DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

[Docket No. FWS–R9–ES–2011–0061; MO–9221050083–B2]

Endangered and Threatened Wildlife and Plants; Review of Native Species That Are Candidates for Listing as Endangered or Threatened; Annual Notice of Findings on Resubmitted Petitions; Annual Description of Progress on Listing Actions

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notice of review.

SUMMARY: In this Candidate Notice of Review (CNOR), we, the U.S. Fish and Wildlife Service (Service), present an updated list of plant and animal species native to the United States that we regard as *candidates* for or have proposed for addition to the Lists of Endangered and Threatened Wildlife and Plants under the Endangered Species Act of 1973, as amended. Identification of candidate species can assist environmental planning efforts by providing advance notice of potential listings, allowing landowners and resource managers to alleviate threats and thereby possibly remove the need to list species as endangered or threatened. Even if we subsequently list a candidate species, the early notice provided here could result in more options for species management and recovery by prompting candidate conservation measures to alleviate threats to the species.

The CNOR summarizes the status and threats that we evaluated in order to determine that species qualify as candidates and to assign a listing priority number (LPN) to each species or to determine that species should be removed from candidate status. Additional material that we relied on is available in the Species Assessment and Listing Priority Assignment Forms (species assessment forms) for each candidate species.

Overall, this CNOR recognizes three new candidates, changes the LPN for seven candidates, and removes three species from candidate status. Combined with other decisions for individual species that were published separately from this CNOR in the past year, the current number of species that are candidates for listing is 244.

This document also includes our findings on resubmitted petitions and describes our progress in revising the Lists of Endangered and Threatened Wildlife and Plants (Lists) during the period October 1, 2010, through September 30, 2011.

We request additional status information that may be available for the 244 candidate species identified in this CNOR.

DATES: We will accept information on any of the species in this Candidate Notice of Review at any time.

ADDRESSES: This notice is available on the Internet at *http://www.regulations.gov* and *http://www.fws.gov/endangered/what-e-do/cnor.html.* Species assessment forms with information and references on a particular candidate species' range, status, habitat needs, and listing priority assignment are available for review at the appropriate Regional Office listed below in **SUPPLEMENTARY INFORMATION** or at the Office of Communications and Candidate Conservation, Arlington, VA (see address under **FOR FURTHER INFORMATION CONTACT**), or on our Web site (*http://ecos.fws.gov/tess_public/pub/SpeciesReport.do?listingType=C&mapstatus=1*). Please submit any new information, materials, comments, or questions of a general nature on this notice to the Arlington, VA, address listed under **FOR FURTHER INFORMATION CONTACT.** Please submit any new information, materials, comments, or questions pertaining to a particular species to the address of the Endangered Species Coordinator in the appropriate Regional Office listed in **SUPPLEMENTARY INFORMATION.**

FOR FURTHER INFORMATION CONTACT: The Endangered Species Coordinator(s) in the appropriate Regional Office(s), or Chief, Office of Communications and Candidate Conservation, U.S. Fish and Wildlife Service, 4401 N. Fairfax Drive, Room 420, Arlington, VA 22203 (telephone 703–358–2171). Persons who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 800–877–8339.

SUPPLEMENTARY INFORMATION: We request additional status information that may be available for any of the candidate species identified in this CNOR. We will consider this information to monitor changes in the status or LPN of candidate species and to manage candidates as we prepare listing documents and future revisions to the notice of review. We also request information on additional species to consider including as candidates as we prepare future updates of this notice.

You may submit your information concerning this notice in general or for any of the species included in this notice by one of the methods listed in the **ADDRESSES** section.

Species-specific information and materials we receive will be available for public inspection by appointment, during normal business hours, at the appropriate Regional Office listed below under Request for Information in **SUPPLEMENTARY INFORMATION**. General information we receive will be available at the Office of Communications and Candidate Conservation, Arlington, VA (see address under **FOR FURTHER INFORMATION CONTACT**).

Candidate Notice of Review

Background

The Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) (ESA), requires that we identify species of wildlife and plants that are endangered or threatened, based on the best available scientific and commercial information. As defined in section 3 of the ESA, an endangered species is any species which is in danger of extinction throughout all or a significant portion of its range, and a threatened species is any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. Through the Federal rulemaking process, we add species that meet these definitions to the List of Endangered and Threatened Wildlife at 50 CFR 17.11 or the List of Endangered and Threatened Plants at 50 CFR 17.12. As part of this program, we maintain a list of species that we regard as candidates for listing. A candidate species is one for which we have on file sufficient information on biological vulnerability and threats to support a proposal to list as endangered or threatened, but for which preparation and publication of a proposal is precluded by higher priority listing actions. We may identify a species as a candidate for listing after we have conducted an evaluation of its status on our own initiative, or after we have made a positive finding on a petition to list a species, in particular we have found that listing is warranted but precluded by other higher priority listing action (see the Petition Findings section, below).

