Authority: Secs. 4, 303, 307(e), 309, and 332, 48 Stat. 1066, 1082, as amended; 47 U.S.C. 154, 303, 307(e), 309, and 332, unless otherwise noted. Interpret or apply 48 Stat. 1064–1068, 1081–1105, as amended; 47 U.S.C. 151–155, 301–609; 3 UST 3450, 3 UST 4726, 12 UST 2377.

19. Section 80.3 is amended by revising paragraphs (b) and (e) to read as follows:

§ 80.3 Other applicable rule parts of this chapter.

* * * * *

(b) *Part 1.* This part includes rules of practice and procedure for license applications, adjudicatory proceedings, procedures for reconsideration and review of the Commission's actions; provisions concerning violation notices and forfeiture proceedings; and the environmental processing requirements that, together with the procedures specified in § 17.4(c) of this chapter, if applicable, must be complied with prior to the initiation of construction. Subpart Q of part 1 contains rules governing competitive bidding procedures for resolving mutually exclusive applications for certain initial licenses.

* * * * *

(e) *Part 17.* This part contains requirements for the construction, marking and lighting of antenna towers, and the environmental notification process that must be completed before filing certain antenna structure registration applications.

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PART 87—AVIATION SERVICES

20. The authority citation for part 87 continues to read as follows:

Authority: 47 U.S.C. 154, 303, and 307(e), unless otherwise noted.

21. Section 87.3 is amended by revising paragraphs (b) and (e) to read as follows:

§ 87.3 Other applicable rule parts.

* * * * *

(b) *Part 1* contains rules of practice and procedure for license applications, adjudicatory proceedings, rule making proceedings, procedures for reconsideration and review of the Commission's actions; provisions concerning violation notices and forfeiture proceedings; and the environmental processing requirements that, together with the procedures specified in § 17.4(c) of this chapter, if applicable, must be complied with prior to the initiation of construction.

* * * * *

(e) *Part 17* contains requirements for construction, marking and lighting of antenna towers, and the environmental notification process that must be completed before filing certain antenna structure registration applications.

* * * * *

PART 90—PRIVATE LAND MOBILE RADIO SERVICES

22. The authority citation for part 90 continues to read as follows:

Authority: Sections 4(i), 11, 303(g), 303(r), and 332(c)(7) of the Communications Act of 1934, as amended, 47 U.S.C. 154(i), 161, 303(g), 303(r), 332(c)(7).

23. Section 90.5 is amended by revising paragraphs (b) and (f) to read as follows:

§ 90.5 Other applicable rule parts.

* * * * *

(b) *Part 1* includes rules of practice and procedure for the filing of applications for stations to operate in the Wireless Telecommunications Services, adjudicatory proceedings including hearing proceedings, and rule making proceedings; procedures for reconsideration and review of the Commission's actions; provisions concerning violation notices and forfeiture proceedings; and the environmental processing requirements that, together with the procedures specified in § 17.4(c) of this chapter, if applicable, must be complied with prior to initiating construction.

* * * * *

(f) *Part 17* contains requirements for construction, marking and lighting of antenna towers, and the environmental notification process that must be completed before filing certain antenna structure registration applications.

* * * * *

24. Section 90.129 is amended by revising paragraph (g) to read as follows:

§ 90.129 Supplemental information to be routinely submitted with applications.

* * * * *

(g) The environmental assessment required by §§ 1.1307 and 1.1311 of this chapter, if applicable. If an application filed under this part proposes the use of one or more new or existing antenna structures that require registration under part 17 of this chapter, any required environmental assessment should be submitted pursuant to the process set forth in § 17.4(c) of this chapter rather than with the application filed under this part.

* * * * *

[FR Doc. 2011–7785 Filed 4–4–11; 8:45 am]

BILLING CODE 6712–01–P

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

[Docket No. FWS–R6–ES–2011–0016; MO 92210–0–0008–B2]

Endangered and Threatened Wildlife and Plants; 12-Month Finding on a Petition To List the Bearmouth Mountainsnail, Byrne Resort Mountainsnail, and Meltwater Lednian Stonefly as Endangered or Threatened

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notice of 12-month petition finding.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), announce a 12-month finding on a petition to list the Bearmouth mountainsnail (*Oreohelix* species 3), Byrne Resort mountainsnail (*Oreohelix* species 31), and meltwater lednian stonefly (*Lednia tumana*) as endangered or threatened, and to designate critical habitat under the Endangered Species Act of 1973, as amended (Act). After review of all available scientific and commercial information, we find that listing the Bearmouth mountainsnail and the Byrne Resort mountainsnail is not warranted because neither constitutes a valid taxon; therefore, they are not considered to be listable entities under the Act. We find that listing of the meltwater lednian stonefly is warranted. However, currently listing of the meltwater lednian stonefly is precluded by higher priority actions to amend the Lists of Endangered and Threatened Wildlife and Plants. Upon publication of this 12-month petition finding, we will add the meltwater lednian stonefly to our candidate species list. We will develop a proposed rule to list the meltwater lednian stonefly as our priorities allow. We will make any determination on critical habitat during development of the proposed listing rule. During any interim period, we will address the status of the candidate taxon through our annual Candidate Notice of Review (CNOR).

DATES: The finding announced in this document was made on April 5, 2011.

ADDRESSES: This finding is available on the Internet at *http://www.regulations.gov* at Docket Number FWS–R6–ES–2011–0016. Supporting documentation we used in preparing this finding is available for public inspection, by appointment, during normal business hours at the U.S. Fish and Wildlife Service, Montana Field Office, 585 Shepard Way, Helena, MT

59601. Please submit any new information, materials, comments, or questions concerning this finding to the above street address.

FOR FURTHER INFORMATION CONTACT: Mark Wilson, Field Supervisor, Montana Field Office (*see* **ADDRESSES**); by telephone at 406–449–5225; or by facsimile at 406–449–5339. Persons who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 800–877–8339.

SUPPLEMENTARY INFORMATION:

Background

Section 4(b)(3)(B) of the Act (16 U.S.C. 1531 *et seq.*) requires that, for any petition containing substantial scientific or commercial information indicating that listing the species may be warranted, we make a finding within 12 months of the date of receipt of the petition. In this finding, we determine that the petitioned action is: (a) Not warranted, (b) warranted, or (c) warranted, but immediate proposal of a regulation implementing the petitioned action is precluded by other pending proposals to determine whether species are endangered or threatened, and expeditious progress is being made to add or remove qualified species from the Federal Lists of Endangered and Threatened Wildlife and Plants. Section 4(b)(3)(C) of the Act requires that we treat a petition for which the requested action is found to be warranted but precluded as though resubmitted on the date of such finding, that is, requiring a subsequent finding to be made within 12 months. We must publish these 12-month findings in the **Federal Register**.

Previous Federal Actions

Federal action for the Bearmouth mountainsnail, Byrne Resort mountainsnail, and meltwater lednian stonefly began on July 30, 2007, after we received a 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 (Forest Guardians 2007, pp. 1–37). The petition incorporated all analyses, references, and documentation provided by NatureServe in its online database at *http://www.natureserve.org/.* We acknowledged the receipt of the petition in a letter to the Forest Guardians, dated August 24, 2007 (Slack 2007, p. 1). In that letter we stated, based on preliminary review, we found no compelling evidence to support an emergency listing for any of the species covered by the petition, and that we planned work on the petition in Fiscal Year (FY) 2008.

On March 19, 2008, WildEarth Guardians filed a complaint (1:08–CV–472–CKK) indicating that the Service failed to comply with its statutory duty to make 90-day findings on their two multiple species petitions in two of the Service's administrative regions—one for the mountain-prairie region, and one for the Southwest region (*WildEarth Guardians* v. *Kempthorne* 2008, case 1:08–CV–472–CKK). We subsequently published two initial 90-day findings on January 6, 2009 (74 FR 419), and February 5, 2009 (74 FR 6122), identifying species for which we were then making negative 90-day findings, and species for which we were still working on a determination. The Bearmouth mountainsnail, Byrne Resort mountainsnail, and meltwater lednian stonefly were not addressed in either 90-day finding published in 2009, as we were still conducting our analyses of these mountainsnails and the stonefly. On March 13, 2009, the Service and WildEarth Guardians filed a stipulated settlement in the U.S. District Court, District of Columbia, agreeing that the Service would submit to the **Federal Register** a finding as to whether WildEarth Guardians' petition presented substantial information indicating that the petitioned action may be warranted for 38 mountain-prairie region species by August 9, 2009 (*WildEarth Guardians* v. *Salazar* 2009, case 1:08–CV–472–CKK).

On August 18, 2009, we published a 90-day finding for 38 mountain-prairie region species (74 FR 41649). In that finding, we found that the petition presented substantial information to indicate that listing of Bearmouth mountainsnail and Byrne Resort mountainsnail may be warranted due to the present or threatened destruction, modification, or curtailment of their habitat or range resulting from road construction and associated activities. We also found that listing of the meltwater lednian stonefly may be warranted based on threats from climate change, and specifically the melting of glaciers associated with the species' habitat. The finding also requested further information pertaining to all three "species" (74 FR 41649). However, the 90-day finding did not formally consider the taxonomic status of the petitioned entities.

This notice constitutes the 12-month finding on the July 24, 2007, petition to list the Bearmouth mountainsnail, Byrne Resort mountainsnail, and meltwater lednian stonefly as endangered or threatened.

Species Information for Bearmouth Mountainsnail and Byrne Resort Mountainsnail

Species Descriptions

Bearmouth mountainsnail and Byrne Resort mountainsnail are ascribed to the genus *Oreohelix,* commonly called the "mountainsnail." This genus of land snails is endemic to western North America and is found in mountainous environments in the western United States from the eastern Sierra Nevadas in the west to the Black Hills in the east, and from southern Canada down to northern Mexico (Pilsbry 1916, pp. 341–342; Pilsbry 1939, pp. 415–416; Weaver 2006, p. 9).

Biology and Life History

Most mountainsnail species are relatively large land snails (adult body size greater than 5 centimeters (cm) (2 inches (in.)) that typically prefer forested environments, calcium-rich areas, and generally high available water content during generally dry conditions in spring and summer months (Weaver 2006, p. 9). They survive colder conditions at higher elevations by burrowing underground and aestivating (Weaver 2006, p. 9). Individuals often also burrow during hot summer months, appearing on the surface to feed during or after rains (Frest and Johannes 1995, p. 22; Weaver 2006, p. 9). One adaptation by *Oreohelix* to arid and semi-arid environments is the practice of hatching eggs internally instead of the typical pattern of laying them in favorable locations, as desiccation of eggs and juveniles is a common cause of land snail death, especially in arid areas (Frest and Johannes 1995, p. 18). Hatching the eggs internally can reduce the probability of desiccation, and adults seem to be able to delay release of juveniles if conditions warrant (Frest and Johannes 1995, p. 18).

Western land snails are typically herbivores, but some may consume animal matter (Frest and Johannes 1995, p. 24). Land snails contribute substantially to nutrient recycling, often breaking down plant detritus and animal waste (Frest and Johannes 1995, pp. 24–25). They are preyed upon extensively by small mammals (*e.g.,* shrews and voles), reptiles, amphibians, birds, and insects (Frest and Johannes 1995, p. 25).

The life history of western land snails is strongly controlled by climate. Some species of *Oreohelix* are among the most long-lived land snails, reaching sexual

maturity at about 2 to 3 years and living as long as 8 to 10 years (Frest and Johannes 1995, p. 25). Mountainsnails have low adult vagility (ability to move or disperse) (Chak 2007, p. 23) and apparently lack a larval stage with high dispersal ability (Weaver 2006, pp. 8–9). Consequently, mountainsnails typically exist in small, circumscribed colonies with dozens to a few thousand individuals (Frest and Johannes 1995, pp. 22–23). *Oreohelix* snails are known to be hermaphroditic (individuals have both male and female genitalia and can assume either role in mating) (Pisbry 1939, p. 427; Hendricks 2003, pp.17, 25) and viviparous (give birth to live young) (Pilsbry 1916, p. 343; Pilsbry 1939, p. 418).

Oreohelix species and subspecies vary in size, height of shell spire, degree of carination (*i.e.,* presence and size of a keel or ridge around the outside whorl of the shell), width of umbilicus (*i.e.,* the ventral opening formed in the center of the whorls), and color (Pilsbry 1939, p. 415). Shell morphology is plastic (variable in response to environmental conditions) in *Oreohelix,* and in snails in general and can be affected by elevation, calcium content, humidity, and population density (Chak 2007, p. 3). Substantial variation in shell morphology within a particular *Oreohelix* colony is common (Pilsbry 1916, p. 340; 1939, p. 415). Conversely, shell characteristics can be similar in taxa with different evolutionary histories but that occupy similar environments (Chak 2007, p. 3). This variation within species and colonies, combined with parallelism that can occur between unrelated groups, has long been recognized as a challenge to correctly identifying *Oreohelix* specimens and determining their distribution (Pilsbry 1916, p. 340).

