah, and Nye and White Counties, Nevada. The White River Valley of Nevada contains 9 previously known sites (Smith 2000, p. 8) and 17 newly discovered sites (Forbis 2007, pp. 2–3). Populations include approximately 69,000 individuals on 321 hectares (ha) (793 acres (ac)) (Smith 1994, p. 8). The size of the Utah population is unknown,

but considered to be much smaller (England pers. comm. 2008).

**Factor A:** Potential threats include livestock trampling, road widening, seismic exploration, juniper cutting, and agricultural or ORV use (Smith 2000, p. 14). However, no evidence was presented to indicate that any of these activities currently pose a threat to any of the known populations (Smith 2000, pp. 14–15).

**Factors B and C:** No information was presented in the petition concerning threats to this species from the factors.

**Factor D:** The species is protected by the State of Nevada, and is managed by the Bureau of Land Management (BLM) as a sensitive species. Two Areas of Critical Environmental Concern have been designated that include substantial habitat for the species (Forbis 2007, p. 2). Neither the petition nor NatureServe present any information concerning the adequacy of this designation as a regulatory mechanism.

**Factor E:** The species may be sensitive to climate-change-induced drought and resulting habitat changes (Smith 2000, p. 15); however, no information was presented in the petition or exists in our files to verify this.

Based on our evaluation of the information provided in the petition and in our files, we have determined that the petition does not present substantial information to indicate that listing of *Frasera gypsicola* may be warranted due to the present or threatened destruction, modification, or curtailment of its habitat or range resulting from livestock trampling, road widening, seismic exploration, juniper cutting, and agricultural or ORV use; due to the inadequacy of existing regulatory mechanisms; or due to other natural or manmade factors affecting its continued existence.

#### *Lomatium latilobum* (Canyonlands Lomatium)

*Lomatium latilobum* is endemic to sand substrates at low elevations in Grand and San Juan Counties, Utah, and Mesa County, Colorado. There are 4,000 plants in 14 occurrences in Utah (Franklin 1995, appendix C) and 1,825 plants in 5 occurrences in Colorado (Colorado Natural Heritage Program 2008a, p. 1).

**Factor A:** According to the NatureServe database, potential threats to the species include ORV use, cattle grazing, hikers, and mountain bikes, but no quantification, verification, or effects to the species were presented.

**Factors B and C:** No information was presented in the petition concerning threats to this species from the factors.

**Factor D:** The species is listed as sensitive by the National Park Service, U.S. Forest Service, and BLM. Neither the petition nor NatureServe present any information concerning the adequacy of this designation as a regulatory mechanism.

**Factor E:** No information was presented in the petition concerning threats to this species from the factor.

Based on our evaluation of the information provided in the petition and in our files, we have determined that the petition does not present substantial information to indicate that listing of *Lomatium latilobum* may be warranted due to the present or threatened destruction, modification, or curtailment of its habitat or range resulting from ORV use, cattle grazing, hikers, or mountain bikes; or due to the inadequacy of existing regulatory mechanisms.

#### *Lygodesmia doloresensis* (Dolores River Skeletonplant)

*Lygodesmia doloresensis* is a narrow endemic limited to the Dolores River Canyon in Grand County, Utah, and Mesa and San Miguel Counties in Colorado, and one location outside the Dolores River Canyon in Rabbit Valley, Colorado. There are 17 known occurrences; 12 of these are in Colorado, although 2 are considered historical because they have not been seen in over 20 years (Colorado Natural Heritage Program 2008b, p. 21). In Colorado, population estimates are available for only 6 of the 12 occurrences, totaling 2,580 plants (Colorado Natural Heritage Program 2008b, p. 21). The remaining occurrences occur along the Dolores River in Utah, near the Colorado border. The taxonomy of *L. doloresensis* is currently being reviewed (Tomb 1980, pp. 48–50; Welsh *et al.* 2003, pp. 210–211).

**Factor A:** According to the NatureServe database, potential threats include livestock grazing, road maintenance, and nonnative plants, but no quantification, verification, or effect to the species was presented.

**Factors B and C:** No information was presented in the petition concerning threats to this species from the factors.

**Factor D:** The species is listed as sensitive by BLM. Neither the petition nor NatureServe present any information concerning the adequacy of this designation as a regulatory mechanism.

**Factor E:** No information was presented in the petition concerning threats to this species from the factor.

Based on our evaluation of the information provided in the petition and in our files, we have determined

that the petition does not present substantial information to indicate that listing of *Lygodesmia doloresensis* may be warranted due to the present or threatened destruction, modification, or curtailment of its habitat or range resulting from livestock grazing, road maintenance, or nonnative plants; or due to the inadequacy of existing regulatory mechanisms.

#### *Oreohelix* sp. 4 (Drummond Mountainsnail)

The Drummond mountainsnail is an extremely rare, local endemic with one small site known to persist, and an uncertain historical distribution in Granite and Powell Counties, Montana. Potentially, additional sites are occupied. According to Frest and Johannes (1995, p. 116), the population trend is downward in number of sites and individuals based on extirpation in previously-occupied areas; however, this information is somewhat speculative because it is difficult to survey for snails—they tend to be cyclic, depending on weather and other natural factors.

**Factor A:** According to the NatureServe database, human activities such as logging, highway construction, roadside spraying, and grazing potentially cause population declines, but no quantification, verification, or effect to the species was presented.

**Factors B, C, and D:** No information was presented in the petition concerning threats to this species from the factors.

**Factor E:** The species has a limited geographic range. However, no information was presented either in NatureServe or the petition indicating that habitat disturbance caused by stochastic events, exacerbated by small population sizes and a restricted range, may be a threat to the species.

Based on our evaluation of the information provided in the petition and in our files, we have determined that the petition does not present substantial information to indicate that listing of the Drummond mountainsnail may be warranted due to the present or threatened destruction, modification, or curtailment of its habitat or range resulting from logging, highway construction, roadside spraying, or grazing.

#### *Oreohelix amariradix* (Bitterroot Mountainsnail)

The Bitterroot mountainsnail is a local endemic with at least two known occurrences in the Lolo Creek drainage in Missoula County, Montana. There appears to be inconsistency in population and location information.

Errors in locations and species identification (confusion with other *Oreohelix* species) cited in previous reports bring into question range, threat, and population trend information (Hendricks 2003a, pp. 21–22). According to Frest and Johannes (1995, p. 105), the species is possibly declining based on absolute numbers, number of known and potential sites, and known habitat loss; however, this information is speculative due to past misidentifications.

**Factor A:** According to the NatureServe database, much of the Bitterroot Mountains have been logged, followed by intensified grazing. Roadside spraying for weed control could affect the species. Portions of the Lolo Pass and lower Lolo Creek area were subject to fires in 1991 and 1993. Highway improvements resulted in removal of extensive portions of the taluses in the Lolo Creek drainage. However, no evidence exists to indicate that any of these activities currently pose a threat to any of the known populations.

**Factors B, C, D, and E:** No information was presented in the petition concerning threats to this species from the factors.

Based on our evaluation of the information provided in the petition and in our files, we have determined that the petition does not present substantial information to indicate that listing of the Bitterroot mountainsnail may be warranted due to the present or threatened destruction, modification, or curtailment of its habitat or range resulting from logging, grazing, roadside spraying, fires, or highway improvements.