We maintain this list of candidates for a variety of reasons: To notify the public that these species are facing threats to their survival; to provide advance knowledge of potential listings that could affect decisions of environmental planners and developers; to provide information that may stimulate and guide conservation efforts that will remove or reduce threats to these species and possibly make listing unnecessary; to request input from interested parties to help us identify

those candidate species that may not require protection under the ESA or additional species that may require the ESA's protections; and to request necessary information for setting priorities for preparing listing proposals. We strongly encourage collaborative conservation efforts for candidate species, and offer technical and financial assistance to facilitate such efforts. For additional information regarding such assistance, please contact the appropriate Regional Office listed under Request for Information or visit our Web site, *http://www.fws.gov/endangered/what-we-do/cca.html.*

Previous Notices of Review

We have been publishing candidate notices of review (CNOR) since 1975. The most recent CNOR (prior to this CNOR) was published on November 10, 2010 (75 FR 69222). CNORs published since 1994 are available on our Web site, *http://www.fws.gov/endangered/what-we-do/cnor.html.* For copies of CNORs published prior to 1994, please contact the Office of Communications and Candidate Conservation (see **FOR FURTHER INFORMATION CONTACT** section above).

On September 21, 1983, we published guidance for assigning an LPN for each candidate species (48 FR 43098). Using this guidance, we assign each candidate an LPN of 1 to 12, depending on the magnitude of threats, immediacy of threats, and taxonomic status; the lower the LPN, the higher the listing priority (that is, a species with an LPN of 1 would have the highest listing priority). Section 4(h)(3) of the ESA (15 U.S.C. 1533(h)(3)) requires the Secretary to establish guidelines for such a priority-ranking guidance system. As explained below, in using this system we first categorize based on the magnitude of the threat(s), then by the immediacy of the threat(s), and finally by taxonomic status.

Under this priority-ranking system, magnitude of threat can be either ''high'' or ''moderate to low.'' This criterion helps ensure that the species facing the greatest threats to their continued existence receive the highest listing priority. It is important to recognize that all candidate species face threats to their continued existence, so the magnitude of threats is in relative terms. For all candidate species, the threats are of sufficiently high magnitude to put them in danger of extinction, or make them likely to become in danger of extinction in the foreseeable future. But for species with higher magnitude threats, the threats have a greater likelihood of bringing about extinction or are expected to bring about extinction on a shorter timescale (once the threats are imminent) than for species with lower magnitude threats. Because we do not routinely quantify how likely or how soon extinction would be expected to occur absent listing, we must evaluate factors that contribute to the likelihood and time scale for extinction. We therefore consider information such as: The number of populations or extent of range of the species affected by the threat(s) or both; the biological significance of the affected population(s), taking into consideration the life-history characteristics of the species and its current abundance and distribution; whether the threats affect the species in only a portion of its range, and if so the likelihood of persistence of the species in the unaffected portions; the severity of the effects and the rapidity with which they have caused or are likely to cause mortality to individuals and accompanying declines in population levels; whether the effects are likely to be permanent; and the extent to which any ongoing conservation efforts reduce the severity of the threat.

As used in our priority-ranking system, immediacy of threat is categorized as either ''imminent'' or ''nonimminent'' and is based on when the threats will begin. If a threat is currently occurring or likely to occur in the very near future, we classify the threat as imminent. Determining the immediacy of threats helps ensure that species facing actual, identifiable threats are given priority for listing proposals over those for which threats are only potential or species that are intrinsically vulnerable to certain types of threats but are not known to be presently facing such threats.

Our priority ranking system has three categories for taxonomic status: Species that are the sole members of a genus; full species (in genera that have more than one species); and subspecies and distinct population segments of vertebrate species (DPS).

The result of the ranking system is that we assign each candidate a listing priority number of 1 to 12. For example, if the threat(s) is of high magnitude, with immediacy classified as imminent, the listable entity is assigned an LPN of 1, 2, or 3 based on its taxonomic status (i.e., a species that is the only member of its genus would be assigned to the LPN 1 category, a full species to LPN 2, and a subspecies or DPS would be assigned to LPN 3). In summary, the LPN ranking system provides a basis for making decisions about the relative priority for preparing a proposed rule to list a given species. No matter which LPN we assign to a species, each species included in this notice as a candidate is one for which we have sufficient information to prepare a proposed rule to list it because it is in danger of extinction or likely to become endangered within the foreseeable future throughout all or a significant portion of its range.