Distribution and Abundance

The distribution and abundance of Bearmouth mountainsnail and Byrne Resort mountainsnail are not well known. In general, very little is known about the distribution and status of terrestrial mollusks in Montana (*e.g.,* Hendricks 2003, pp. 3–4). The 2007 petition from WildEarth Guardians and the NatureServe rankings for both Bearmouth mountainsnail and Byrne Resort mountainsnail (*e.g.,* NatureServe 2010a, b) rely entirely on information contained in the unpublished report by Frest and Johannes (1995, entire) that summarized occurrence and conservation status of mollusks in the Interior Columbia Basin.

Frest and Johannes (1995, p. 5) stated that the original distribution of Bearmouth mountainsnail is the "Clark Fork River valley in the area between Clinton and Garrison, Granite and Powell counties, Montana," and they described the present distribution (in 1995) as "a few very small colonies in the Bearmouth area." They did not provide any spatial information about the actual location of these colonies. They further speculated that Bearmouth mountainsnail may occur in the adjacent lands managed by the U.S. Forest Service (Lolo National Forest) and the State of Montana. Little information about the Bearmouth mountainsnail has become available since the report by Frest and Johannes (1995, p. 115). No occurrences of Bearmouth mountainsnail were reported in more recent surveys of terrestrial mollusks conducted by the Montana Natural Heritage Program (MNHP) (Hendricks 2003, entire; Hendricks *et al.* 2008, entire).

The only potential recent occurrences of Bearmouth mountainsnail come from surveys conducted by Dr. Kathleen Weaver, an assistant professor at the University of La Verne, California, who recently began conducting research on the distribution, ecology, and genetics of *Oreohelix* in Montana. Dr. Weaver reports collecting land snail specimens from two colonies she believes may be Bearmouth mountainsnails (Weaver 2010a, 2010b, pers. comm.). The first colony is located in the Bearmouth area, and Dr. Weaver believes it is near the type locality "Bearmouth" location along the Clark Fork River described in Frest and Johannes (1995, p. 5; *see* above). The second colony is located along Rock Creek, a left-bank tributary to the Clark Fork River. The two colonies are believed to represent the same species based on genetic similarity measured using mitochondrial DNA (mtDNA, maternally-inherited DNA found in cellular organelles called mitochondria) (Weaver 2010b, pers. comm.). Dr. Weaver refers to the two colonies as "Bearmouth mountainsnail" based on the location of the first colony (Weaver 2010b, pers. comm.). Both colonies are very small (no more than 5 to 15 square meters or about 17 to 50 square feet), and may contain from a few dozen to a few hundred individuals (Weaver 2010b, pers. comm.).

No information is available on the current abundance or distribution of Byrne Resort mountainsnail, or whether the "species" even exists. The original distribution of the Byrne Resort mountainsnail was described by Frest and Johannes (1995, p. 140) as "the Clark Fork River valley near Bearmouth, Granite County, MT," and they described the present distribution (in 1995) as "a few very small colonies in the old Byrne Resort area." As with the Bearmouth mountainsnail, Frest and Johannes did not provide any accurate spatial information about the actual location of these colonies. No occurrences of Byrne Resort mountainsnail were reported in more recent surveys of terrestrial mollusks conducted by the MNHP (Hendricks 2003, entire; Hendricks *et al.* 2008, entire). More recently, neither the MNHP nor Dr. Weaver (University of La Verne) have been able to locate a colony of *Oreohelix* in the area that Frest and Johannes (1995, p. 14) reported the Byrne Resort mountainsnail (Hendricks 2010, pers. comm.; Weaver 2010b, pers. comm.). It is not known whether the colonies no longer exist, or if the original description of Byrne Resort mountainsnail is incorrect.

Habitat

Factors determining habitat preferences of land snails include cover, effective moisture availability, and geologic history (Frest and Johannes 1995, p. 20). Most land snail species including those in the genus *Oreohelix* are calciphiles, meaning they are usually restricted to limestone, dolomite, or other substrates containing high levels of the element calcium (Pilsbry 1916, p. 342; Frest and Johannes 1995, pp. 20–21). Moist soil conditions are favored and soil pH may be a factor in determining suitable habitat (Frest and Johannes 1995, pp. 20–24). *Oreohelix* are generally associated with talus (a sloping mass of loose rock debris at the base of a cliff) or rocky outcrops, and the occupied sites may range from low-elevation canyons and valley bottoms to high-elevation slopes well above the treeline (Hendricks 2003, pp. 4–5).

Taxonomy and Evaluation of the Listable Entities for Bearmouth Mountainsnail and Byrne Resort Mountainsnail

The genus *Oreohelix* belongs to phylum Mollusca, class Gastropoda, order Stylommatophora (terrestrial snails and slugs), and family Oreohelicidae. The genus *Oreohelix* consists of 41 recognized species (Turgeon *et al.* 1998, p. 143; Integrated Taxonomic Information System (ITIS) 2010). Overall, the taxonomy of the genus is not well known (Chak 2007, p. 21; Weaver 2006, p. 9), and additional species have been proposed in the primary literature (*e.g.,* Ports 2004, entire), in graduate theses (*e.g.,* Weaver 2006, pp. 49–95), and in grey literature reports (*e.g.,* Frest and Johannes 1995, pp. 113–140). The most extreme example of purported additional

taxonomic diversity in *Oreohelix* is found in Frest and Johannes (1995, pp. 113–139), who proposed that 31 additional species or subspecies were found in the Interior Columbia Basin. The Bearmouth mountainsnail (*Oreohelix* sp. 3) and the Byrne Resort Mountainsnail (*Oreohelix* sp. 31) were among these 31 proposed species or subspecies (Frest and Johannes 1995, pp. 115, 139–140).

Taxonomic classification of *Oreohelix* snails has been based traditionally on shell morphology (*e.g.,* Pilsbry 1916, entire; Pilsbry 1939, pp. 413–553). Nonetheless, shell morphology has long been considered an unreliable characteristic for delineating taxonomic units within *Oreohelix* because of the substantial phenotypic plasticity that exists for shell traits (Pilsbry 1916, p. 340; Chak 2007, pp. 3, 15; Weaver *et al.* 2008, p. 908). Phenotypic plasticity is defined as the ability of an individual genotype (genetic composition) to produce multiple phenotypes (observable characteristics or traits) in response to its environment. There is wide agreement among malacologists (the branch of invertebrate zoology that deals with the study of Mollusca) familiar with *Oreohelix* that relying exclusively on shell morphology to designate taxa is problematic (McDonald 2010, pers. comm.; Oliver 2010, pers. comm.; Weaver 2010a, pers. comm.). More robust taxonomic designations within genus *Oreohelix* generally rely on differences in internal anatomy, such as penis morphology (Pilsbry 1916, entire; Pilsbry 1939, pp. 413–553; Chak 2007, p. 15). More recently, molecular genetic methods have been used to reconcile taxonomic designations originally based on morphological characteristics (*e.g.,* Chak 2007, pp. 21–42; Weaver *et al.* 2008, entire).

The basis of the species designations for the Bearmouth mountainsnail (*Oreohelix* sp. 3) and Byrne Resort mountainsnail (*Oreohelix* sp. 31) is shell morphology (Frest and Johannes 1995, pp. 115, 139–140). Unfortunately, Frest and Johannes never published any of their putative (presumed or supposed) species designations for *Oreohelix* contained in their 1995 report. In some cases, species designations by Frest and Johannes that relied entirely on shell morphology were subsequently found to be in error when additional morphological (Weaver 2006, p. 10) or genetic information (Chak 2007, p. 1) was collected.

Taxonomy of the Bearmouth Mountainsnail (*Oreohelix* sp. 3)

The only additional information about the occurrence and taxonomic status of Bearmouth mountainsnail comes from Dr. Weaver (Weaver 2010a, 2010b, pers. comm.). As described above, she identified two colonies of *Oreohelix* in Montana that she believes represent Bearmouth mountainsnail, based on the location of one colony and genetic similarity (of mtDNA) of the two colonies (Weaver 2010b, pers. comm.). Dr. Weaver observed that genetic analyses of individuals from these two colonies (that she believes to represent Bearmouth mountainsnail) revealed approximately 6 percent DNA sequence divergence relative to a sister taxon (*O. carinifera*) in the same genus (Weaver 2010a, pers. comm.). This level of divergence is consistent with species-level differences in terrestrial mollusks (*e.g.,* Weaver *et al.* 2008, pp. 913–914). Thus, there is some evidence to suggest that the individuals she sequenced are part of a distinct species or subspecies. Unfortunately, archived individuals collected from the putative type location of Bearmouth mountainsnail (as described in Frest and Johannes 1995, p. 115) are not available (Weaver 2010b, pers. comm.). Moreover, Frest and Johannes did not provide the precise location of any of the "type localities" (*i.e.,* location where the specimens that define the species were collected) for the undescribed species in their 1995 report (Frest and Johannes 1995, pp. 113–140). Consequently, there remains uncertainty as to whether the "Bearmouth mountainsnail" proposed by Frest and Johannes (1995, p. 115) represents the same entity that Dr. Weaver refers to as "Bearmouth mountainsnail."

Uncertainty notwithstanding, the Bearmouth mountainsnail is not included as a valid taxon in the classic works by Pilsbry (1916, entire; 1939, entire), which are still accepted as the most authoritative publications on the taxonomy of *Oreohelix;* nor is the Bearmouth mountainsnail listed among the *Oreohelix* taxa recognized by more current sources such as the Integrated Taxonomic Information System (ITIS 2010) or the Council of Systematic Malacologists and the American Malacological Union (Turgeon *et al.* 1998, p. 143 in this compilation of mollusk taxonomy by scientific experts). In summary, the entity referred to as the "Bearmouth mountainsnail" has not been formally described as a species according to accepted scientific standards, and this entity is not widely recognized as a species or subspecies by the scientific community. The type of additional information that may permit a formal description may include a more thorough description of the type specimen, an evaluation of various lines of evidence (morphological, ecological, biogeographical, genetic) relevant to its taxonomic status, resolution of any discrepancies in taxonomic nomenclature, or a combination of these (*e.g.,* Weaver 2006, pp. 49–65), and that the taxon be accepted as valid by widely-recognized sources (*e.g.,* Turgeon *et al.* 1998, entire; ITIS 2010).

Taxonomic Status of Byrne Resort Mountainsnail (*Oreohelix* sp. 31)

There have been no additional collections of Byrne Resort mountainsnail at the location initially described by Frest and Johannes (1995, p. 140) (Hendricks 2010, pers. comm.; Weaver 2010b, pers. comm.). Specimens collected near where Frest and Johannes made their collection of Byrne Resort mountainsnail have been tentatively identified as a variant of an existing species (lyrate mountainsnail, *Oreohelix haydeni*) based on morphological characteristics (Hendricks 2010, pers. comm.). To our knowledge, there has been no follow-up analysis of any specimens collected by Frest and Johannes (1995, pp. 139–140). Thus, we have virtually no information on this putative species.

The taxonomic validity of the Byrne Resort mountainsnail is highly uncertain given that the only description was based on shell morphology, which, as discussed above, is widely recognized by the scientific community as a poor trait for defining taxonomic groups in *Oreohelix* (Pilsbry 1906, p. 340). Moreover, we are not aware of any corroborating information concerning the taxonomic status of this entity. The Byrne Resort mountainsnail is not listed as a valid taxon in the classic works by Pilsbry (1916, entire; 1939, entire), which are still accepted as the most authoritative publications on the taxonomy of *Oreohelix;* nor is the Byrne Resort mountainsnail listed among the *Oreohelix* taxa recognized by more current sources such as the Council of Systematic Malacologists (*e.g.,* Turgeon *et al.* 1998, p. 143) or the Integrated Taxonomic Information System (ITIS 2010). In short, the entity referred to as "Byrne Resort mountainsnail" has not been formally described as a species according to accepted scientific standards, and this entity is not widely recognized as a species or subspecies by the scientific community. The type of additional information that may permit a formal description may include a more

thorough description of the type specimen, an evaluation of various lines of evidence (morphological, ecological, biogeographical, genetic) relevant to its taxonomic status, resolution of any discrepancies in taxonomic nomenclature, or a combination of these (*e.g.,* Weaver 2006, pp. 49–65), and that the taxon be accepted as valid by widely-recognized sources (*e.g.,* Turgeon *et al.* 1998, entire; ITIS 2010).