#### *Oreohelix carinifera* (Keeled Mountainsnail)

The keeled mountainsnail persists in a portion of its type locality (area where the species was first found and that is used to define the species' habitat). Four known sites exist near the Clark Fork River in Powell County, Montana, including a portion of the type locality. The species has been extirpated over parts of its range (Frest and Johannes 1995, p. 105), although shell remains can still be found, suggesting recent population declines (Frest and Johannes 1995, p. 106). Limited survey information or effort exists. No published estimates of population size or relative abundance exist.

**Factor A:** The type locality has been reduced by highway and urban encroachment due to the expansion of the City of Garrison, and additional threats cited as potentially affecting the species include grazing, logging, and

road construction and maintenance (Frest and Johannes 1995, pp. 105–106; Hendricks 2003a, p. 26). However, no evidence exists to indicate that any of these activities currently pose a threat to any of the known populations or may do so in the future.

**Factors B, C, and D:** No information was presented in the petition concerning threats to this species from the factors.

**Factor E:** Factor A threats could be exacerbated by recent drought. The species' occupied and potential habitat and the type locality colony have been reduced (Frest and Johannes 1995, pp. 105–106; Hendricks 2003a, p. 26). However, neither NatureServe nor the petition presented any information indicating that this is a threat.

Based on our evaluation of the information provided in the petition and in our files, we have determined that the petition does not present substantial information to indicate that listing of the keeled mountainsnail may be warranted due to the present or threatened destruction, modification, or curtailment of its habitat or range resulting from highway and urban encroachment, grazing, logging, or road construction; or other natural or manmade factors affecting its continued existence.

#### **Species for Which Substantial Information Was Presented**

##### *Abronia ammophila* (Yellowstone Sand Verbena)

*Abronia ammophila* is endemic to Yellowstone National Park (Fertig 2000a, p. 1; Whipple 2002, p. 257). The one known population consists of three locations along Yellowstone Lake (Fertig 2000a, p. 1). Habitat for this species consists of open, sandy, and sparsely vegetated shorelines, with the habitat likely maintained by wave action or erosion (Fertig 2000a, p. 1; Whipple 2002, p. 256). In 1998, the total population was conservatively estimated at 8,325 plants, with 96 percent of them in 1 location (Fertig 2000a, p. 2). Trend data are lacking (Fertig 1997, unpubl. data), but the plant has been extirpated from at least one other known location as a result of human trampling associated with recreation (Fertig 1996, unpubl. data).

**Factor A:** Yellowstone Lake is a high-use recreational area. Human impacts to the sandy habitats may pose a threat to the species (Whipple 2002, p. 267).

**Factors B, C, and D:** No information was presented in the petition concerning threats to this species from the factors.

**Factor E:** The references within the NatureServe database indicated that habitat disturbance caused by stochastic events, exacerbated by small population sizes and a restricted range, may be a threat to the species (Fertig 2000a, p. 1; Whipple 2002, p. 260).

Based on our evaluation of the information provided in the petition and in our files, we have determined that the petition presents substantial information to indicate that listing of *Abronia ammophila* may be warranted due to the present or threatened destruction, modification, or curtailment of its habitat or range resulting from recreational impacts. The possible threats to the species may be exacerbated by its small population size and a restricted range.

##### *Agrostis rossiae* (Ross' bentgrass)

*Agrostis rossiae* is endemic to the Upper Geyser Basin of Yellowstone National Park (Dorn 1980, p. 59; Clark *et al.* 1989, p. 8), where four known populations exist (Fertig *et al.* 1994, unpaginated). The species occurs in warm soils around hot springs and geysers (Fertig *et al.* 1994, unpaginated; Fertig 2000b, p. 2). In 1995, the total population was estimated at 5,000 to 7,500 individuals (Fertig 2000b, p. 2). However, the ephemeral nature of the thermal habitats occupied by this species may result in rapid population fluctuation, making estimates difficult (Fertig 2000b, p. 2).

**Factor A:** Park visitor activity, through trampling, is cited as a threat to the species (Fertig 2000b, p. 2). In addition, invasion of *Agrostis scabra* (rough bentgrass), which may be facilitated by park visitors, may be reducing the distribution of the species through displacement (Fertig 2000b, p. 2).

**Factors B, C, and D:** No information was presented in the petition concerning threats to this species from the factors.

**Factor E:** The changing thermal activity in occupied areas may affect habitat suitability for the species; one colony in Midway Geyser Basin was extirpated in the 1980s, likely due to a change in soil temperature resulting from a change in geyser activity (Fertig 2000b, p. 2). Small population sizes within a very restricted range make *A. rossiae* vulnerable to stochastic extinction events (Dorn 1980, p. 59).

Based on our evaluation of the information provided in the petition and in our files, we have determined that the petition presents substantial information to indicate that listing of *Agrostis rossiae* may be warranted due to the present or threatened destruction, modification, or curtailment of its

habitat or range resulting from park visitation and competition from invasive species; and due to other natural or manmade factors affecting its continued existence resulting from thermal activity.

*Astragalus hamiltonii* (Hamilton milkvetch)

*Astragalus hamiltonii* is endemic to low-elevation clay soils in Colorado and Uintah County, Utah, where 10 element occurrences exist. Only one of these element occurrences exists in Colorado. Element occurrences are part of scientific methodology established by Natural Heritage programs, and are the spatial representation of a species population as documented through voucher specimens or other methods. Population estimates are 10,000 to 15,000 individuals (Colorado Natural Heritage Program 2008c, p. 1).

**Factor A:** Energy exploration and development are planned, and can impact the landscape where *Astragalus hamiltonii* exists (Neese and Smith 1982; Heil and Melton 1995; BLM 2008, pp. 4–239 to 4–245). Oil and gas geophysical exploration usually involves either drilling holes and detonating explosives, or using a vibrating pad that is driven across an area using heavy vehicles. The extent of impact from either exploration method is unknown, but the vibrations and potential soil impacts may impact habitat and any species in the area. Oil and gas development involves staging a drilling rig, setting up additional equipment, and building roads to access each site, which may fragment the species' habitat. Similarly, soil disturbance occurs in oil and gas fields and would impact the habitat that lies within the footprint of well pads and roads, and areas disturbed during the development of that infrastructure. Any soil that is moved may have a direct impact on *A. hamiltonii* individuals that are present. Once a rig is in place, the drilling process creates vibrations that may impact habitat and any plants in the area. Once a well has been drilled and is producing, energy companies make regular trips to well pads to monitor production, conduct maintenance, or collect extracted resources. These regular trips may disturb *A. hamiltonii* plants present at or near well pads and roads. The introduction and spread of nonnative plants may result from energy development activities, and this would negatively impact *A. hamiltonii*. Over 90 percent of the species' population is associated with surface mineable deposits of the Little Water, Spring Hollow, and Cow Wash Tar Sand

deposits (BLM 2008a, pp. 3–50, 3–174; Neese and Smith 1982; Heil and Melton 1995; BLM 2008, pp. 4–239 to 4–245). ORV use and nonnative plants are potential threats to the species (Heil and Melton 1995, p. 16).

**Factor B, C, D, and E:** No information was presented in the petition concerning threats to this species from the factors.

Based on our evaluation of the information provided in the petition and in our files, we have determined that the petition presents substantial information to indicate that listing of *Astragalus hamiltonii* may be warranted due to the present or threatened destruction, modification, or curtailment of its habitat or range resulting from energy exploration and development.

*Astragalus iselyi* (Isely milkvetch)

*Astragalus iselyi* is endemic to low-elevation clay soils in Grand and San Juan Counties in southeastern Utah. The species has a narrow range and a small population estimated at approximately 2,500 individuals.