For more information on the process and standards used in assigning LPNs, a copy of the 1983 guidance is available on our Web site at: *http://www.fws.gov/endangered/esa-library/pdf/48fr43098-43105.pdf.* For more information on the LPN assigned to a particular species, the species assessment for each candidate contains the LPN chart and a rationale for the determination of the magnitude and immediacy of threat(s) and assignment of the LPN; that information is summarized in this CNOR.

This revised notice supersedes all previous animal, plant, and combined candidate notices of review.

Summary of This CNOR

Since publication of the previous CNOR on November 10, 2010 (75 FR 69222), we reviewed the available information on candidate species to ensure that a proposed listing is justified for each species, and reevaluated the relative LPN assigned to each species. We also evaluated the need to emergency-list any of these species, particularly species with high priorities (i.e., species with LPNs of 1, 2, or 3). This review and reevaluation ensures that we focus conservation efforts on those species at greatest risk first.

In addition to reviewing candidate species since publication of the last CNOR, we have worked on numerous findings in response to petitions to list species, and on proposed and final determinations for rules to list species under the ESA. Some of these findings and determinations have been completed and published in the **Federal Register**, while work on others is still under way (see *Preclusion and Expeditious Progress,* below, for details).

Based on our review of the best available scientific and commercial information, with this CNOR we identify 3 new candidate species (see New Candidates, below), change the LPN for 7 candidates (see Listing Priority Changes in Candidates, below) and determine that a listing proposal is not warranted for 3 species and thus remove them from candidate status (see Candidate Removals, below). Combined with the other decisions published separately from this CNOR for individual species that previously were candidates, a total of 244 species (including 104 plant and 140 animal

species) are now candidates awaiting preparation of rules proposing their listing. These 244 species, along with the 48 species currently proposed for listing (includes 4 species proposed for listing due to similarity in appearance), are included in Table 1.

Table 2 lists the changes from the previous CNOR, and includes 14 species identified in the previous CNOR as either proposed for listing or classified as candidates that are no longer in those categories. This includes nine species for which we published a final listing rule, one species for which we published an emergency listing rule, one species for which we published a withdrawal of a proposed rule, plus the three species that we have determined do not meet the definition of endangered or threatened and therefore do not warrant listing. We have removed these species from candidate status in this CNOR. Also included in Table 2 are three species for which we published an emergency listing rule due to similarity in appearance; these three species were not previously candidate species.

New Candidates

Below we present a brief summary of one new snail (magnificent ramshorn), one new insect (Poweshiek skipperling), and one new plant candidate (*Streptanthus bracteatus*), which are additions to this year's CNOR. Complete information, including references, can be found in the species assessment forms. You may obtain a copy of these forms from the Regional Office having the lead for the species, or from our Web site (*http://ecos.fws.gov/tess_public/pub/SpeciesReport.do?listingType=C&mapstatus=1*). For these species, we find that we have on file sufficient information on biological vulnerability and threats to support a proposal to list as endangered or threatened, but that preparation and publication of a proposal is precluded by higher priority listing actions (i.e., it met our definition of a candidate species). We also note below that 18 other species—Pacific walrus, gopher tortoise (eastern population), striped newt, 7 species of Hawaiian yellow-faced bees (*Hylaeus anthracinus, H. assimulans, H. facilis, H. hilaris, H. kuakea, H. longiceps,* and *H. mana*), Hermes copper butterfly, Mt. Charleston blue butterfly, Puerto Rican harlequin butterfly, *Boechera pusilla* (Fremont County rockcress), *Eriogonum soredium* (Frisco buckwheat), *Lepidium ostleri* (Ostler's peppergrass), *Pinus albicaulis* (whitebark pine), *Trifolium friscanum* (Frisco clover)—were identified as candidates earlier this year as a result of separate petition findings published in the **Federal Register.**

Mammals

Pacific walrus (*Odobenus rosmarus divergens*)—We previously announced candidate status for this species, and described the reasons and data on which the finding was based, in a separate warranted-but-precluded 12-month petition finding published on February 10, 2011 (76 FR 7634).

Reptiles

Gopher tortoise, eastern population (*Gopherus polyphemus*)—We previously announced candidate status for this species, and described the reasons and data on which the finding was based, in a separate warranted-but-precluded 12-month petition finding published on July 27, 2011 (76 FR 45130).