Finding for the Bearmouth Mountainsnail (Oreohelix sp. 3) and Byrne Resort Mountainsnail (Oreohelix sp. 31)

We have very little information on the distribution and abundance of these two land snails. In fact, we could not find any information on occurrence or even the existence of the species referred to as the "Byrne Resort mountainsnail" by Frest and Johannes (1995, p. 139). We have some information, based on recent surveys and genetic analyses, that two colonies of land snails tentatively identified by a species expert as "Bearmouth mountainsnail" currently exist in the vicinity of the Clark Fork River valley, Montana (Weaver 2010a, 2010b, pers. comm.). To our knowledge, there has never been a systematic analysis of the validity of taxonomic arrangements (*i.e.,* subspecies or species) that have been proposed for *Oreohelix* by Frest and Johannes (1995, pp. 113–140). Moreover, neither the Bearmouth mountainsnail nor the Byrne Resort mountainsnail has been formally described as a species, and neither is presently recognized as a species or subspecies by the scientific community (*e.g.,* Pilsbry 1939, entire; Turgeon *et al.* 1998, p. 143; ITIS 2010).

Neither the Bearmouth mountainsnail nor the Byrne Resort mountainsnail is recognized as a species or subspecies, and their taxonomic statuses are currently uncertain. Consequently, the Service does not at this time consider the Bearmouth mountainsnail or the Byrne Resort mountainsnail to be listable entities under section 3(16) of the Act (16 U.S.C. 1532(16)) because they do not belong to taxa currently recognized by the scientific community. The Service encourages additional scientific investigations that will resolve the significant uncertainties concerning the occurrence and taxonomy of *Oreohelix* land snails. Because we have concluded the Bearmouth mountainsnail and the Byrne Resort mountainsnail are not listable entities, we will not be further evaluating these mountainsnails under section 4(a)(1) of the Act, and they will not be discussed further in this finding.

Species Information for the Meltwater Lednian Stonefly

Species Description and Taxonomy

The meltwater lednian stonefly (*Lednia tumana*) is in the monotypic genus *Lednia* (Baumann 1975, p. 19; Stewart and Harper 1996, p. 263; Stark *et al.* 2009, entire). The genus *Lednia* belongs to the phylum Arthropoda, class Insecta, order Plecoptera (stoneflies), family Nemouridae, and subfamily Nemourinae. The family Nemouridae is the largest in the order Plecoptera (stoneflies), comprising more than 370 species in 17 genera (Baumann 1975, p. 1). In North America, family Nemouridae comprises 73 species in 13 genera (Stark *et al.* 2009, entire). The type specimens for the meltwater lednian stonefly were collected in the Many Glaciers area of Glacier National Park (Glacier NP), Montana (Baumann 1982, pers. comm.). The species was originally described by Ricker in 1952 (Baumann 1975, p. 18), and is recognized as a valid species by the scientific community (*e.g.,* Baumann 1975, p. 18; Baumann *et al.* 1977, pp. 7, 34; Newell *et al.* 2008, p. 181; Stark *et al.* 2009, entire). Consequently, we conclude that the meltwater lednian stonefly (*Lednia tumana*) is a valid species and, therefore, a listable entity under section 3(16) of the Act.

Kondratieff and Lechleitner (2002, pp. 385, 391) reported that specimens thought to be the meltwater lednian stonefly were collected in Mount Rainier National Park (Mount Rainier NP), Washington. They also cited a personal communication with a species expert (R.W. Baumann, Brigham Young University, Provo, UT) that similar specimens also are known from North Cascades National Park (North Cascades NP), Washington, and a site in the California Sierra Nevada (Kondratieff and Lechleitner 2002, pp. 388–389). However, the specimens discovered in Mount Rainier NP, North Cascades NP, and in the Sierra Nevada Mountains of California are now believed to represent additional undescribed taxa (presumably in the genus *Lednia*) that await formal description (Baumann 2010, pers. comm.; Kondratieff 2010, pers. comm.; Kondratieff *et al.* 2006, p. 463). If these specimens are described as species in the genus *Lednia,* then the genus *Lednia* would no longer be considered a monotypic genus. However, the taxonomy of these additional specimens (from Mount Rainier NP, North Cascades NP, and in the Sierra Nevada Mountains of California) has not been evaluated or accepted by the scientific community (*e.g.,* Stark *et al.* 2009, entire). Thus, while there is some preliminary indication that the taxonomy of the genus *Lednia* will be revised when the new specimens are officially described, the meltwater lednian stonefly remains the only species in the genus *Lednia* that is currently recognized by the scientific community. Consequently, based on the information presented above, the Service considers *Lednia* to be a monotypic genus. Therefore, for the purpose of this finding, we are evaluating the meltwater lednian stonefly, throughout its known range, as a full species in a monotypic genus.

The nymph (aquatic juvenile stage) of the meltwater lednian stonefly is dark red-brown on its dorsal (top) surface and pink on the ventral (lower) surface, with light grey-green legs (Baumann and Stewart 1980, p. 658). Mature nymphs can range in size from 4.5 to 6.5 millimeter (mm) (0.18 to 0.26 in.) (Baumann and Stewart 1980, p. 655). Adults also are small, ranging in size from 4 to 6 mm (0.16 to 0.24 in.) (Baumann 1975, p. 19).

Biology and Life History

Plecoptera (stoneflies) are primarily associated with clean, cool, running waters (Stewart and Harper 1996, p. 217). The Nemourids are usually the dominant Plecoptera family in mountain-river ecosystems, both in terms of total biomass and in numbers of species present (Baumann 1975, p. 1). Eggs and larvae of all North American species of stoneflies, including the meltwater lednian stonefly, are aquatic (Stewart and Harper 1996, p. 217). Nemourid stonefly larvae are typically herbivores or detritivores, and their feeding mode is generally that of a shredder or collector-gatherer (Baumann 1975, p. 1; Stewart and Harper 1996, pp. 218, 262). We have no information on the longevity of the meltwater lednian stonefly, but in general stoneflies can complete their life cycles within a single year (univoltine) or in 2 to 3 years (semivoltine) (Stewart and Harper 1996, pp. 217–218). Adult meltwater lednian stoneflies are thought to emerge and breed in August and September (Baumann and Stewart 1980, p. 658; Giersch 2010b, pers. comm.; MNHP 2010a).

Distribution and Abundance

The current known distribution of the meltwater lednian stonefly is restricted to a handful of locations just to the east and west of the Continental Divide within Glacier NP (Newell *et al.* 2008, p. 181; National Park Service (NPS) 2009; *see* Table 1 below). Within the last 13 years, the meltwater lednian stonefly has been observed in a total of 11

streams within Glacier NP, at sites ranging from 1,628 to 2,378 meters (m) elevation (5,341 to 7,801 feet (ft)) (NPS 2009; *see* Table 1 below). Most collection sites have been in close proximity to glaciers. The species can attain moderate to high abundance in certain locations (*e.g.,* Logan Creek: Baumann and Stewart 1980, p. 658; NPS 2009, entire).

TABLE 1—DOCUMENTED OCCURRENCES OF MELTWATER LEDNIAN STONEFLY (LEDNIA TUMANA) DURING THE LAST 13 YEARS. ALL OCCURRENCES ARE WITHIN GLACIER NP, MONTANA. INFORMATION PROVIDED BY NPS (2009) BASED ON DATA COLLECTED BY F. RICHARD HAUER (FLATHEAD LAKE BIOLOGICAL STATION, DIVISION OF BIOLOGICAL SCIENCES, UNIVERSITY OF MONTANA, POLSON) AND JOE GIERSCH (DRUNELLADESIGNS.COM, WEST GLACIER, MONTANA)

Stream or drainage	Year	Elevation
East of the Continental Divide (Glacier County, Montana)		
Baring Creek [a]	1998	2,378 m (7,801 ft).
	1999	2,173 m (7,129 ft).
	2003	2,273 m (7,457 ft).
	2009	2,024 m (6,640 ft).
Lunch Creek [a b]	1999	2,173 m (7,129 ft).
	2003	2,273 m (7,457 ft).
	2009	2,024 m (6,640 ft).
Reynolds Creek [a b]	1997	2,171 m (7,123 ft).
		2,170 m (7,119 ft).
		2,140 m (7,021 ft).
		2,106 m (6,909 ft).
		2,165 m (7,103 ft).
	1998	2,169 m (7,116 ft).
		2,068 m (6,785 ft).
		2,099 m (6,886 ft).
		2,165 m (7,103 ft).
St. Mary River [a]	1999	2,054 m (6,739 ft).
Swiftcurrent Creek [a]	2007	1,628 m (5,341 ft).
Twin Lakes (St. Mary River)	1998	2,265 m (7,431 ft).
West of the Continental Divide (Flathead County, Montana)		
Ahern Creek	1998	2,065 m (6,775 ft).
Bear Creek	2001	1,696 m (5,564 ft).
Hidden Lake (Hidden Creek)	1998	2,302 m (7,552 ft).
Logan Creek [a b]	1998	2,115 m (6,939 ft).
		2,031 m (6,663 ft).
Mineral Creek	1997	2,017 m (6,617 ft)

Collection Location Details
[a] Stream directly associated with a named glacier within that watershed or an unnamed glacier present on a 7.5′ topographic map.
[b] Multiple collections within a stream are itemized by year and elevation.

Although the species has been observed recently only in Glacier NP, experts speculate that suitable habitat for the species may extend north into Waterton Lakes National Park in Canada and south into the Scapegoat-Great Bear-Bob Marshall wilderness areas of Montana, or in similar areas of the northern Rocky Mountains in alpine snow-melt streams (*e.g.,* Baumann 1982, pers. comm.; Giersch 2010a, pers. comm.). The species was previously reported from the Waterton River system in Alberta (Donald and Anderson 1977, p. 114). However, surveys conducted in Waterton Lakes National Park (Canada) during 2007 and 2008 did not detect the species (Langor 2010, pers. comm.), although it is unclear if the proper habitat was surveyed (Johnston 2010, pers. comm.).

In general, little information exists about the meltwater lednian stonefly, and additional surveys are needed in order to develop a more thorough understanding of its distribution and abundance (*e.g.,* Giersch 2010a, 2010b, pers. comm.). In the interim, we conclude based on the available recent survey information that the meltwater lednian stonefly is a narrow endemic present only in Glacier NP.

Habitat

The meltwater lednian stonefly is found in snow-melt runoff streams in high-elevation, alpine areas, most typically in locations closely linked to glacial runoff (Baumann and Stewart 1980, p. 658; MNHP 2010a) or alpine springs (Hauer *et al.* 2007, p. 107; Giersch 2010c, pers. comm.). The species is considered a cold-water stenotherm restricted to water less than (<) 10 degrees Celsius (°C) (< 50 degrees Fahrenheit (°F)) (MNHP 2010a), but apparently it can tolerate higher water temperatures (up to 15 °C (59 °F)) in certain situations (Hauer *et al.* 2007, p. 107) for short periods of time (Giersch 2010c, pers. comm.). Most aquatic invertebrates in stream environments in the northern Rocky Mountains exhibit very strong elevation (temperature) gradients in their distribution (*e.g.,* Fagre *et al.* 1997, p. 763; Lowe and Hauer 1999, pp. 1637, 1640, 1642; Hauer *et al.* 2007, p. 110), and occur at the highest population density in their preferred temperature range. We presume the meltwater lednian stonefly exhibits a similar pattern, in terms of being more likely to be present and more abundant in the small (first order), cold, snowmelt-driven, alpine streams, and less likely to occur farther downstream within a drainage in larger habitats (second order and larger streams) with warmer water temperatures. In general, the alpine

streams inhabited by the meltwater lednian stonefly are presumed to have very low nutrient concentrations (low nitrogen and phosphorus), reflecting the nutrient content of the glacial or snow-melt source (Hauer *et al.* 2007, pp. 107–108). The daytime microhabitat preferences of meltwater lednian stonefly nymphs are the underside of rocks or larger pieces of bark or wood (Baumann and Stewart 1980, p. 658).

Summary of Information Pertaining to the Five Factors for the Meltwater Lednian Stonefly

Section 4 of the Act (16 U.S.C. 1533) and its implementing regulations (50 CFR 424) set forth procedures for adding species to the Federal Lists of Endangered and Threatened Wildlife and Plants. Under section 4(a)(1) of the Act, a species may be determined to be endangered or threatened based on any of the following five factors:

(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.

In making this finding, information pertaining to meltwater lednian stonefly in relation to the five factors provided in section 4(a)(1) of the Act is discussed below.

In considering what factors might constitute threats to a species, we must look beyond the exposure of the species to a factor to evaluate whether the species may respond to the factor in a way that causes actual impacts to the species. If there is exposure to a factor and the species responds negatively, the factor may be a threat and we attempt to determine how significant a threat it is. The threat is significant if it drives, or contributes to, the risk of extinction of the species such that the species warrants listing as endangered or threatened as those terms are defined in the Act.

Factor A. The Present or Threatened Destruction, Modification, or Curtailment of Its Habitat or Range

The known distribution of the meltwater lednian stonefly is entirely within the boundaries of Glacier NP. The ecosystems in most national parks are considered to be comparatively pristine, and the Glacier NP is a relatively unaltered landscape when compared to other areas of western North America (Fagre 2005, p. 2).