**Factor A:** Uranium mining was once a threat, and uranium mining is again proposed for the area and is a potential threat to the existing population (Franklin 2003 pp. 1, 2, 35, 46). ORV use occurs within sites occupied by the species and is a potential threat (Hreha 1982, pp. 16–17; Franklin 2003, pp. 1, 2, 9, 37; Heil *et al.* 1991, p. 9; Thompson 1987, p. 3). The species' narrow range and small population size renders it vulnerable to any habitat disturbing activity (Franklin 2003, pp. 1, 2).

**Factors B, C, D, and E:** No information was presented in the petition concerning threats to this species from the factors.

Based on our evaluation of the information provided in the petition and in our files, we have determined that the petition presents substantial information to indicate that listing of *Astragalus iselyi* may be warranted due to the present or threatened destruction, modification, or curtailment of its habitat or range resulting from uranium mining and possibly ORV use within the occupied sites.

*Astragalus microcymbus* (Skiff milkvetch)

*Astragalus microcymbus* exists in 4 element occurrences within a range of about 24 kilometers (km) (15 miles (mi)) that includes an estimated 10,322 individuals (Colorado Natural Heritage Program 2008d, pp. 4–5). Its habitat is found mainly on Federal land in a BLM Area of Critical Environmental Concern, and in a Colorado Natural Area. A 1994

not-substantial finding on a petition to list this species indicated that drought and herbivory could not be clearly shown to present a substantial threat to the species.

However, four demographic monitoring plots show an overall decline in numbers. The decline occurred from 1995 to 2002, and then a relatively stable trend occurred from 2003 until 2007 (Denver Botanic Gardens 2007, p. 4). The cause of 1995 to 2002 decline is unknown but may have been due to herbivory (Denver Botanic Gardens 2007, p. 7).

**Factors A, C, and E:** A population viability analysis conducted in 2007 predicted a loss of all four monitored populations by 2030 (Denver Botanic Gardens, p. 7); the reasons for this predicted decline are undocumented, but potentially include lack of precipitation, herbivory (primarily from rabbits), and episodic fruit production (Denver Botanic Gardens, p. 7). ORV use occurs within occupied habitat and could negatively impact habitat of *A. microcymbus* (Colorado Natural Heritage Program 2008d, p. 3).

**Factors B and D:** No information was presented in the petition concerning threats to this species from the factors.

Based on our evaluation of the information provided in the petition and in our files, we have determined that the petition presents substantial information to indicate that listing of *Astragalus microcymbus* may be warranted due to the present or threatened destruction, modification, or curtailment of its habitat or range resulting from ORV use; or due to other natural or manmade factors affecting its continued existence resulting from drought.

*Astragalus proimanthus* (precocious milkvetch)

*Astragalus proimanthus* is restricted to the bluffs of the Henry's Fork River near McKinnon, Sweetwater County, Wyoming (Roberts 1977, p. 63; WYNDD 2001, p. 2). The species' global distribution is limited to less than 130 ha (320 ac) on BLM land (WYNDD 2001, pp. 2, 3). This milkvetch occurs in plant communities on rocky clay and shale soils along rims, bluffs, and rocky ridges (Fertig *et al.* 1994, unpaginated; WYNDD 2001, p. 2). In 2000, the entire population was estimated at 10,500 to 13,000 individuals, a reduction from estimates in the 1980s of 22,000 to 40,000 individuals (WYNDD 2001, p. 3); however, trend data are inconsistent between monitoring plots (WYNDD 2001, p. 3).

**Factor A:** Purported threats to this species include road construction, ORV

use, oil and gas exploration and development, garbage dumps, livestock grazing, and range improvement projects (WYNDD 2001, p. 3). While the impacts of these threats were not quantified, the species is located in an area incurring substantial energy development (Fertig and Welp 2001, p. 16). Impacts from energy development to *Astragla proimanthus* are the same as shown under Factor A analysis for *Astragalus hamiltonii* above; activities are the same and would have the same effect on each plant species. These threats exist within the habitat of *A. proimanthus*, and are acting on the species to some degree.

**Factors B, C, D, and E:** No information was presented in the petition concerning threats to this species from the factors.

Based on our evaluation of the information provided in the petition and in our files, we have determined that the petition presents substantial information to indicate that listing of *Astragalus proimanthus* may be warranted due to the present or threatened destruction, modification, or curtailment of its habitat or range resulting from energy exploration and development.

#### *Astragalus sabulosus* (Cisco milkvetch)

*Astragalus sabulosus* is a narrow endemic found in five locations in Grand County, Utah, that occur in a total area of approximately 320 ha (800 ac) (Atwood 1995, pp. 3, 4; Franklin 1988, p. 5). The species' population size is highly variable from year to year depending, presumably, on winter and spring precipitation. The total population is an estimated 25,000 individuals (Atwood 1995, pp. 5–6).

**Factor A:** Potential threats to the species include ORV use, oil and gas development, uranium mining, and natural gas development (Atwood 1995, pp. 7–9). Energy exploration and development and mining are planned in the population area, and can impact the landscape where the species exists (Atwood 1995, pp. 7–9). Impacts from energy development to *Astragla sabulosus* are the same as shown under Factor A analysis for *Astragalus hamiltonii* above; activities are the same and would have the same effect on each plant species. These threats exist within the habitat of *A. sabulosus*, and are acting on the species to some degree.

**Factors B, C, D, and E:** No information was presented in the petition concerning threats to this species from the factors.

Based on our evaluation of the information provided in the petition and in our files, we have determined

that the petition presents substantial information to indicate that listing of *Astragalus sabulosus* may be warranted due to the present or threatened destruction, modification, or curtailment of its habitat or range resulting from energy exploration and development.

#### *Astragalus schmollii* (Schmoll milkvetch)

*Astragalus schmollii* is known only from Chapin Mesa in Mesa Verde National Park (MVNP) and the Ute Mountain Ute Reservation in Montezuma County, Colorado. The 6 element occurrences include roughly 294,499 individuals, all of which are in MVNP (Colorado Natural Heritage Program 2008e, pp. 8–9). Populations are likely to occur on the Ute Mountain Ute Reservation, but no survey data exist from this location.

**Factor A:** A potential threat to the species is the invasion of nonnative species into burned areas it occupies. *Carduus nutans* (musk thistle) is particularly invasive in burned areas of southern MVNP, and has been observed invading areas occupied by *A. schmollii* (summarized in Anderson 2004, p. 61). *Bromus tectorum* (cheatgrass) also is invading occupied burned areas (Anderson 2004, pp. 60–61). The Chapin 5 fire in 1996, and the Long Mesa Fire in 2002, impacted a large portion of the occurrences in MVNP. Burning may not have significantly impacted plant mortality, but long-term impacts of fire, such as nonnative invasion, are likely to cause a decline in populations (Anderson 2004, pp. 60–61). Data on the species' response to nonnative invasions since 2006 are not readily available. Visitor impacts to the species within MVNP are localized and minimal, limited to trampling of an occasional plant growing adjacent to a trail or road (Anderson 2004, p. 72). Outside MVNP boundaries, threats from road construction and grazing may exist (O'Kane 1988, p. 444).

**Factors B, C, and D:** No information was presented in the petition concerning threats to this species from the factors.

**Factor E:** *A. schmollii* has declined 39 percent from 2001–2003; the decline was attributed to drought (Anderson 2004, p. 37 and Table 5).

Based on our evaluation of the information provided in the petition and in our files, we have determined that the petition presents substantial information to indicate that listing of *Astragalus schmollii* may be warranted due to the present or threatened destruction, modification, or

curtailment of its habitat or range resulting from impacts of fire and nonnative invasions, and possibly road construction and grazing; and due to other natural or manmade factors affecting its continued existence resulting from drought.