Climate Change

Climate is influenced primarily by long-term patterns in air temperature and precipitation. The Intergovernmental Panel on Climate Change (IPCC) has concluded that climate warming is unequivocal, and is now evident from observed increases in global average air and ocean temperatures, widespread melting of snow and ice, and rising global mean sea level (IPCC 2007, pp. 30–31). Continued greenhouse gas emissions at or above current rates are expected to cause further warming (IPCC 2007, p. 30). The years from 1995 through 2006 rank among the 12 warmest years in the instrumental record of global average near-surface temperature since 1850 (Independent Scientific Advisory Board (ISAB) 2007, p. 7; IPCC 2007, p. 30). During the last century, mean annual air temperature increased by approximately 0.6 °C (1.1 °F) (IPCC 2007, p. 30). Warming appears to have accelerated in recent decades, as the linear warming trend over the 50 years from 1956 to 2005 (average 0.13 °C or 0.24 °F per decade) is nearly twice that for the 100 years from 1906 to 2005 (IPCC 2007, p. 30). Climate change scenarios estimate that the mean air temperature could increase by over 3 °C (5.4 °F) by 2100 (IPCC 2007, pp. 45–46). The IPCC also projects there will likely be regional increases in the frequency of hot extremes, heat waves, and heavy precipitation, as well as greater warming in high northern latitudes (IPCC 2007, p. 46).

We recognize that there are scientific differences of opinion on many aspects of climate change, including the role of natural variability in climate. In our analysis, we rely primarily on synthesis documents (IPCC 2007, entire; ISAB 2007, entire; Karl *et al.* 2009, entire) that present the consensus view of a large number of experts on climate change from around the world. We find that these synthesis reports, as well as the scientific papers used in, or resulting from, those reports represent the best available scientific information we can use to inform our decision. Where possible, we use empirical data or projections specific to Glacier NP and the surrounding area and focus on observed or expected effects on stream systems, as this area includes the known distribution of the meltwater lednian stonefly.

Water temperature and hydrology (stream flow) influence many of the basic physical and biological processes in aquatic systems, and both are sensitive to environmental changes that result from climate change (*e.g.,* Stewart *et al.* 2005, entire; Isaak *et al.* 2010, entire; Kaushal *et al.* 2010, entire). For ectothermic organisms like aquatic invertebrates, temperature sets basic constraints on species' distribution and physiological performance (Fagre *et al.* 1997, p. 763; Lowe and Hauer 1999, pp. 1637, 1640, 1642; Hauer *et al.* 2007, p. 110). Stream hydrology not only affects the structure of aquatic systems across space and time, but influences the life history and phenology (timing of life-cycle events) of aquatic invertebrates such as stoneflies (Stewart and Harper 1996, pp. 217–218).

Significant trends in water temperature and stream flow have been observed in the western United States (Stewart *et al.* 2005, entire; Kaushal *et al.* 2010, entire), and increased air temperatures and changes in precipitation are partially responsible. During the past 50 to 100 years in the western United States, the timing of runoff from snowmelt has shifted to occur 1 to 4 weeks earlier (Regonda *et al.* 2005, p. 380; Stewart *et al.* 2005, pp. 1136, 1141; Hamlet *et al.* 2007, p. 1468), presumably as a result of increased temperatures (Hamlet *et al.* 2007, p. 1468), increased frequency of melting (Mote *et al.* 2005, p. 45), and decreased snowpack (Mote *et al.* 2005, p. 41). Trends in decreased water availability also are apparent across the Pacific Northwest. For example, Luce and Holden (2009, entire) found a tendency toward more extreme droughts at 72 percent of the stream flow gages they examined across Idaho, Montana, Oregon, and Washington.

The western United States appears to be warming faster than the global average. In the Pacific Northwest, regionally averaged temperatures have risen 0.8 °C (1.5 °F) over the last century and as much as 2 °C (4 °F) in some areas. Since 1900, the mean annual air temperature for Glacier NP and the surrounding region has increased 1.33 °C, which is 1.8 times the global mean increase (U.S. Geological Survey (USGS) 2010, p. 1). Mean annual air temperatures are projected to increase by another 1.5 to 5.5 °C (3 to 10 °F) over the next 100 years (Karl *et al.* 2009, p. 135). Warming also appears to be very pronounced in alpine regions globally (*e.g.,* Hall and Fagre 2003, p. 134 and references therein).

For the purposes of this finding, we consider the foreseeable future for anticipated environmental changes such as reductions in glacial meltwater and increases in stream temperatures to be approximately 40 years based on two factors. First, various global climate models (GCMs) and emissions scenarios give consistent predictions within that

timeframe (Ray *et al.* 2010, p. 11). Second, the effect of climate change on glaciers in Glacier NP has been modeled within that time range (*e.g.,* Hall and Fagre 2003, entire). We used a similar foreseeable future time period when considering climate change projections in other 12-month findings for species in western North America (*see* American pika (*Ochotona princeps*), 75 FR 6438, February 9, 2010; Arctic grayling (*Thymallus arcticus*), 75 FR 54708, September 8, 2010).

While projected patterns of warming across North America are generally consistent across different GCMs and emissions scenarios (Ray *et al.* 2010, p. 22), there tends to be less agreement among models for whether mean annual precipitation will increase or decrease, but the models seem to indicate an increase in precipitation in winter and a decrease in summer (Ray *et al.* 2010, pp. 22–23). In the foreseeable future, natural variation will likely confound a clear prediction for precipitation based on current climate models (Ray *et al.* 2010, p. 29). Although there is considerable uncertainty about how climate will evolve at any specific location, statistically downscaled climate projection models (models that predict climate at finer spatial resolution than GCMs) for the western United States also support widespread warming, with warmer temperature zones shifting to the north and upward in elevation (Ray *et al.* 2010, pp. 23–24).

Based on the information described above, we believe that environmental changes resulting from climate change may affect the meltwater lednian stonefly through two primary mechanisms: (1) Loss of glaciers, and (2) changes in hydrology and increased water temperature.

Glacier Loss

Environmental changes resulting from climate change are assumed to be directly related to the well-documented loss of glaciers in Glacier NP (*e.g.,* Hall and Fagre 2003, entire; Fagre 2005, entire). Glacier NP contained approximately 150 glaciers larger than 0.1 square kilometer (25 acres) in size when established in 1910, but presently only 25 glaciers larger than 0.1 square kilometers in size (25 acres) remain in the park (Fagre 2005, pp. 1–3; USGS 2005, 2010). Between 1966 and 2006, the 25 largest glaciers (those that are presently believed to be larger than 0.1 square kilometer (25 acres) in area) shrank by an average of 26.4 percent, whereas smaller glaciers (those that are presently believed to be smaller than 0.1 square kilometer (25 acres) in area) shrank at more than twice that rate (59.7 percent) (USGS 2010).

Hall and Fagre (2003, entire) modeled the effects of climate change on glaciers in Glacier NP's Blackfoot-Jackson basin using then-current climate assumptions (doubling of atmospheric carbon dioxide by 2030). Current climate change publications consider scenarios with higher anticipated carbon dioxide concentrations and associated temperature changes. However, we are not aware of any other published studies using more recent climate scenarios that speak directly to anticipated conditions in Glacier NP, so we use Hall and Fagre's predictions in our analysis. Under this scenario, they predicted that increases in winter precipitation would not be able to buffer glacial shrinking, and the Blackfoot-Jackson glaciers, which are among the largest in Glacier NP, would disappear entirely by 2030 (Hall and Fagre 2003, pp. 137–138).

Glacial shrinking varies by topography (structure and position of land underlying the glaciers), with the result that glaciers shrink at different rates (*e.g.,* Key *et al.* 2002, p. J370; Hall and Fagre 2003, p. 136). Given the greater relative rate of shrinkage observed in smaller glaciers (*e.g.,* USGS 2010), we presume that if Hall and Fagre's projections are correct, then nearly all glaciers should be gone from Glacier NP by 2030. We base our analysis as to whether climate change threatens the meltwater lednian stonefly on this assumption.

The consequences of glacier shrinking and glacier loss to aquatic systems inhabited by the meltwater lednian stonefly in Glacier NP are expected to be significant (*e.g.,* Fagre 2005, p. 8). Glaciers act as water banks, whose continual melt helps regulate stream water temperatures and maintain streamflows during late summer or drought periods (Hauer *et al.* 2007, p. 107; USGS 2010). Loss of glaciers may lead to direct dewatering of headwater stream reaches, thus desiccating (drying) habitats currently occupied by lednian stoneflies that are often in close proximity to glaciers (*e.g.,* Baumann and Stewart 1980, p. 658). Permanent desiccation (*i.e.,* no streamflow) resulting from loss of glaciers is expected to result directly in the loss of suitable habitat for the meltwater lednian stonefly and the extirpation of populations that are directly dependent on surface runoff from melting glaciers.

In some cases, streams might change from perennial (always flowing) to ephemeral (only flowing seasonally) as glaciers disappear (Hauer *et al.* 1997, p. 909). A transition from perennial to ephemeral streamflow also is expected to reduce the extent of habitat suitable for the meltwater lednian stonefly; however, the actual response may be more complex in this scenario. For example, adults of the species emerge (transition from aquatic larvae to terrestrial winged adults) and reproduce in the short time period in August and September when the streams are not covered with seasonal snowpack. The species is thus adapted to reproduce in a very narrow ecological window. If the stream only flows seasonally, the species may still be able to complete its life cycle if the nymph (larval) stage can withstand seasonal stream drying. We do not know whether the species can complete its entire life cycle within 1 year (univoltine) or across more than 1 year (semivoltine), nor do we have projections for which streams may dry seasonally in Glacier NP. Therefore, at this time we cannot accurately predict the response of the species in cases where streams change from perennial to ephemeral. However, we do presume that this change will, at a minimum, reduce the distribution and abundance of the species.

Loss of glaciers also may indirectly affect alpine streams by changing the riparian vegetation and nutrient cycling in stream ecosystems. For example, the reduced snowpacks that lead to glacier recession are predicted to allow high-elevation trees to become established above the current treeline and in subalpine meadows, and thus to reduce the diversity of herbaceous plants (Hall and Fagre 2003, pp. 138–139). Changes in riparian vegetation (such as a shift from deciduous to coniferous vegetation) may affect nutrient cycling in headwater streams and the quality of food resources available to herbivorous aquatic insects (*e.g.,* Hisabae *et al.* 2010, pp. 5–7), such as the meltwater lednian stonefly and other aquatic macroinvertebrates.

Changes to Streamflow and Water Temperature

Reduced water volume of snowmelt runoff from glaciers (Fagre 2005, p. 7), combined with earlier runoff (*e.g.,* Fagre 2005, p. 1) and increases in temperatures expected under climate change (Karl *et al.* 2009, p. 135), may result in water temperatures above the physiological limits for survival or optimal growth for the meltwater lednian stonefly, which is a cold-water species (MNHP 2010a). Given the strong temperature gradients that influence the distribution of aquatic invertebrates (Fagre *et al.* 1997, p. 763; Lowe and Hauer 1999, pp. 1637, 1640, 1642; Hauer *et al.* 2007, p. 110) and our

assumption that the meltwater lednian stonefly responds similarly to these types of gradients, we expect that there will be major changes in invertebrate communities, with species that currently occupy more downstream reaches shifting their distributions to higher elevations to track changing thermal regimes (*e.g.,* Fagre 2005, p. 7). One likely result is the displacement or extirpation or both of stenothermic species that occupy headwater stream reaches (such as the meltwater lednian stonefly), due to thermal conditions that become unsuitable, encroaching aquatic invertebrate species that may be superior competitors, or changed thermal conditions that may favor the encroaching species in competitive interactions between the species (so-called condition-specific competition). Consequently, we infer that changes in the timing and volume of streamflow coupled with increased summer water temperatures will reduce the extent of suitable habitat and result in the extirpation of some meltwater lednian stonefly populations.

In summary, we expect environmental changes resulting from climate change to affect the meltwater lednian stonefly through loss of glaciers, which can lead to the permanent or seasonal drying of currently occupied habitats, and through interrelated alterations to existing hydrologic and thermal regimes, which will reduce the extent of habitat suitable for this species because it has very specific thermal requirements (*i.e.,* it is a cold-water obligate). Environmental changes resulting from climate change are ongoing based on the documented shrinking of glaciers in Glacier NP, and are expected to continue in the foreseeable future in Glacier NP (*e.g.,* Fagre and Hall 2003, entire) and across western North America (USGS 2010, p.1; Karl *et al.* 2009, p. 135). Consequently, we conclude that the threat of current and future environmental changes resulting from climate change occurs over the entire range of the species. This threat has likely reduced the amount of suitable habitat for the meltwater lednian stonefly, based on the documented extent of glacial melting. However, data on the species is sparse and limited to a handful of observations (*e.g., see* Table 1 above). Thus, we have no empirical basis for evaluating whether there are any trends in the occurrence or abundance of the species, nor can we speak to whether environmental changes resulting from climate change have actually affected populations. We reason that future environmental changes resulting from climate change will likely result in the extirpation of populations of the meltwater lednian stonefly because of stream drying and increased water temperatures, and that there will be substantial reductions in the amount of suitable habitat for the species relative to its current range. Effects on populations found in spring habitats may lag behind those found in stream habitats directly associated with melting glaciers or snowfields. Chemical, hydrologic, and thermal conditions of both habitat types are ultimately influenced by melting snow and ice, but conditions in spring habitats are more stable (*e.g.,* Hauer *et al.* 2007, p. 107; Giersch 2010c, pers. comm.) and should change more slowly because their groundwater sources are storing water from melted snow and ice. Ultimately, spring habitats might also dry as their groundwater sources are depleted, and not replenished by glacial meltwater.

The impacts of environmental changes resulting from climate change will likely continue within the foreseeable future (40 years). Due to the magnitude and extent of the effects of the environmental changes resulting from climate change, we conclude that the environmental changes resulting from climate change constitute a significant threat to the meltwater lednian stonefly in the foreseeable future.

Maintenance and Improvement of Glacier National Park Infrastructure

Glacier NP is managed to protect natural and cultural resources, and the landscape within the park is relatively pristine. However, the Glacier NP does include a number of human-built facilities and structures, such as the Going-to-the-Sun Road (which bisects the Glacier NP) and numerous visitor centers, trailheads, overlooks, and lodges (*e.g.,* NPS 2003a, pp. S3, 11). Maintenance and improvement of these facilities and structures could conceivably lead to disturbance of the natural environment.

One major project initiated in 2003, and that is ongoing as of 2011, is the improvement of the Going-to-the-Sun Road (NPS 2003a; 2003b). This road parallels or bisects a number of streams in the Glacier NP including McDonald, Logan, Lunch, Siyeh, and Baring Creeks (NPS 2003a, p. 134). Localized land disturbance associated with construction activities could lead to introduction of sediment into stream channels (*e.g.,* NPS 2003a, pp. S18–S19, 74). However, the collection sites for the meltwater lednian stonefly in streams adjacent to or bisected by the road (*e.g.,* Logan, Lunch, and Baring Creeks; *see* Table 1 above) are all upstream from the road. We anticipate that any disturbance to aquatic habitats from road construction would occur in the immediate vicinity of the construction and that any impacts (*i.e.,* sediment input) would be translated downstream. Thus, we conclude that road maintenance does not constitute a threat to the meltwater lednian stonefly or its habitat now or in the foreseeable future.

We do not have any information indicating maintenance and improvement of other Glacier NP facilities and structures is affecting the species. Most documented occurrences of meltwater lednian stonefly are in remote locations upstream from human-built structures; thus we conclude that maintenance and improvement of other Glacier NP facilities and structures does not constitute a threat to the meltwater lednian stonefly or its habitat now or in the foreseeable future.

Glacier National Park Visitor Impacts

Between 2000 to 2008, Glacier NP averaged more than 1.8 million visitors annually (NPS 2008). Many of the recent collection sites for the meltwater lednian stonefly (*e.g.,* Logan and Reynolds Creeks; *see* Table 1 above) are near visitor centers or adjacent to popular hiking trails. Theoretically, human activity (wading) in streams by anglers or hikers could disturb meltwater lednian stonefly habitat. However, we consider it unlikely that many Glacier NP visitors would actually wade in stream habitats where the species has been collected, because the sites are in small, high-elevation streams situated in rugged terrain, and most would not be suitable for angling. In addition, the sites are typically snow covered into late July or August (Giersch 2010a, pers. comm.), and the alpine areas begin to accumulate snowpack in the fall, so the sites occupied by the stonefly are not accessible for more than a few months. We also note that the most accessible collection sites in Logan Creek near the Logan Pass Visitor Center and the Going-to-the-Sun Road (so called "Jones Flat" at Oberlin Bend) are currently closed to public use and entry to protect resident vegetation (NPS 2010, pp. J5, J24). We conclude that impacts to the meltwater lednian stonefly and its habitat from public visitors to Glacier NP do not constitute a threat now or in the foreseeable future.

Summary of Factor A

Climate change, and the associated effects of glacier loss, reduced streamflows, and increased water temperatures, is expected to

significantly reduce the occurrence of populations and extent of suitable habitat for the meltwater lednian stonefly in Glacier NP in the foreseeable future. Nearly all known recent occurrences of the meltwater lednian stonefly are in close proximity to glaciers that are projected to disappear during the next 20 years. Consequently, we expect that the environmental changes resulting from climate change will significantly alter the habitat of all extant populations of the meltwater lednian stonefly, and we conclude that the loss of glaciers represents a high-intensity threat (*i.e.,* one that results in dramatic changes to the species' habitat and distribution) and that this threat is, and will continue to be, large in scope (most, if not all, known populations will be affected) now and into the foreseeable future. The significant reduction in glacier size observed during the past 40 years is evidence that the environmental changes resulting from climate change also may represent a current threat to this species, but we do not have any information on trends in the occurrence of meltwater lednian stonefly populations or changes in densities of specific populations to confirm this. In addition, we anticipate that effects of the environmental changes resulting from climate change on the species will become more pronounced, or that they will accelerate in the foreseeable future, as glaciers melt and eventually disappear in Glacier NP. In conclusion, we find that the meltwater lednian stonefly is likely to become in danger of extinction in the foreseeable future because of the environmental changes resulting from climate change.

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

We are not aware of any threats involving the overutilization or collection of the meltwater lednian stonefly (*Lednia tumana*) for any commercial, recreational, scientific, or educational purposes at this time. We are aware that specimens are occasionally collected for scientific purposes to determine its distribution and abundance (*e.g.,* Baumann and Stewart 1980, pp. 655, 658; NPS 2009); however, the species is observed to be relatively abundant in preferred habitats (*e.g.,* NPS 2009). We have no information that suggests past collections, current collections, or any collections in the foreseeable future will result in population-level effects to the species. Consequently, we do not consider overutilization for commercial, recreational, scientific, or educational purposes to be a threat to the meltwater lednian stonefly.

Factor C. Disease or Predation

We are not aware of any diseases that affect the meltwater lednian stonefly. Therefore, we do not consider disease to be a threat to the species now or in the foreseeable future.

We presume that nymph and adult meltwater lednian stoneflies may occasionally be subject to predation by bird species such as the American dipper (*Cinclus mexicanus*). The American dipper prefers to feed on aquatic invertebrates in fast-moving, clear, alpine streams (MNHP 2010b), and the species is native to Glacier NP. As such, predation by American dipper on the meltwater lednian stonefly would represent a natural ecological interaction in the Glacier NP. We have no evidence that the extent of such predation, if it occurs, represents any population-level threat to the meltwater lednian stonefly. Therefore, we do not consider predation to be a threat to the species now or in the foreseeable future.

In summary, there is currently no scientific evidence to indicate that the meltwater lednian stonefly is affected by any diseases, or that any avian predation that occurs constitutes an abnormal (above background-level) predator-prey interaction likely to have adverse population-wide effects. Therefore, we do not find disease or predation to be threats to the meltwater lednian stonefly now or in the forseeable future.

Factor D. Inadequacy of Existing Regulatory Mechanisms

The Act requires us to examine the adequacy of existing regulatory mechanisms with respect to those existing and foreseeable threats that place the meltwater lednian stonefly in danger of becoming either endangered or threatened. The currently documented distribution of the species is within the boundaries of Glacier NP, which is under the jurisdiction of the National Park Service (NPS). Thus, there are a number of Federal laws and regulations that may be relevant.

National Environmental Policy Act

All Federal agencies are required to adhere to the National Environmental Policy Act (NEPA) of 1970 (42 U.S.C. 4321 *et seq.*) for projects they fund, authorize, or carry out. The Council on Environmental Quality's regulations for implementing NEPA (40 CFR 1500–1518) state that, when preparing environmental impact statements, agencies shall include a discussion on the environmental impacts of the various project alternatives, any adverse environmental effects which cannot be avoided, and any irreversible or irretrievable commitments of resources involved (40 CFR 1502). The NEPA itself is a disclosure law, and does not require subsequent minimization or mitigation measures by the Federal agency involved. Although the NPS may include conservation measures for meltwater lednian stonefly or any other species as a result of the NEPA process, any such measures are typically voluntary in nature and are not required by NEPA.

National Park Service Organic Act

The NPS Organic Act of 1916 (16 U.S.C. 1 *et seq.*), as amended, states that the NPS "shall promote and regulate the use of the Federal areas known as national parks, monuments, and reservations * * * to conserve the scenery and the national and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." The current distribution of the meltwater lednian stonefly is entirely within the boundaries of Glacier NP, so the NPS Organic Act is presumed to be one Federal law of particular relevance to the species. Although Glacier NP does not have a management plan specific to the meltwater lednian stonefly, the habitats occupied by the species remain relatively pristine and generally free from direct human impacts from Glacier NP visitors (*see* discussion under Factor A). We also note that the most accessible meltwater lednian collection sites in Logan Creek near the Logan Pass Visitor Center and the Going-to-the-Sun Road (so called "Jones Flat" at Oberlin Bend) are currently closed to public use and entry to protect resident vegetation under Glacier NP management regulations (NPS 2010, pp. J5, J24). We believe that the NPS Organic Act provides adequate protection from the species and its habitat being directly destroyed or modified by most human activities, including visitor use and development. However, the NPS Organic Act does not address the primary threat to the species of habitat loss resulting from the environmental changes due to climate change. Therefore, the Organic Act does not constitute an adequate regulatory mechanism for this threat.

Clean Air Act

On December 15, 2009, the U.S. Environmental Protection Agency (EPA) published in the **Federal Register** (74 FR 66496) a rule titled, "Endangerment

and Cause or Contribute Findings for Greenhouse Gases under Section 202(a) of the Clean Air Act." In this rule, the EPA Administrator found that the current and projected concentrations of the six long-lived and directly emitted greenhouse gases—carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride—in the atmosphere threaten the public health and welfare of current and future generations; and that the combined emissions of these greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution that threatens public health and welfare (74 FR 66496). In effect, the EPA has concluded that the greenhouse gases linked to climate change are pollutants, whose emissions can now be subject to the Clean Air Act (42 U.S.C. 7401 *et seq.; see* 74 FR 66496). However, specific regulations to limit greenhouse gas emissions were only proposed in 2010. At present, we have no basis to conclude that implementation of the Clean Air Act in the foreseeable future (40 years, based on global climate projections) will substantially reduce the current rate of global climate change through regulation of greenhouse gas emissions. Thus, we conclude that the Clean Air Act does not adequately address the primary threat to the meltwater lednian stonefly, namely the anticipated loss of thermally and hydrologically suitable habitat as a result of the melting of glaciers and other environmental changes that result from climate change in Glacier NP.

Summary of Factor D

The existing regulatory mechanisms, especially the NPS Organic Act, appear to adequately protect the pristine nature of Glacier NP and presumably the high-alpine streams inhabited by the meltwater lednian stonefly. Thus, at a local or regional level we have no evidence that such regulatory mechanisms are inadequate to protect the species now or in the foreseeable future, and we expect that meltwater lednian stonefly habitat in Glacier NP will be generally protected from direct human disturbance. However, we consider habitat loss and modification resulting from the environmental changes due to climate change to constitute the primary threat to the species. The United States is only now beginning to address global climate change through the regulatory process (*e.g.,* Clean Air Act). We have no information on what regulations may eventually be adopted, and when implemented, if they would address the changes in meltwater lednian stonefly habitat that are likely to occur in the foreseeable future. Consequently, we conclude that existing regulatory mechanisms are not adequate to address the threat of habitat loss and modification resulting from the environmental changes due to climate change to the meltwater lednian stonefly in the foreseeable future.

Factor E. Other Natural or Manmade Factors Affecting The Species' Continued Existence

Restricted Range and Stochastic (Random) Events

The meltwater lednian stonefly is currently considered to be a narrow endemic found only within Glacier NP. At present, the species' restricted range makes the species vulnerable to extirpation by localized disturbances or environmental conditions, such as fire, flood, and drought. We have no information on the specific effects of any of these disturbances on the meltwater lednian stonefly, nor any information on the ability of the species to recover from disturbance or disperse to new habitats. However, in general, organisms of alpine stream segments may be isolated by specific thermal or habitat criteria that make transfer from one stream to another difficult despite the physical connections that exist in dendritic stream networks (*e.g.,* Hauer *et al.* 2007, pp. 108–110). We presume that the species' restricted range does not constitute a threat in itself for the meltwater lednian stonefly, especially as it occupies habitats that are generally considered pristine and that should be comparatively resistant and resilient to disturbance compared to more intensively managed landscapes. We do not consider the species' restricted range to be a threat at the present time, but we do anticipate that the species' restricted range may interact with the anticipated environmental changes resulting from the effects of climate change to increase the risk of extirpation, and therefore to become a threat in the foreseeable future.