#### *Boechera* (formerly *Arabis*) *pusilla* (Fremont County rockcress)

*Boechera pusilla* is known from one location in the southern Wind River Range, Fremont County, Wyoming (Fertig 2000c; p. 1; Heidel 2005, p. 6). The genus was changed from *Arabis* to *Boechera* in 2002 (Heidel 2005, p. 1). Its habitat consists of crevices and sparsely vegetated granitic soils in granite-pegmatite outcrops, at an elevation of 2,438 to 2,469 meters (8,000 to 8,100 feet) (Fertig 2000c, p. 1; Heidel 2005, pp. 8–9). Population estimates have varied from 800 to 1,000 individuals in 1988, to 600 in 1990, to 100 to 150 plants in 2003 (Heidel 2005, p. 14). Occupied habitat is limited to 2.4 to 6.5 ha (6 to 16 ac) (Dorn 1990, p. 8; Heidel 2005, p. 15), entirely on BLM land. The Service previously identified *B. pusilla* as a candidate species for listing as endangered in 1992 due to small population numbers, restricted range, recreational activities, and existence of six mining claims within the species' habitats. Due to conservation measures implemented by the BLM, *B. pusilla* was withdrawn from candidate status in 1999. It is currently unclear whether conservation measures are adequate to protect the species.

**Factor A:** ORV use occurs in the habitat of this species, and is likely affecting the species to some extent (Dorn 1990, p. 11; Fertig 2000c, p. 2; Heidel 2005, p. 17). Mining historically occurred in the area, but it is not clear if mining directly affected this species (Heidel 2005, p. 17).

**Factors B, C, D, and E:** No information was presented in the petition concerning threats to this species from the factors.

Based on our evaluation of the information provided in the petition and in our files, we have determined that the petition presents substantial information to indicate that listing of *Boechera pusilla* may be warranted due to the present or threatened destruction, modification, or curtailment of its habitat or range resulting from ORV use.

#### *Catinella gelida* (Frigid ambersnail)

The Frigid ambersnail is known from 14 sites in Iowa (Frest 1991, p. 17), 12 sites in the Black Hills of South Dakota (Frest and Johannes 2002, p. 74), and 19 sites in Wisconsin (Nekola, 2003, p. 8). According to the NatureServe database,

the species is possibly extirpated in Missouri, Michigan, Indiana, Ohio, and Mississippi, and is presumed extirpated in Kentucky. The Frigid ambersnail could be a difficult species to sample because it is present in low densities, and is typically located 3 to 15 centimeters (1 to 6 inches) beneath the talus field surface (Frest 1991, p. 16). While information presented in the petition was not substantial, we have sufficient information in our files indicating that threats are impacting the Frigid ambersnail (Ostlie 2009, pp. 49 and 50). As such, we have already initiated a status review on several mollusk species, including this one.

*Factor A:* The species may be found near roads, although this could be an artifact of survey bias, and in areas subject to livestock grazing and logging disturbances (Frest and Johannes 1993, p. 53; Frest and Johannes 2002, p. 73). Populations are small at all Iowa sites making the species more vulnerable to current threats of human and livestock trampling, and landslides (Frest 1991, p. 16; Frest and Johannes 1993, p. 53; Frest and Johannes 2002, p. 73). Wisconsin sites could be disturbed by development in the future (Nekola 2003, p. 21), but this threat is currently unsubstantiated. Known South Dakota sites are located near highways and roads, and most are subject to livestock trampling and effects of timber harvest (Frest and Johannes 2002, p. 73).

*Factors B, C, D, and E:* No information was presented in the petition concerning threats to this species from the factors.

The petition did not present substantial information regarding the presence of the threats identified above. However, our files contain substantial information indicating that the petitioned action may be warranted. Generally, land snail individuals and colonies are vulnerable to land-use activities due to their small body size and specific habitat requirements. The species is State-listed as endangered in Iowa, and as a Species of Special Concern in Wisconsin. Based on our identification of likely threats, and indications that they are likely impacting the species to some degree, we have determined that substantial information exists to indicate that listing of Frigid ambersnail may be warranted due to the present or threatened destruction, modification, or curtailment of its habitat or range resulting from the effects from roads, livestock trampling, and logging disturbances.

*Corispermum navicula* (boat-shaped bugseed)

According to the NatureServe database, the taxonomy of *Corispermum navicula* is currently being questioned. The only two element occurrences are recorded in Jackson County, Colorado, and include an unknown number of plants on two active sand dune complexes covering about 15.5 km<sup>2</sup> (6 mi<sup>2</sup>); total occupied habitat is about 173 ha (427 ac) (Colorado Natural Heritage Program 2008f, p. 12).

*Factor A:* Heavy ORV use is allowed on one of the two dune complexes, and has negatively impacted the species by disturbing the habitat and destroying plants (Colorado Natural Heritage Program 2008f, p. 12).

*Factors B, C, D, and E:* No information was presented in the petition concerning threats to this species from the factors.

Based on our evaluation of the information provided in the petition and in our files, we have determined that the petition presents substantial information to indicate that listing of *Corispermum navicula* may be warranted due to the present or threatened destruction, modification, or curtailment of its habitat or range resulting from ORV use.

*Cryptantha semiglabra* (Pipe Springs cryptantha)

*Cryptantha semiglabra* is endemic to clay soils in Washington County, Utah, and Coconino and Mohave Counties, Arizona. No population data are currently available.

*Factor A:* According to the NatureServe database, all populations of this species exist within 11 km (7 mi) of Fredonia, Arizona, which is undergoing expansion. As a result, *C. semiglabra* may be facing threats resulting from development, but this potential threat has not been adequately identified by any source. The habitat of the species is subject to disturbance from garbage dumping, ORV use, and trampling (AGFD 2004, p. 3). No information was available concerning the status of this species in Utah.

*Factors B, C, D, and E:* No information was presented in the petition concerning threats to this species from the factors.

Based on our evaluation of the information provided in the petition and in our files, we have determined that the petition presents substantial information to indicate that listing of *Cryptantha semiglabra* may be warranted due to the present or threatened destruction, modification, or curtailment of its habitat or range

resulting from livestock grazing and ORV use.

*Draba weberi* (Weber whitlowgrass)

One occurrence of *Draba weberi* was recorded in 1969, in Summit County, Colorado, and this remains the only known location. The number of plants appears to have diminished from about 100 to 20 or 30 between the 1980s and 2006 (Decker 2006, p. 3).

*Factor A:* The plants are found in shallow rock crevices easily accessed from a parking lot that is a popular point of access for climbers, hikers, and backcountry skiers (Decker 2006, p. 20); this level of recreational activity is likely to result in trampling. The population depends on water flowing from an outflow pipe below a dam that enters a relatively natural creek bed; under most circumstances, water flows from the outlet pipe into the stream channel (Decker 2006, p. 20). A municipal water company owns the property; road and dam construction and maintenance are potential threats to the species (Decker 2006, p. 7).

*Factors B and C:* No information was presented in the petition concerning threats to this species from the factors.

*Factor D:* The dam property owners are aware of the plants and have no plans that would affect the habitat, but no conservation plans or agreements have been developed; therefore, the water flowing to the creek bed is not reliable (Decker 2006, pp. 7, 20).

*Factor E:* No information was presented in the petition concerning threats to this species from the factor.