Summary of Factor E

The restricted range of the meltwater lednian stonefly does not necessarily constitute a threat in itself. However, the restricted range in concert with the threat of habitat loss and modification resulting from the environmental changes due to climate change is expected to increase the vulnerability of the species, and thus we anticipate this will become a threat in the foreseeable future. We are not aware of any additional natural or manmade factors affecting the species' continued existence that present a current or potential threat in the foreseeable future to the meltwater lednian stonefly, but we do consider the interaction of the species' restricted range with the threat of habitat loss in the foreseeable future to be a threat to the species under this factor.

Finding for the Meltwater Lednian Stonefly

As required by the Act, we considered the five factors in assessing whether the meltwater lednian stonefly is endangered or threatened throughout all or a significant portion of its range. We carefully examined the best scientific and commercial information available regarding the past, present, and future threats faced by the species. We reviewed the petition, information available in our files, other available published and unpublished information, and we consulted with recognized experts and other Federal and State agencies.

The meltwater lednian stonefly is a narrowly distributed endemic presently known to occur in a small number of cold, snowmelt- or glacier-fed, high-alpine streams in Glacier NP, Montana. Our status review identified threats to the species related to Factors A, D, and E. In particular, under Factor A, the melting of glaciers in Glacier NP is considered a threat to the species, now and in the foreseeable future, because loss of glaciers is expected to alter the thermal and hydrologic regimes of high-alpine streams occupied by the species. Higher water temperatures, seasonal or permanent stream dewatering, and changes in the timing and volume of snowmelt may change the existing habitat such that it no longer satisfies the ecological and physiological requirements of the species. While existing regulatory mechanisms provide adequate protection for the meltwater lednian stonefly and its habitat from direct destruction or modification resulting from most human activities, the existing regulatory mechanisms do not address the primary threat to the species, which is habitat loss and modification resulting from environmental changes caused by global climate change. Thus, under Factor D, we conclude the existing regulatory mechanisms do not adequately address the threat of habitat loss and modification in the foreseeable future. In addition, under Factor E we conclude that the restricted range of the species, while not a threat by itself, is expected to interact with the threat of habitat loss and modification to increase the

vulnerability of the species in the forseeable future.

On the basis of the best scientific and commercial information available, we find that listing of the meltwater lednian stonefly as endangered or threatened is warranted. We will make a determination on the status of the species as endangered or threatened when we prepare a proposed listing determination. However, as explained in more detail below (*see* Preclusion and Expeditious Progress section), an immediate proposal of a regulation implementing this action is precluded by higher priority listing actions, and progress is being made to add or remove qualified species from the Lists of Endangered and Threatened Wildlife and Plants.

We have reviewed the available information to determine if the existing and foreseeable threats render the species at risk of extinction now, such that issuing an emergency regulation temporarily listing the species, under section 4(b)(7) of the Act, is warranted. We determined that issuing an emergency regulation temporarily listing the species is not warranted at this time, because the species is not under immediate threat of extinction. Glaciers still exist in Glacier NP and are expected to be present through the next decade. However, if at any time we determine that issuing an emergency regulation temporarily listing the meltwater lednian stonefly is warranted, we will initiate the action at that time.

Listing Priority Number

The Service adopted guidelines on September 21, 1983 (48 FR 43098), to establish a rational system for utilizing available resources for the highest priority species when adding species to the Lists of Endangered or Threatened Wildlife and Plants or reclassifying species listed as threatened to endangered status. These guidelines, titled "Endangered and Threatened Species Listing and Recovery Priority Guidelines," address the immediacy and magnitude of threats, and the level of taxonomic distinctiveness by assigning priority in descending order to monotypic genera (genus with one species), full species, and subspecies (or equivalently, distinct population segments of vertebrates).

As a result of our analysis of the best available scientific and commercial information, we assigned the meltwater lednian stonefly a Listing Priority Number (LPN) of 4 based on our finding that the species faces threats that are of high magnitude but are not imminent. These primary threats include the present or threatened destruction, modification, or curtailment of its habitat resulting from climate change, and the inadequacy of existing regulatory mechanisms to address threats from climate change.

Under the Service's guidelines, the magnitude of threat is the first criterion we look at when establishing a listing priority. The guidelines indicate that species with the highest magnitude of threat are those species facing the greatest threats to their continued existence. These species receive the highest listing priority. We consider the threats that the meltwater lednian stonefly faces from melting glaciers and other environmental changes that result from climate change to be high in magnitude because of the recent observations of glacial ablation (shrinking) in Glacier NP and the projections that all glaciers in Glacier NP may disappear in the next 20 years, and because we expect all known populations of the meltwater lednian stonefly to be affected by these changes.

Under our LPN guidelines, the second criterion we consider in assigning a listing priority is the immediacy of threats. This criterion is intended to ensure that species facing actual, identifiable threats are given priority over those for which threats are only potential or for those that are intrinsically vulnerable but are not known to be presently facing such threats. The significant reduction in glacier sizes in Glacier NP observed during the past few decades and the changes in hydrologic patterns and water temperatures attributed to climate change suggests that habitat loss and modification may represent a current threat to the species. Because of its apparent dependence on glacial meltwater for survival, the meltwater lednian stonefly is intrinsically vulnerable to threats from the environmental changes resulting from climate change. However, we do not have sufficient empirical information on the meltwater lednian stonefly to evaluate whether there are any trends in the occurrence or abundance of the species, nor do we have any information about the species' response to such changes. Thus, we cannot conclude that the species is currently actually facing the threat of habitat loss and modification, which would be necessary to make a finding that the threat of environmental changes resulting from climate change is imminent. Environmental changes resulting from climate change are reasonably certain to occur, but we have no empirical (documented) evidence that the resulting threat to the species is imminent (ongoing). The other identified threats include inadequate regulatory mechanisms for addressing the environmental changes resulting from climate change, and the interaction of the species' restricted range with the threat of habitat loss resulting from climate change. These threats act in concert with climate change, and so they also are not imminent. We expect the threat of climate change to intensify in the foreseeable future based on projections of air temperature increases from current global climate models and the predicted melting of all glaciers in Glacier NP by the year 2030. Therefore, based on our LPN guidelines, the threats are not imminent (ongoing).

The third criterion in our LPN guidelines is intended to devote resources to those species representing highly distinctive or isolated gene pools as reflected by taxonomy. The meltwater lednian stonefly (*Lednia tumana*) is a valid taxon at the species level and is currently recognized as a monotypic genus; thus it receives a higher priority than a species or subspecies.

Therefore, we have assigned the meltwater lednian stonefly an LPN of 4 based on our determination that the threats are high in magnitude but not imminent, and because the species is recognized as a monotypic genus.

We will continue to monitor the threats to the meltwater lednian stonefly and the species' status on an annual basis, and should the taxonomic status or the magnitude or imminence of the threats change, we will revisit our assessment of its LPN.

Because we have assigned the meltwater lednian stonefly a LPN of 4, work on a proposed listing determination for the meltwater lednian stonefly is precluded by work on higher priority listing actions with absolute statutory, court-ordered, or court-approved deadlines and on final listing determinations for those species that were proposed for listing with funds from FY 2010. This work includes all the actions listed in the tables below under Preclusion and Expeditious Progress.

Preclusion and Expeditious Progress

Preclusion is a function of the listing priority of a species in relation to the resources that are available and the cost and relative priority of competing demands for those resources. Thus, in any given fiscal year (FY), multiple factors dictate whether it will be possible to undertake work on a listing proposal regulation or whether promulgation of such a proposal is precluded by higher-priority listing actions.

The resources available for listing actions are determined through the annual Congressional appropriations process. The appropriation for the Listing Program is available to support work involving the following listing actions: Proposed and final listing rules; 90-day and 12-month findings on petitions to add species to the Lists of Endangered and Threatened Wildlife and Plants (Lists) or to change the status of a species from threatened to endangered; annual "resubmitted" petition findings on prior warranted-but-precluded petition findings as required under section 4(b)(3)(C)(i) of the Act; critical habitat petition findings; proposed and final rules designating critical habitat; and litigation-related, administrative, and program-management functions (including preparing and allocating budgets, responding to Congressional and public inquiries, and conducting public outreach regarding listing and critical habitat). The work involved in preparing various listing documents can be extensive and may include, but is not limited to: Gathering and assessing the best scientific and commercial data available and conducting analyses used as the basis for our decisions; writing and publishing documents; and obtaining, reviewing, and evaluating public comments and peer review comments on proposed rules and incorporating relevant information into final rules. The number of listing actions that we can undertake in a given year also is influenced by the complexity of those listing actions; that is, more complex actions generally are more costly. The median cost for preparing and publishing a 90-day finding is $39,276; for a 12-month finding, $100,690; for a proposed rule with critical habitat, $345,000; and for a final listing rule with critical habitat, $305,000.

We cannot spend more than is appropriated for the Listing Program without violating the Anti-Deficiency Act (*see* 31 U.S.C. 1341(a)(1)(A)). In addition, in FY 1998 and for each fiscal year since then, Congress has placed a statutory cap on funds that may be expended for the Listing Program, equal to the amount expressly appropriated for that purpose in that fiscal year. This cap was designed to prevent funds appropriated for other functions under the Act (for example, recovery funds for removing species from the Lists), or for other Service programs, from being used for Listing Program actions (*see* House Report 105–163, 105th Congress, 1st Session, July 1, 1997).

Since FY 2002, the Service's budget has included a critical habitat subcap to ensure that some funds are available for other work in the Listing Program ("The critical habitat designation subcap will ensure that some funding is available to address other listing activities" (House Report No. 107–103, 107th Congress, 1st Session, June 19, 2001)). In FY 2002 and each year until FY 2006, the Service has had to use virtually the entire critical habitat subcap to address court-mandated designations of critical habitat, and consequently none of the critical habitat subcap funds have been available for other listing activities. In some FYs since 2006, we have been able to use some of the critical habitat subcap funds to fund proposed listing determinations for high-priority candidate species. In other FYs, while we were unable to use any of the critical habitat subcap funds to fund proposed listing determinations, we did use some of this money to fund the critical habitat portion of some proposed listing determinations so that the proposed listing determination and proposed critical habitat designation could be combined into one rule, thereby being more efficient in our work. At this time, for FY 2011, we do not know if we will be able to use some of the critical habitat subcap funds to fund proposed listing determinations.

We make our determinations of preclusion on a nationwide basis to ensure that the species most in need of listing will be addressed first and also because we allocate our listing budget on a nationwide basis. Through the listing cap, the critical habitat subcap, and the amount of funds needed to address court-mandated critical habitat designations, Congress and the courts have in effect determined the amount of money available for other listing activities nationwide. Therefore, the funds in the listing cap, other than those needed to address court-mandated critical habitat for already listed species, set the limits on our determinations of preclusion and expeditious progress.

Congress identified the availability of resources as the only basis for deferring the initiation of a rulemaking that is warranted. The Conference Report accompanying Public Law 97–304 (Endangered Species Act Amendments of 1982), which established the current statutory deadlines and the warranted-but-precluded finding, states that the amendments were "not intended to allow the Secretary to delay commencing the rulemaking process for any reason other than that the existence of pending or imminent proposals to list species subject to a greater degree of threat would make allocation of resources to such a petition [that is, for a lower-ranking species] unwise." Although that statement appeared to refer specifically to the "to the maximum extent practicable" limitation on the 90-day deadline for making a "substantial information" finding, that finding is made at the point when the Service is deciding whether or not to commence a status review that will determine the degree of threats facing the species, and therefore the analysis underlying the statement is more relevant to the use of the warranted-but-precluded finding, which is made when the Service has already determined the degree of threats facing the species and is deciding whether or not to commence a rulemaking.

In FY 2011, on March 18, 2011, Congress passed a continuing resolution which provides funding at the FY 2010 enacted level through April 8, 2011. Until Congress appropriates funds for FY 2011 at a different level, we will fund listing work based on the FY 2010 amount. Thus, at this time in FY 2011, the Service anticipates an appropriation of $22,103,000 for the listing program based on FY 2010 appropriations. Of that, the Service anticipates needing to dedicate $11,632,000 for determinations of critical habitat for already listed species. Also $500,000 is appropriated for foreign species listings under the Act. The Service thus has $9,971,000 available to fund work in the following categories: compliance with court orders and court-approved settlement agreements requiring that petition findings or listing determinations be completed by a specific date; section 4 (of the Act) listing actions with absolute statutory deadlines; essential litigation-related, administrative, and listing program-management functions; and high-priority listing actions for some of our candidate species. In FY 2010, the Service received many new petitions and a single petition to list 404 species. The receipt of petitions for a large number of species is consuming the Service's listing funding that is not dedicated to meeting court-ordered commitments. Absent some ability to balance effort among listing duties under existing funding levels, it is unlikely that the Service will be able to initiate any new listing determination for candidate species in FY 2011.

In 2009, the responsibility for listing foreign species under the Act was transferred from the Division of Scientific Authority, International Affairs Program, to the Endangered Species Program. Therefore, starting in FY 2010, we used a portion of our funding to work on the actions described above for listing actions related to foreign species. In FY 2011, we anticipate using $1,500,000 for work

on listing actions for foreign species which reduces funding available for domestic listing actions; however, currently only $500,000 has been allocated for this function. Although there are no foreign species issues included in our high-priority listing actions at this time, many actions have statutory or court-approved settlement deadlines, thus increasing their priority. The budget allocations for each specific listing action are identified in the Service's FY 2011 Allocation Table (part of our record).

For the above reasons, funding a proposed listing determination for the meltwater lednian stonefly, which has an LPN of 4, is precluded by court-ordered and court-approved settlement agreements, listing actions with absolute statutory deadlines, work on final listing determinations for those species that were proposed for listing with funds from FY 2011, and work on proposed listing determinations for those candidate species with a higher listing priority (*i.e.,* candidate species with LPNs of 1 to 3).

Based on our September 21, 1983, guidelines for assigning an LPN for each candidate species (48 FR 43098), we have a significant number of species with high priority LPNs. Using these guidelines, we assign each candidate an LPN of 1 to 12, depending on the magnitude of threats (high or moderate to low), immediacy of threats (imminent or nonimminent), and taxonomic status of the species (in order of priority: Monotypic genus (a species that is the sole member of a genus); species; or part of a species (subspecies, distinct population segment, or significant portion of the range)). The lower the listing priority number, the higher the listing priority (that is, a species with an LPN of 1 would have the highest listing priority).

Because of the large number of high-priority species, we have further ranked the candidate species with an LPN of 2 by using the following extinction-risk type criteria: International Union for the Conservation of Nature and Natural Resources (IUCN) Red list status/rank, Heritage rank (provided by NatureServe), Heritage threat rank (provided by NatureServe), and species currently with fewer than 50 individuals, or 4 or fewer populations. Those species with the highest IUCN rank (critically endangered), the highest Heritage rank (G1), the highest Heritage threat rank (substantial, imminent threats), and currently with fewer than 50 individuals, or fewer than 4 populations, originally comprised a group of approximately 40 candidate species ("Top 40"). These 40 candidate species have had the highest priority to receive funding to work on a proposed listing determination. As we work on proposed and final listing rules for those 40 candidates, we apply the ranking criteria to the next group of candidates with an LPN of 2 and 3 to determine the next set of highest priority candidate species. Finally, proposed rules for reclassification of threatened species to endangered are lower priority, because as listed species, they are already afforded the protection of the Act and implementing regulations. However, for efficiency reasons, we may choose to work on a proposed rule to reclassify a species to endangered if we can combine this with work that is subject to a court-determined deadline.

With our workload so much bigger than the amount of funds we have to accomplish it, it is important that we be as efficient as possible in our listing process. Therefore, as we work on proposed rules for the highest priority species in the next several years, we are preparing multi-species proposals when appropriate, and these may include species with lower priority if they overlap geographically or have the same threats as a species with an LPN of 2. In addition, we take into consideration the availability of staff resources when we determine which high-priority species will receive funding to minimize the amount of time and resources required to complete each listing action.

As explained above, a determination that listing is warranted but precluded must also demonstrate that expeditious progress is being made to add and remove qualified species to and from the Lists of Endangered and Threatened Wildlife and Plants. As with our "precluded" finding, the evaluation of whether progress in adding qualified species to the Lists has been expeditious is a function of the resources available for listing and the competing demands for those funds. (Although we do not discuss it in detail here, we are also making expeditious progress in removing species from the list under the Recovery program in light of the resource available for delisting, which is funded by a separate line item in the budget of the Endangered Species Program. So far during FY 2011, we have completed one delisting rule.) Given the limited resources available for listing, we find that we are making expeditious progress in FY 2011 in the Listing Program. This progress included preparing and publishing the following determinations:

FY 2011 Completed Listing Actions

Publication date	Title	Actions	FR pages
10/6/2010	Endangered Status for the Altamaha Spinymussel and Designation of Critical Habitat.	Proposed Listing Endangered	75 FR 61664–61690
10/7/2010	12-month Finding on a Petition to list the Sacramento Splittail as Endangered or Threatened.	Notice of 12-month petition finding, Not warranted.	75 FR 62070–62095
10/28/2010	Endangered Status and Designation of Critical Habitat for Spikedace and Loach Minnow.	Proposed Listing Endangered (uplisting).	75 FR 66481–66552
11/2/2010	90-Day Finding on a Petition to List the Bay Springs Salamander as Endangered.	Notice of 90-day Petition Finding, Not substantial.	75 FR 67341–67343
11/2/2010	Determination of Endangered Status for the Georgia Pigtoe Mussel, Interrupted Rocksnail, and Rough Hornsnail and Designation of Critical Habitat.	Final Listing Endangered	75 FR 67511–67550
11/2/2010	Listing the Rayed Bean and Snuffbox as Endangered	Proposed Listing Endangered	75 FR 67551–67583
11/4/2010	12-Month Finding on a Petition to List Cirsium wrightii (Wright's Marsh Thistle) as Endangered or Threatened.	Notice of 12-month petition finding, Warranted but precluded.	75 FR 67925–67944
12/14/2010	Endangered Status for Dunes Sagebrush Lizard	Proposed Listing Endangered	75 FR77801–77817
12/14/2010	12-month Finding on a Petition to List the North American Wolverine as Endangered or Threatened.	Notice of 12-month petition finding, Warranted but precluded.	75 FR 78029–78061

FY 2011 COMPLETED LISTING ACTIONS—Continued

Publication date	Title	Actions	FR pages
12/14/2010	12-Month Finding on a Petition to List the Sonoran Population of the Desert Tortoise as Endangered or Threatened.	Notice of 12-month petition finding, Warranted but precluded.	75 FR 78093–78146
12/15/2010	12-Month Finding on a Petition to List *Astragalus microcymbus* and *Astragalus schmolliae* as Endangered or Threatened.	Notice of 12-month petition finding, Warranted but precluded.	75 FR 78513–78556
12/28/2010	Listing Seven Brazilian Bird Species as Endangered Throughout Their Range.	Final Listing Endangered	75 FR 81793–81815
1/4/2011	90-Day Finding on a Petition to List the Red Knot subspecies *Calidris canutus roselaari* as Endangered.	Notice of 90-day Petition Finding, Not substantial.	76 FR 304–311
1/19/2011	Endangered Status for the Sheepnose and Spectaclecase Mussels.	Proposed Listing Endangered	76 FR 3392–3420
2/10/2011	12-Month Finding on a Petition to List the Pacific Walrus as Endangered or Threatened.	Notice of 12-month petition finding, Warranted but precluded.	76 FR 7634–7679
2/17/2011	90-Day Finding on a Petition To List the Sand Verbena Moth as Endangered or Threatened.	Notice of 90-day Petition Finding, Substantial.	76 FR 9309–9318
2/22/2011	Determination of Threatened Status for the New Zealand-Australia Distinct Population Segment of the Southern Rockhopper Penguin.	Final Listing Threatened	76 FR 9681–9692
2/22/2011	12-Month Finding on a Petition to List *Solanum conocarpum* (marron bacora) as Endangered.	Notice of 12-month petition finding, Warranted but precluded.	76 FR 9722–9733
2/23/2011	12-Month Finding on a Petition to List Thorne's Hairstreak Butterfly as Endangered.	Notice of 12-month petition finding, Not warranted.	76 FR 991–10003
2/23/2011	12-Month Finding on a Petition to List *Astragalus hamiltonii, Penstemon flowersii, Eriogonum soredium, Lepidium ostleri,* and *Trifolium friscanum* as Endangered or Threatened.	Notice of 12-month petition finding, Warranted but precluded & Not Warraned.	76 FR 10166–10203
2/24/2011	90-Day Finding on a Petition to List the Wild Plains Bison or Each of Four Distinct Population Segments as Threatened.	Notice of 90-day Petition Finding, Not substantial.	76 FR 10299–10310
2/24/2011	90-Day Finding on a Petition to List the Unsilvered Fritillary Butterfly as Threatened or Endangered.	Notice of 90-day Petition Finding, Not substantial.	76 FR 10310–10319
3/8/2011	12-Month Finding on a Petition to List the Mt. Charleston Blue Butterfly as Endangered or Threatened.	Notice of 12-month petition finding, Warranted but precluded.	76 FR 12667–12683
3/8/2011	90-Day Finding on a Petition to List the Texas Kangaroo Rat as Endangered or Threatened.	Notice of 90-day Petition Finding, Substantial.	76 FR 12683–12690
3/10/2011	Initiation of Status Review for Longfin Smelt	Notice of Status Review	76 FR 13121–31322
3/15/2011	Withdrawal of Proposed Rule to List the Flat-tailed Horned Lizard as Threatened.	Proposed rule withdrawal	76 FR 14210–14268
3/22/2011	12-Month Finding on a Petition to List the Berry Cave Salamander as Endangered.	Notice of 12-month petition finding, Warranted but precluded.	76 FR 15919–15932

Our expeditious progress also includes work on listing actions that we funded in FY 2010 and FY 2011 but have not yet been completed to date. These actions are listed below. Actions in the top section of the table are being conducted under a deadline set by a court. Actions in the middle section of the table are being conducted to meet statutory timelines, that is, timelines required under the Act. Actions in the bottom section of the table are high-priority listing actions. These actions include work primarily on species with an LPN of 2, and, as discussed above, selection of these species is partially based on available staff resources, and when appropriate, include species with a lower priority if they overlap geographically or have the same threats as the species with the high priority. Including these species together in the same proposed rule results in considerable savings in time and funding, when compared to preparing separate proposed rules for each of them in the future.

ACTIONS FUNDED IN FY 2010 AND FY 2011 BUT NOT YET COMPLETED

Species	Action
Actions Subject to Court Order/Settlement Agreement	
Mountain plover [4]	Final listing determination.
Hermes copper butterfly [3]	12-month petition finding.
4 parrot species (military macaw, yellow-billed parrot, red-crowned parrot, scarlet macaw) [5]	12-month petition finding.
4 parrot species (blue-headed macaw, great green macaw, grey-cheeked parakeet, hyacinth macaw) [5]	12-month petition finding.
4 parrots species (crimson shining parrot, white cockatoo, Philippine cockatoo, yellow-crested cockatoo) [5]	12-month petition finding.
Utah prairie dog (uplisting)	90-day petition finding.

ACTIONS FUNDED IN FY 2010 AND FY 2011 BUT NOT YET COMPLETED—Continued

Species	Action
Actions With Statutory Deadlines	
Casey's june beetle	Final listing determination.
6 Birds from Eurasia	Final listing determination.
5 Bird species from Colombia and Ecuador	Final listing determination.
Queen Charlotte goshawk	Final listing determination.
5 species southeast fish (Cumberland darter, rush darter, yellowcheek darter, chucky madtom, and laurel dace) [4]	Final listing determination.
Ozark hellbender [4]	Final listing determination.
Altamaha spinymussel [3]	Final listing determination.
3 Colorado plants (*Ipomopsis polyantha* (Pagosa Skyrocket), *Penstemon debilis* (Parachute Beardtongue), and *Phacelia submutica* (DeBeque Phacelia)) [4].	Final listing determination.
Salmon crested cockatoo	Final listing determination.
6 Birds from Peru & Bolivia	Final listing determination.
Loggerhead sea turtle (assist National Marine Fisheries Service) [5]	Final listing determination.
2 mussels (rayed bean (LPN = 2), snuffbox No LPN) [5]	Final listing determination.
CA golden trout [4]	12-month petition finding.
Black-footed albatross	12-month petition finding.
Mojave fringe-toed lizard [1]	12-month petition finding.
Kokanee—Lake Sammamish population [1]	12-month petition finding.
Cactus ferruginous pygmy-owl [1]	12-month petition finding.
Northern leopard frog	12-month petition finding.
Tehachapi slender salamander	12-month petition finding.
Coqui Llanero	12-month petition finding/ Proposed listing.
Dusky tree vole	12-month petition finding.
3 MT invertebrates (meltwater lednian stonefly (*Lednia tumana*), *Oreohelix* sp. 3, *Oreohelix* sp. 31) from 206 species petition.	12-month petition finding.
5 WY plants (*Abronia ammophila, Agrostis rossiae, Astragalus proimanthus, Boechere* (*Arabis*) *pusilla, Penstemon gibbensii*) from 206 species petition.	12-month petition finding.
Leatherside chub (from 206 species petition)	12-month petition finding.
Frigid ambersnail (from 206 species petition) [3]	12-month petition finding.
Platte River caddisfly (from 206 species petition) [5]	12-month petition finding.
Gopher tortoise—eastern population	12-month petition finding.
Grand Canyon scorpion (from 475 species petition)	12-month petition finding.
Anacroneuria wipukupa (a stonefly from 475 species petition) [4]	12-month petition finding.
3 Texas moths (*Ursia furtiva, Sphingicampa blanchardi, Agapema galbina*) (from 475 species petition)	12-month petition finding.
2 Texas shiners (*Cyprinella* sp., *Cyprinella lepida*) (from 475 species petition)	12-month petition finding.
3 South Arizona plants (*Erigeron piscaticus, Astragalus hypoxylus, Amoreuxia gonzalezii*) (from 475 species petition).	12-month petition finding.
5 Central Texas mussel species (3 from 475 species petition)	12-month petition finding.
14 parrots (foreign species)	12-month petition finding.
Striped Newt [1]	12-month petition finding.
Fisher—Northern Rocky Mountain Range [1]	12-month petition finding.
Mohave Ground Squirrel [1]	12-month petition finding.
Puerto Rico Harlequin Butterfly [3]	12-month petition finding.
Western gull-billed tern	12-month petition finding.
Ozark chinquapin (*Castanea pumila* var. *ozarkensis*) [4]	12-month petition finding.
HI yellow-faced bees	12-month petition finding.
Giant Palouse earthworm	12-month petition finding.
Whitebark pine	12-month petition finding.
OK grass pink (*Calopogon oklahomensis*) [1]	12-month petition finding.
Ashy storm-petrel [5]	12-month petition finding.
Honduran emerald	12-month petition finding.
Southeastern pop snowy plover & wintering pop. of piping plover [1]	90-day petition finding.
Eagle Lake trout [1]	90-day petition finding.
Smooth-billed ani [1]	90-day petition finding.
32 Pacific Northwest mollusks species (snails and slugs) [1]	90-day petition finding.
42 snail species (Nevada & Utah)	90-day petition finding.
Peary caribou	90-day petition finding.
Spring Mountains checkerspot butterfly	90-day petition finding.
Spring pygmy sunfish	90-day petition finding.
Bay skipper	90-day petition finding.
Spot-tailed earless lizard	90-day petition finding.
Eastern small-footed bat	90-day petition finding.
Northern long-eared bat	90-day petition finding.
Prairie chub	90-day petition finding.
10 species of Great Basin butterfly	90-day petition finding.
6 sand dune (scarab) beetles	90-day petition finding.
Golden-winged warbler [4]	90-day petition finding.
404 Southeast species	90-day petition finding.
Franklin's bumble bee [4]	90-day petition finding.
2 Idaho snowflies (straight snowfly & Idaho snowfly) [4]	90-day petition finding.