Based on our evaluation of the information provided in the petition and in our files, we have determined that the petition presents substantial information to indicate that listing of *Draba weberi* may be warranted due to the present or threatened destruction, modification, or curtailment of its habitat or range resulting from recreational activities, and possibly activities related to road construction and dam maintenance.

*Eriogonum brandegeei* (Brandegee's wild buckwheat)

Eight occurrences of *Eriogonum brandegeei* are currently considered extant, with an additional three considered historical because they have not been seen in over 20 years (Colorado Natural Heritage Program 2008g, p. 15). The habitat consists of barren outcrops of white to grayish bentonite soils in Fremont and Chaffee Counties, Colorado. The 6 occurrences for which we have plant estimates total 33,465 individuals (Colorado Natural Heritage Program 2008g, p. 15), but some

observer estimates have placed this number much higher, up to several million plants (Anderson 2006, pp. 3, 11). The species was made a candidate in 1993, but removed from candidate status in 1996 (61 FR 7460) as a result of additional information collected from survey work (Anderson 2006, p. 11). A conservation assessment was completed for the species in 2006 by the Colorado Natural Heritage Program (Anderson 2006, entire). Population estimates in the millions are noted in the conservation assessment, and in our removal of the species from candidate status, but we lack survey documentation of these higher population estimates.

**Factor A:** ORV and other recreational uses threaten some occurrences of *Eriogonum brandegeei*, and curtailment of these activities in plant occurrences would likely provide the greatest conservation benefit to the species (Anderson 2006, p. 3). Residential and commercial development has encroached on one of the healthiest occurrences, and could affect most of the species' range in the future; road construction related to increased development creates an additional threat to its habitat (Anderson 2006, p. 37). According to the NatureServe database, timber thinning and extraction is expected to cause direct mortality of plants, erosion, and invasion of nonnative plants; mining and oil and gas development are potential activities in this area, but the possible effects have not been assessed; bentonite mining resulted in habitat destruction in the past, but is not occurring now. Protection of plants is not considered prior to right-of-way maintenance because rights-of-way are outside the area assessed for project work; however, this activity affects a small portion of the total population (Anderson 2006, p. 39). Grazing is a small threat, and invasive nonnative species pose a high but undocumented threat (Anderson 2006, p. 39).

**Factors B and C:** No information was presented in the petition concerning threats to this species from the factor.

**Factor D:** Four of the eight occurrences are partially within two BLM Areas of Critical Environmental Concern that also are State Natural Areas. Neither the petition nor NatureServe present any information concerning the adequacy of these designations as a regulatory mechanism. Some ORV route restrictions apply in these areas, but no restrictions apply to the remaining habitat, and therefore ORV use poses a potential threat to the species and its habitat.

**Factor E:** No information was presented in the petition concerning threats to this species from the factor.

Based on our evaluation of the information provided in the petition and in our files, we have determined that the petition presents substantial information to indicate that listing of *Eriogonum brandegeei* may be warranted due to the present or threatened destruction, modification, or curtailment of its habitat or range resulting from recreational activities, ORV use, development, and road construction; and due to the inadequacy of existing regulatory mechanisms related to ORV use.

*Eriogonum soredium* (Frisco buckwheat)

*Eriogonum soredium* is a narrow endemic with small populations (Evenden 1998, p. 5). The three element occurrences are restricted to limestone outcrops on Grampian Hill in Beaver County, Utah (Evenden 1998, appendix C). Estimates of the area of occupied habitat of the species range from 70 ha (170 ac) (Evenden 1998, appendix C) to 160 ha (400 ac) (Kass 1992, pp. 7–8). Estimates of the species' total population are 2,000 individuals (Kass 1992, p. 8) to approximately 30,000 individuals (Evenden 1998, appendix C). These numbers are only estimates because approximately 90 percent of the species' habitat is on private land, and access to these areas to survey for the plant is limited.

**Factor A:** Mineralized limestone substrates that sustain the species were subject to habitat destruction from precious metals mining. Over 90 percent of the species' habitat is located on lands having private, patented mining claims (Evenden 1998 p. 9; Kass 1992, p. 9). This high-value substrate on private lands to which we have no access is likely to be impacted by continued mining, and the future of *E. soredium* on those lands is tenuous. A small portion of the species' habitat may exist on adjacent BLM land; however, we currently have no information on the number of individuals or the magnitude of threats to the species on that land.

**Factors B, C, D, and E:** No information was presented in the petition concerning threats to this species from the factors.

Based on our evaluation of the information provided in the petition and in our files, we have determined that the petition presents substantial information to indicate that listing of *Eriogonum soredium* may be warranted due to the present or threatened destruction, modification, or curtailment of its habitat or range resulting from mining activities.

*Ironoquia plattensis* (Platte River caddisfly)

The Platte River caddisfly is endemic to an approximately 75-km (46-mi) segment of the central Platte River that extends from approximately Gibbon, Buffalo, and Kearney Counties, Nebraska, to Central City, Merrick County, Nebraska, comprising approximately 63,940 ha (158,000 ac) (Goldowitz 2004, p. 4). One population has likely been lost (Reins and Hoback 2008, p. 1). The species inhabits intermittent wetland habitats that are associated with the central Platte River. Intermittent wetland hydrology is affected by precipitation, periodic flooding, and groundwater levels as influenced by the nearby Platte River. Intermittent wetlands used by the Platte River caddisfly may contain water 75 to 90 percent of the time, but can typically go dry during the summer (Goldowitz 2004, p. 2), and completely freeze over during the winter (Alexander and Whiles 2000, p. 2).

**Factor A:** Hydrologic regimes, which are increasingly altered by regulation of the Platte River for hydroelectric and agricultural purposes, influence the hydroperiod in intermittent wetlands and, therefore, the abundance and distribution of the Platte River caddisfly and other macroinvertebrates that rely on this habitat (Goldowitz 2004, p. 2). For example, construction of impoundments, dewatering the Platte River for irrigation, installation of new irrigation wells in the floodplain, land restoration and management projects, and channel modification pose threats to the longevity of intermittent wetland habitat utilized by the Platte River caddisfly (Goldowitz 2004, p. 2). An increase in row crop agriculture or vegetation control can increase nutrient, toxic, and pesticide runoff that could have direct or cumulative effects on the species; heavy grazing pressure in wetland and grassland habitats can result in removal and degradation of wetland habitats critical for larval development (Goldowitz 2004, p. 9).

**Factors B, C, D, and E:** No information was presented in the petition concerning threats to this species from the factors.

Based on our evaluation of the information provided in the petition and in our files, we have determined that the petition presents substantial information to indicate that listing of Platte River caddisfly may be warranted due to the present or threatened destruction, modification, or curtailment of its habitat or range resulting from construction of impoundments, dewatering the Platte

River for irrigation, installation of new irrigation wells in the floodplain, land restoration and management projects, and channel modification.

*Lednia tumana (meltwater lednian stonefly)*

The meltwater lednian stonefly is a narrow endemic found in two known occurrences, both in Glacier National Park in Montana. No information exists to indicate that the species exists in other locations. The species is associated with glacier melt-water streams. An extensive survey in 1979 did not result in any additional occurrences (Baumann and Stewart 1980, p. 658). A 1980 survey showed moderate abundance (Baumann and Stewart 1980, p. 658); no more refined quantification occurred and no further information has been available.

**Factors A and E:** Climate-change-related ecosystem modeling predicts the loss of glaciers in Glacier National Park by 2030 (Hall and Fagre 2003, p. 138). This loss of glaciers could result in the loss or significant reduction of glacier melt-water streams, resulting in reduced habitat for the meltwater lednian stonefly. Glacier melt provides water and temperature moderation in high altitude streams.