ACTIONS FUNDED IN FY 2010 AND FY 2011 BUT NOT YET COMPLETED—Continued

Species	Action
American eel [4]	90-day petition finding.
Gila monster (Utah population) [4]	90-day petition finding.
Arapahoe snowfly [4]	90-day petition finding.
Leona's little blue [4]	90-day petition finding.
Aztec gilia [5]	90-day petition finding.
White-tailed ptarmigan [5]	90-day petition finding.
San Bernardino flying squirrel [5]	90-day petition finding.
Bicknell's thrush [5]	90-day petition finding.
Chimpanzee	90-day petition finding.
Sonoran talussnail [5]	90-day petition finding.
2 AZ Sky Island plants (*Graptopetalum bartrami* & *Pectis imberbis*) [5]	90-day petition finding.
I'iwi [5]	90-day petition finding.
High-Priority Listing Actions	
19 Oahu candidate species [2] (16 plants, 3 damselflies) (15 with LPN = 2, 3 with LPN = 3, 1 with LPN = 9)	Proposed listing.
19 Maui-Nui candidate species [2] (16 plants, 3 tree snails) (14 with LPN = 2, 2 with LPN = 3, 3 with LPN = 8)	Proposed listing.
2 Arizona springsnails [2] (*Pyrgulopsis bernadina* (LPN = 2), *Pyrgulopsis trivialis* (LPN = 2))	Proposed listing.
Chupadera springsnail [2] (*Pyrgulopsis chupaderae* (LPN = 2)	Proposed listing.
8 Gulf Coast mussels (southern kidneyshell (LPN = 2), round ebonyshell (LPN = 2), Alabama pearlshell (LPN = 2), southern sandshell (LPN = 5), fuzzy pigtoe (LPN = 5), Choctaw bean (LPN = 5), narrow pigtoe (LPN = 5), and tapered pigtoe (LPN = 11)) [4].	Proposed listing.
Umtanum buckwheat (LPN = 2) and white bluffs bladderpod (LPN = 9) [4]	Proposed listing.
Grotto sculpin (LPN = 2) [4]	Proposed listing.
2 Arkansas mussels (Neosho mucket (LPN = 2) & Rabbitsfoot (LPN = 9)) [4]	Proposed listing.
Diamond darter (LPN = 2) [4]	Proposed listing.
Gunnison sage-grouse (LPN = 2) [4]	Proposed listing.
Coral Pink Sand Dunes Tiger Beetle (LPN = 2) [5]	Proposed listing.
Miami blue (LPN = 3) [3]	Proposed listing.
Lesser prairie chicken (LPN = 2)	Proposed listing.
4 Texas salamanders (Austin blind salamander (LPN = 2), Salado salamander (LPN = 2), Georgetown salamander (LPN = 8), Jollyville Plateau (LPN = 8)) [3].	Proposed listing.
5 SW aquatics (Gonzales Spring Snail (LPN = 2), Diamond Y springsnail (LPN = 2), Phantom springsnail (LPN = 2), Phantom Cave snail (LPN = 2), Diminutive amphipod (LPN = 2)) [3].	Proposed listing.
2 Texas plants (Texas golden gladecress (*Leavenworthia texana*) (LPN = 2), Neches River rose-mallow (*Hibiscus dasycalyx*) (LPN = 2)) [3].	Proposed listing.
4 AZ plants (Acuna cactus (*Echinomastus erectocentrus* var. *acunensis*) (LPN = 3), Fickeisen plains cactus (*Pediocactus peeblesianus fickeiseniae*) (LPN = 3), Lemmon fleabane (*Erigeron lemmonii*) (LPN = 8), Gierisch mallow (*Sphaeralcea gierischii*) (LPN = 2)) [5].	Proposed listing.
FL bonneted bat (LPN = 2) [3]	Proposed listing.
3 Southern FL plants (Florida semaphore cactus (*Consolea corallicola*) (LPN = 2), shellmound applecactus (*Harrisia* (= *Cereus*) *aboriginum* (= *gracilis*)) (LPN = 2), Cape Sable thoroughwort (*Chromolaena frustrata*) (LPN = 2)) [5].	Proposed listing.
21 Big Island (HI) species [5] (includes 8 candidate species—5 plants & 3 animals; 4 with LPN = 2, 1 with LPN = 3, 1 with LPN = 4, 2 with LPN = 8).	Proposed listing.
12 Puget Sound prairie species (9 subspecies of pocket gopher (*Thomomys mazama* ssp.) (LPN = 3), streaked horned lark (LPN = 3), Taylor's checkerspot (LPN = 3), Mardon skipper (LPN = 8)) [3].	Proposed listing.
2 TN River mussels (fluted kidneyshell (LPN = 2), slabside pearlymussel (LPN = 2) [5]	Proposed listing.
Jemez Mountain salamander (LPN = 2) [5]	Proposed listing.

[1] Funds for listing actions for these species were provided in previous FYs.
[2] Although funds for these high-priority listing actions were provided in FY 2008 or 2009, due to the complexity of these actions and competing priorities, these actions are still being developed.
[3] Partially funded with FY 2010 funds and FY 2011 funds.
[4] Funded with FY 2010 funds.
[5] Funded with FY 2011 funds.

We have endeavored to make our listing actions as efficient and timely as possible, given the requirements of the relevant law and regulations, and constraints relating to workload and personnel. We are continually considering ways to streamline processes or achieve economies of scale, such as by batching related actions together. Given our limited budget for implementing section 4 of the Act, these actions described above collectively constitute expeditious progress.

The meltwater lednian stonefly will be added to the list of candidate species upon publication of this 12-month finding. We will continue to monitor the status of this species as new information becomes available. This review will determine if a change in status is warranted, including the need to make prompt use of emergency listing procedures.

We intend that any proposed listing action for the meltwater lednian stonefly will be as accurate as possible. Therefore, we will continue to accept additional information and comments from all concerned governmental agencies, the scientific community, industry, or any other interested party concerning this finding.

References Cited

A complete list of references cited is available on the Internet at *http://www.regulations.gov* and upon request from the Montana Field Office (*see* **ADDRESSES** section).

Authors

The primary authors of this notice are the staff members of the Montana Field Office.

Authority

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

Dated: March 21, 2011.

Gregory E. Siekaniec,

Acting Director, Fish and Wildlife Service.

[FR Doc. 2011–7827 Filed 4–4–11; 8:45 am]

BILLING CODE 4310–55–P

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

[FWS–R9–ES–2010–0001; MO 92210–0–0010 B6]

Endangered and Threatened Wildlife and Plants; 90-Day Finding on a Petition To List the Peary Caribou and Dolphin and Union Population of the Barren-Ground Caribou as Endangered or Threatened

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notice of petition finding and initiation of status review.

SUMMARY: We, the U.S. Fish and Wildlife Service, announce a 90-day finding on a petition to list the Peary (*Rangifer tarandus pearyi*) and the Dolphin and Union population of the barren-ground (*R. t. groenlandicus x pearyi*) caribou as endangered or threatened under the Endangered Species Act of 1973, as amended (Act). Based on our review, we find that the petition presents substantial scientific and commercial information indicating that the petitioned action may be warranted. Therefore, with the publication of this notice, we are initiating a review of the status of these two subspecies to determine if listing these two subspecies is warranted. To ensure that this status review is comprehensive, we request scientific and commercial data and other information regarding these two subspecies. At the conclusion of this review, we will issue a 12-month finding on the petition, which will address whether the petitioned action is warranted, as provided in section 4(b)(3)(B) of the Act.

DATES: To allow us adequate time to conduct this review, we request that we receive information on or before June 6, 2011. After this date, you must submit information directly to the office listed in the **FOR FURTHER INFORMATION CONTACT** section below. Please note that we may not be able to address or incorporate information that we receive after the above requested date.

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

- *Federal eRulemaking Portal: http://www.regulations.gov.* Search for docket FWS–R9–ES–2010–0001 and then follow the instructions for submitting comments.
- *U.S. mail or hand-delivery:* Public Comments Processing, *Attn:* FWS–R9–ES–2010–0001; Division of Policy and Directives Management; U.S. Fish and Wildlife Service; 4401 N. Fairfax Drive, MS 2042–PDM; 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 Requested section below for more details).

FOR FURTHER INFORMATION CONTACT: Janine Van Norman, Chief, Branch of Foreign Species, Endangered Species Program, U.S. Fish and Wildlife Service, 4401 N. Fairfax Drive, Room 420, Arlington, VA 22203; telephone 703–358–2171; facsimile 703–358–1735. If you use a telecommunications device for the deaf (TDD), call the Federal Information Relay Service (FIRS) at 800–877–8339.

SUPPLEMENTARY INFORMATION:

Information Requested

When we make a finding that a petition presents substantial information indicating that listing a species or subspecies may be warranted, we are required to promptly review the status of the species (conduct a status review). For the status review to be complete and based on the best available scientific and commercial information, we request information on these two subspecies from governmental agencies (including Canadian national and provincial governments), local indigenous people of Canada (who also may be acknowledged as Native American or Aboriginal tribes), the scientific community, industry, and any other interested parties. We seek information on:

(1) Each subspecies' biology, range, and population trends, including:

(a) Habitat requirements for feeding, breeding, and sheltering;

(b) Genetics and taxonomy;

(c) Historical and current range including distribution patterns, particularly regarding their seasonal migrations;

(d) Historical and current population levels, and current and projected population trends;

(e) Potential threats to each subspecies such as mining, resource extraction, or other threats not identified; and

(f) Past and ongoing conservation measures for each subspecies or their habitat.

(2) The factors that are the basis for making a listing determination for a species or subspecies under section 4(a) of the Act (16 U.S.C. 1531 *et seq.*), which are:

(a) The present or threatened destruction, modification, or curtailment of their habitat or range;

(b) Overutilization for commercial, recreational, scientific, or educational purposes, particularly data on hunting;

(c) Disease or predation;

(d) The inadequacy of existing regulatory mechanisms; or

(e) Other natural or manmade factors affecting their continued existence.

(3) The potential effects of climate change on each subspecies and its habitat.

Please include sufficient information with your submission (such as full references) to allow us to verify any scientific or commercial information you include. Submissions merely stating support for or opposition to the action under consideration without providing supporting information, although noted, will not be considered in making a determination. Section 4(b)(1)(A) of the Act directs that determinations as to whether any species is an endangered or threatened species must be made "solely on the basis of the best scientific and commercial data available."

You may submit your information concerning this status review by one of the methods 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 Web site. If you submit a hardcopy that includes personal identifying information, you may request at the top of your document that we withhold this personal identifying information from public review. However, we cannot guarantee that we will be able to do so. We will post all