**Factors B, C, and D:** No information was presented in the petition concerning threats to this species from the factors.

Based on our evaluation of the information provided in the petition and in our files, we have determined that the petition presents substantial information to indicate that listing of meltwater lednian stonefly may be warranted due to other natural or manmade factors affecting its continued existence resulting from climate-change-induced glacier loss.

*Lepidium ostleri (Ostler's peppergrass)*

*Lepidium ostleri* is a narrow endemic with small populations (Evenden 1998, p. 5). The four element occurrences are restricted to limestone outcrops on Grampian Hill in Beaver County, Utah (Evenden 1998, appendix C). Estimates of occupied habitat within the species' range are 80 ha (200 ac) (Evenden 1998, appendix C) to 160 ha (400 ac) (Kass 1992b, p. 7). Estimates of the species' total population are 700 individuals (Kass 1992b, p. 8) to approximately 10,000 individuals (Evenden 1998, appendix C). These numbers are only estimates because approximately 90 percent of the species' habitat is on private land, and access to these areas to survey for the plant is limited. Population estimates from Evenden and Kass are more than a decade old, and no

verification of their survey results has been made.

**Factor A:** Mineralized limestone substrates that sustain the species were subject to habitat destruction from precious metals mining. Over 90 percent of the species' habitat is located on lands having private, patented mining claims (Evenden 1998 p. 9; Kass 1992, p. 9). This high-value substrate on private lands to which we have no access is likely to be impacted by continued mining, and the future of *L. ostleri* on those lands is tenuous. A small portion of the species' habitat may exist on adjacent BLM land; however, we currently have no information on the number of individuals or the magnitude of threats to the species on that land.

**Factors B, C, D, and E:** No information was presented in the petition concerning threats to this species from the factors.

Based on our evaluation of the information provided in the petition and in our files, we have determined that the petition presents substantial information to indicate that listing of *Lepidium ostleri* may be warranted due to the present or threatened destruction, modification, or curtailment of its habitat or range resulting from mining activities.

*Lepidomeda copei (northern leatherside chub)*

The northern leatherside chub's historical range encompassed the northeastern margins of the Bonneville Basin in Utah, Idaho, and Wyoming; the Pacific Basin, Goose Creek, Wood and Raft Rivers in Idaho and Nevada; and the Snake River above Shoshone Falls in Idaho and Wyoming (UDWR 2009, p. 28). The current range includes fragmented populations in the Bear River drainage, the Snake River drainage, and introduced populations in the Colorado River Basin, including the Fremont River, Pleasant Creek, Dirty Devil River, and Quitcupah Creek in Utah (UDWR 2009, p. 29). Some taxonomic uncertainty exists; two evolutionarily distinct species of leatherside chub have recently been recognized (Johnson *et al.* 2004, pp. 841–855; Belk *et al.* 2005, p. 182). This taxon was formerly considered to be conspecific with the southern leatherside chub, and to be in the genus *Gila* (as cited in IDFG 2005, Appendix F, p. 25). A Conservation Agreement and Strategy on the species in its current range has recently been finalized by a coalition of Federal and State agencies, and nongovernmental organizations; a technical team is assessing issues related to the northern leatherside chub (UDWR 2009, entire).

**Factor A:** According to the NatureServe database, potential threats to the species include habitat degradation, fragmentation, and loss from water developments (*e.g.*, irrigation projects, dewatering); stream alterations (*e.g.*, channelization, barriers); siltation; grazing; and nonnative brown trout. The conservation agreement further describes these threats; surveys indicate that the species is declining due to fragmentation from human-caused activities, including water diversions, nonnative species, and grazing (IDFG 2005, p. 5; Appendix F, p. 26).

**Factors B, C, D, and E:** No information was presented in the petition concerning threats to this species from the factors.

Based on our evaluation of the information provided in the petition and in our files, we have determined that the petition presents substantial information to indicate that listing of northern leatherside chub may be warranted due to the present or threatened destruction, modification, or curtailment of its habitat or range resulting from water developments, stream alterations, livestock trampling, and nonnative brown trout.

*Lesquerella navajoensis (no common name)*

*Lesquerella navajoensis* is endemic to Todilto limestone outcrops in Kane County, Utah; Apache County, Arizona; and McKinley County, New Mexico. Little is known about populations or distribution of this species beyond the two known occurrences.

**Factor A:** According to the NatureServe database, mining is considered a threat to the species, outcrops of Todilto limestone are not abundant in the area, and are actively mined in New Mexico for road base material. Habitat at one of the two known population sites in New Mexico has been quarried, and the species exists there only on a narrow remnant of the mesa rim (New Mexico Rare Plant Technical Council 1999, Web site). No information on this species in Utah or Arizona was available.

**Factors B, C, D, and E:** No information was presented in the petition concerning threats to this species from the factors.

Based on our evaluation of the information provided in the petition and in our files, we have determined that the petition presents substantial information to indicate that listing of *Lesquerella navajoensis* may be warranted due to the present or threatened destruction, modification, or

curtailment of its habitat or range resulting from mining.

*Oreohelix sp. 3 (bearmouth mountainsnail)*

The bearmouth mountainsnail is a local endemic with one small site known in Granite and Powell Counties, Montana (Frest and Johannes 1995, p. 115). The NatureServe database indicates that the species has been in decline in absolute numbers and number of sites, potentially due to human activities (Frest and Johannes 1995, p. 115); however, no population numbers were cited, and further information has not been available since 1995.

**Factor A:** According to the NatureServe database, potential threats to the species' habitat include talus disturbance, and construction and maintenance of highways. Effects from highways and associated frontage roads have impacted known sites (Frest and Johannes 1995, p. 115). Grazing has been cited as a potential threat (Frest and Johannes 1995, p. 115); however, the species exists in rocky habitat not suited to livestock grazing.

**Factors B, C, D, and E:** No information was presented in the petition concerning threats to this species from the factors.

Based on our evaluation of the information provided in the petition and in our files, we have determined that the petition presents substantial information to indicate that listing of bearmouth mountainsnail may be warranted due to the present or threatened destruction, modification, or curtailment of its habitat or range resulting from highways and associated activities.

*Oreohelix sp. 31 (Byrne Resort mountainsnail)*

The Byrne Resort mountainsnail is a local endemic known only in one site in the Clark Fork River Valley in Granite County, Montana. Additional occurrences may exist on neighboring national forest land, but survey information is not available. Based on survey data, previously known sites have been extirpated, and a decline of populations and absolute numbers has occurred (Frest and Johannes 1995, p. 140).

**Factor A:** The species occurs at the base of talus sites that are subject to removal for road construction and fill. Effects from highways and associated frontage roads have impacted known occurrence sites, resulting in extirpation at some sites (Frest and Johannes 1995, p. 140). According to the NatureServe database, extensive alteration of the area

has occurred from recreational resort activities, grazing, and highway construction; however, uncertainty exists as to whether the species has been directly affected by recreational activities and grazing.

**Factors B, C, D, and E:** No information was presented in the petition concerning threats to this species from the factors.

Based on our evaluation of the information provided in the petition and in our files, we have determined that the petition presents substantial information to indicate that listing of Byrne Resort mountainsnail may be warranted due to the present or threatened destruction, modification, or curtailment of its habitat or range resulting from road construction.

*Penstemon flowersii (flowers penstemon)*

*Penstemon flowersii* is endemic to fine soils derived from the Uinta Formation at low elevations in the Uinta Basin in Duchesne and Uintah Counties, Utah. Little is known about this species. It is a narrow endemic, and all known habitat is on private and Ute Tribe lands (Heil and Melton 1995, pp. 8–10). Heil and Melton (1995, p. 13) estimate the species population at 15,000 to 20,000 individuals.

**Factor A:** The species is impacted by ORV use (Heil and Melton 1995, p. 15). Energy exploration and development are planned in the landscape where *Penstemon flowersii* exists (Heil and Melton 1995, pp. 15–16). Impacts from energy development to *A. flowersii* are the same as shown under Factor A analysis for *Astragalus hamiltonii* above; activities are the same and would have the same effect on each plant species. These threats exist within the habitat of *P. flowersii*, and are acting on the species to some degree.

**Factors B, C, D, and E:** No information was presented in the petition concerning threats to this species from the factors.

Based on our evaluation of the information provided in the petition and in our files, we have determined that the petition presents substantial information to indicate that listing of *Penstemon flowersii* may be warranted due to the present or threatened destruction, modification, or curtailment of its habitat or range resulting from ORV use and energy exploration and development.

*Penstemon gibbensii (Gibben's beardtongue)*

*Penstemon gibbensii* is endemic to south-central Wyoming and adjacent northeastern Utah, and northwestern

Colorado (Fertig 2000d, p. 2). Most of the species' known range exists in Wyoming, in Sweetwater and Carbon Counties, and encompasses approximately 40 ha (100 ac) (Fertig 2000d, p. 2). Habitat for this species is primarily sparsely vegetated shale or sandstone slopes (Fertig *et al.* 1994, unpaginated; Fertig and Neighbors 1996, p. 109), associated with the Browns Park Formation and Green River shale (Fertig 2000d, p. 2). In Wyoming, four populations are known (Fertig 2000d, p. 2). Only one known population has been identified in Colorado, in Brown's Park; this population extends into Daggett County, Utah (Fertig and Neighbors 1996, p. 6). In 1995, 3 of the Wyoming populations were estimated to have a total population of 8,600 to 8,900 plants, and a 1999 survey of the fourth Wyoming population resulted in an estimated 4,500 to 5,000 plants (Fertig 2000d, p. 2). Long-term trend data are lacking (Fertig 2000d, p. 2). *P. gibbensii* was formerly designated as a C2 candidate species for listing. The C2 designation was used for species for which there was evidence of vulnerability, but for which the Service lacked sufficient biological data to support a listing proposal. In 1996, the Service ceased using the C2 designation (61 FR 64481; December 5, 1996).

**Factor A:** Potential threats to the species include habitat loss and degradation resulting from land uses that cause soil erosion, particularly grazing, mineral development (primarily oil and gas exploration), and recreation (Fertig and Neighbors 1996, pp. 19–20; Fertig 2000d, p. 3). Grazing is the primary threat to the species (WYNDD 2000, p. 27). ORV use affects the species; although it may colonize disturbed areas at the margins, it cannot become established where direct vehicle use occurs (WYNDD 2000, p. 28). Oil and gas development has increased greatly in the species' habitat in recent years (WYNDD 2000, p. 27). The magnitude of effects from energy development is unknown, because the species tends to occur on slopes that are too unstable to support oil drilling platforms (Fertig and Neighbors 1996, p. 20).

**Factors B, C, and D:** No information was presented in the petition concerning threats to this species from the factors.

**Factor E:** According to the references contained in NatureServe, drought may be a threat to the species (WYNDD 2000, pp. 3, 28).

Based on our evaluation of the information provided in the petition and in our files, we have determined that the petition presents substantial

information to indicate that listing of *Penstemon gibbensii* may be warranted due to the present or threatened destruction, modification, or curtailment of its habitat or range resulting from energy exploration and development, livestock grazing, and ORV use.

*Pyrgulopsis anguina (longitudinal gland pyrg)*

The longitudinal gland pyrg is a freshwater snail endemic to Snake Valley, a large valley that straddles the Nevada-Utah border (Hershler 1998, p. 110). This species is known from spring systems in White Pine County, Nevada, and Millard County, Utah (Hershler 1998, p. 111; Bio-West 2007, pp. 86–87).

**Factors A and E:** Bio-West (2007, p. 91) characterized disturbances at species' sites (spring diversion, domestic livestock grazing, impacts from roads and residences, drought) as moderate to high in 2007. Additional potential threats include agricultural development (State of Utah 2007, p. 88) and habitat changes (e.g., reduction in spring discharge) that may result from climate change or groundwater withdrawal by the Southern Nevada Water Authority in Snake and Spring Valleys (Congdon 2006, pp. 3, 15; Elliot *et al.* 2006, pp. 44, 157).

**Factors B, C, and D:** No information was presented in the petition concerning threats to this species from the factors.

Based on our evaluation of the information provided in the petition and in our files, we have determined that the petition presents substantial information to indicate that listing of longitudinal gland pyrg may be warranted due to the present or threatened destruction, modification, or curtailment of its habitat or range resulting from spring diversions, livestock trampling, roads, and development; and due to other natural or manmade factors affecting its continued existence resulting from drought and effects of climate change.

*Pyrgulopsis hamlinensis (Hamlin Valley pyrg)*

The Hamlin Valley pyrg is a freshwater snail that is a narrow endemic found in only one location in Beaver County, Utah.

**Factors A and E:** Hershler (1998, p. 105) characterized disturbances at springs inhabited by freshwater snails throughout the region, including Hamlin Valley pyrg, as including spring diversion, domestic livestock grazing, impacts from roads and residences, and drought. Additional potential threats include agricultural development (State

of Utah 2007, p. 88) and habitat changes (e.g., reduction in spring discharge) that may result from climate change or groundwater contamination from several sources, including water filings by the Central Iron County Water Conservancy District in Utah, and Southern Nevada Water Authority projects in the Snake and Spring Valleys (Congdon 2006, pp. 3, 15; Elliot *et al.* 2006, pp. 44, 157). These threats exist within the habitat of the Hamlin Valley pyrg, and are acting on the species to some degree.

**Factors B, C, and D:** No information was presented in the petition concerning threats to this species from the factors.

Based on our evaluation of the information provided in the petition and in our files, we have determined that the petition presents substantial information to indicate that listing of Hamlin Valley pyrg may be warranted due to the present or threatened destruction, modification, or curtailment of its habitat or range resulting from spring diversions, livestock trampling, roads, and development; and due to other natural or manmade factors affecting its continued existence resulting from drought and effects of climate change.

*Pyrgulopsis saxatilis (sub-globose snake pyrg)*

The sub-globose snake pyrg is a freshwater snail that is a narrow endemic known from one spring in Millard County, Utah.

**Factors A and E:** Hershler (1998, p. 105) characterized disturbances at springs inhabited by freshwater snails throughout the region, including the sub-globose snake pyrg, as including spring diversion, domestic livestock grazing, impacts from roads and residences, and drought. Additional potential threats include agricultural development (State of Utah 2007, p. 88), the presence of the invasive mollusk *Melanoides*, and habitat changes (e.g., reduction in spring discharge) that may result from climate change or groundwater contamination from several sources, including water filings by the Central Iron County water Conservancy District in Utah, and Southern Nevada Water Authority projects in the Snake and Spring Valleys (Congdon 2006, pp. 3, 15; Elliot *et al.* 2006, pp. 44, 157). These threats exist within the habitat of the sub-globose snake pyrg, and are acting on the species to some degree.

**Factors B, C, and D:** No information was presented in the petition concerning threats to this species from the factors.

Based on our evaluation of the information provided in the petition and in our files, we have determined that the petition presents substantial information to indicate that listing of sub-globose snake pyrg may be warranted due to the present or threatened destruction, modification, or curtailment of its habitat or range resulting from spring diversions, livestock trampling, roads, and development; and due to other natural or manmade factors affecting its continued existence resulting from drought and effects of climate change.

*Sisyrinchium sarmentosum (Pale blue-eyed grass)*

*Sisyrinchium sarmentosum* is a narrow endemic that exists in Klickitat and Skamania Counties in southcentral Washington, and Clackamas County in northern Oregon. Records of this plant existing in North Dakota are suspect, and likely inaccurate. According to the NatureServe database, the species is currently known from about 18 occurrences, and the total number of individuals is thought to be 5,000 to 7,000. The species is listed as threatened by Washington State (WNHP 2009, Web site). Insufficient historical data exist to determine an overall trend in species abundance and distribution.

**Factor A:** According to the NatureServe database, the species has shown some ability to withstand disturbance, but development and agricultural activities have limited the amount of suitable habitat. The smaller occurrences are probably threatened by plant succession leading to canopy closure (Thomas 2009, pers. comm.). Some degree of threat may be posed by ORV use of the meadows where the species occurs (Thomas 2009, pers. comm.).

**Factor B:** No information was presented in the petition concerning threats to this species from the factor.

**Factor C:** Grazing directly impacts the plant's ability to reproduce by seed and, therefore, to broaden its genetic variability by reproduction through cross-pollination with other plants (Thomas 2009, pers. comm.). When seeds are consumed by grazing animals, the plant shifts its reproductive strategy to vegetative reproduction. Vegetative reproduction narrows the genetic makeup of plants, and the species does not benefit from cross pollination with other neighboring plants.

**Factor D:** No information was presented in the petition concerning threats to this species from the factor.

**Factor E:** The species is threatened by a genetic bottleneck and reduction in genetic flow, leading to reduced genetic

variation (Thomas 2009, pers. comm.). Because of the reduction in genetic exchange it faces in the wild, the species is less capable of withstanding other environmental stressors like drought, or climate change (Thomas 2009, pers. comm.).

Based on our evaluation of the information provided in the petition and in our files, we have determined that the petition presents substantial information to indicate that listing of *Sisyrinchium sarmentosum* may be warranted due to the present or threatened destruction, modification, or curtailment of its habitat or range resulting from development, livestock trampling, plant succession, and possibly ORV use; and due to other natural or manmade factors affecting its continued existence resulting from genetic reduction, drought, and effects of climate change.

#### *Trifolium friscanum* (Frisco clover)

*Trifolium friscanum* is a narrow endemic with small populations (Evenden 1998, p. 6). The two element occurrences are restricted to limestone outcrops on Grampian Hill in Beaver County, Utah (Evenden 1998, appendix C), and in the nearby Tunnel Spring Mountains (Evenden 1999, pp. 6–7). Estimates of the area of occupied habitat vary from 30 ha (75 ac) (Evenden 1998, appendix C; Evenden 1999, appendix B) to 225 ha (560 ac) (Kass 1992, pp. 7–8). Estimates of the species' total population vary from 2,000 individuals (Kass 1992, p. 7) to approximately 3,500 individuals (Evenden 1998, appendix C; Evenden 1999, appendix B).

**Factor A:** Mineralized limestone substrates that sustain the species were historically subjected to habitat destruction from precious metals mining. Over 80 percent of the species' habitat is located on lands having private, patented mining claims (Evenden 1998, p. 9; Kass 1992, p. 9).

**Factors B, C, D, and E:** No information was presented in the petition concerning threats to this species from the factors.

Based on our evaluation of the information provided in the petition and in our files, we have determined that the petition presents substantial information to indicate that listing of *Trifolium friscanum* may be warranted due to the present or threatened destruction, modification, or curtailment of its habitat or range resulting from mining.

#### Finding

We reviewed and evaluated 38 of the 206 petitioned species, based on the information in the petition and the

literature cited in the petition, and we have evaluated the information to determine whether the sources cited support the claims made in the petition relating to the five listing factors. We also reviewed reliable information in our files.

We find that the petition does not present substantial information that listing may be warranted for nine species: Washington dusksnail (*Amnicola* sp. 2), *Camissonia exilis* (Cottonwood Spring suncup), lake disc (*Discus brunsoni*), *Frasera gypsicola* (Sunnyside green-gentian), *Lomatium latilobum* (Canyonlands lomatium), *Lygodesmia doloresensis* (Dolores river skeletonplant), Drummond mountainsnail (*Oreohelix* sp. 4), Bitterroot mountainsnail (*Oreohelix amariradix*), and keeled mountainsnail (*Oreohelix carinifera*).

We find that the petition presents substantial scientific or commercial information that listing the remaining 29 of the 38 species that we evaluated as threatened or endangered under the Act may be warranted. Therefore, we are initiating a status review to determine whether listing these 29 species under the Act is warranted.

We previously determined that emergency listing of any of the 38 species is not warranted. However, if at any time we determine that emergency listing of any of the species is warranted, we will initiate an emergency listing.

The petitioners also request that critical habitat be designated for the species concurrent with final listing under the Act. If we determine in our 12-month finding, following the status review of the species, that listing is warranted, we will address the designation of critical habitat in the subsequent proposed rule.

#### References Cited

A complete list of references cited is available on the Internet at Docket No. FWS-R2-ES-2008-0131 at <http://www.regulations.gov> and upon request from the Mountain-Prairie Region Ecological Services Office (see **ADDRESSES**).

#### Author

The primary authors of this document are the staff members of the Mountain-Prairie Region Ecological Services Offices (see **ADDRESSES**).

#### Authority

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

Dated: August 6, 2009.

**Jerome Ford,**

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

[FR Doc. E9-19494 Filed 8-17-09; 8:45 am]

**BILLING CODE 4310-55-P**

## DEPARTMENT OF THE INTERIOR

### Fish and Wildlife Service

#### 50 CFR Part 17

[Docket No. FWS-R8-ES-2009-0044; 92210-1117-0000-FY09-B4]

**RIN 1018-AU23**

#### **Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Sonoma County Distinct Population Segment of California Tiger Salamander (*Ambystoma californiense*)**

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

**ACTION:** Proposed rule; public hearing announcement.

**SUMMARY:** We, the U.S. Fish and Wildlife Service (Service), propose to designate critical habitat for the Sonoma County distinct population segment (DPS) of the California tiger salamander (*Ambystoma californiense*) under the Endangered Species Act of 1973, as amended (Act). In total, approximately 74,223 acres (30,037 hectares) are being proposed for designation as critical habitat. The proposed critical habitat is located in Sonoma County, California.

**DATES:** We will accept comments received or postmarked on or before October 19, 2009. We must receive requests for public hearings, in writing, at the address shown in **FOR FURTHER INFORMATION CONTACT** by October 2, 2009.

**ADDRESSES:** You may submit comments by one of the following methods:

- **Federal eRulemaking Portal:** <http://www.regulations.gov>. Follow the instructions for submitting comments to Docket No. FWS-R8-ES-2009-0044.

- **U.S. mail or hand-delivery:** Public Comments Processing, Attn: FWS-R8-ES-2009-0044; Division of Policy and Directives Management; U.S. Fish and Wildlife Service; 4401 N. Fairfax Drive, Suite 222; Arlington, VA 22203.

We will not accept e-mail or faxes. We will post all comments on <http://www.regulations.gov>. This generally means that we will post any personal information you provide us (see the Public Comments section below for more information).