Amphibians

Striped newt (*Notophthalmus perstriatus*)—We previously announced candidate status for this species, and described the reasons and data on which the finding was based, in a separate warranted-but-precluded 12-month petition finding published on June 7, 2011 (76 FR 32911).

Snails

Magnificent ramshorn (*Planorbella magnifica*)—The following summary is based on information in our files. No new information was provided in the petition received on April 20, 2010 (after we initiated our assessment of this species). The magnificent ramshorn is a freshwater snail in the family Planorbidae (Pilsbry 1903). It is the largest North American snail in this family. The magnificent ramshorn is endemic to the lower Cape Fear River basin, North Carolina. The species has been recorded from only four sites in the lower Cape Fear River Basin in New Hanover and Brunswick Counties, North Carolina, but is believed to be extirpated from all four of these sites. The only known surviving population is a captive population, comprised of approximately 100 adults, being maintained and propagated by a private biologist.

Available information indicates that suitable habitat for the species is restricted to relatively shallow, sheltered portions of still or sluggish, freshwater bodies with an abundance and diversity of submerged aquatic vegetation and a circumneutral pH (pH within the range of 6.8–7.5). The only known records for the species are post-1900 and are from manmade millponds constructed in the 1700s to provide a freshwater source for rice agriculture. However, these impoundments closely replicate beaver-pond habitat, and it is plausible that the species was once a faunal component of beaver ponds. The species may also have once inhabited backwater and other sluggish portions of the main channel of lower Cape Fear River.

Beaver-pond habitat was eliminated for several decades throughout much of the lower Cape Fear River as a result of the extirpation of the North American beaver due to trapping and hunting during the 19th and early 20th centuries. This, together with draining and destruction of beaver ponds for development, agriculture, and other purposes, is believed to have led to a significant decline in the snail's habitat. Also, dredging and deepening of the Cape Fear River channel, which began as early as 1822, and opening of the Atlantic Intercoastal Waterway (through Snow's Cut) in 1930 for navigational purposes have caused saltwater intrusion, altered the diversity and abundance of aquatic vegetation, and changed flows and current patterns far up the river channel and its lower tributaries. Under these circumstances, the magnificent ramshorn could have survived only in areas of tributary streams not affected by salt water intrusion and other changes, such as the millponds protected from saltwater intrusion by their dams. The species is believed to have been eliminated from the millponds from which it has been recorded due to saltwater intrusion during severe storms (Hurricane Fran) and drought conditions, increased input of nutrients and other pollutants from development activities adversely affecting water quality/chemistry and leading to increased nuisance aquatic plant and algae growth, and efforts, harmful to the snail, by landowners to control nuisance plant and algae growth.

While efforts have been made to restore habitat for the magnificent ramshorn at one of the sites known to have previously supported the species, all of the sites known to have previously supported the snail continue to be affected or threatened by most of the same factors (i.e., saltwater intrusion and other water quality degradation, nuisance aquatic plant control, storms, sea level rise, etc.) believed to have resulted in extirpation of the species from the wild. Currently, only a single captive population of the species is known to exist. Although this captive population of the species has been maintained since 1993, a single catastrophic event, such as a severe storm, disease, or predator infestation, affecting this captive population could

result in extinction of the species. Accordingly, the magnitude of the threats to the species' survival is high. The threats are ongoing and therefore imminent. Thus, we have assigned an LPN of 2 to this species.

Insects

Hawaiian yellow-faced bees (*Hylaeus anthracinus, H. assimulans, H. facilis, H. hilaris, H. kuakea, H. longiceps,* and *H. mana*)—We previously announced candidate status for these species, and described the reasons and data on which the finding was based, in a separate warranted-but-precluded 12-month petition finding published on September 6, 2011 (76 FR 55170).

Hermes copper butterfly (*Hermelycaena* [*Lycaena*] *hermes*)—We previously announced candidate status for this species, and described the reasons and data on which the finding was based, in a separate warranted-but-precluded 12-month petition finding published on April 14, 2011 (76 FR 20918).

Mt. Charleston blue butterfly (*Plebejus shasta charlestonensis*)—We previously announced candidate status for this species, and described the reasons and data on which the finding was based, in a separate warranted-but-precluded 12-month petition finding published on March 8, 2011 (76 FR 12667).

Puerto Rican harlequin butterfly (*Atlantea tulita*)—We previously announced candidate status for this species, and described the reasons and data on which the finding was based, in a separate warranted-but-precluded 12-month petition finding published on May 31, 2011 (76 FR 31282).

Poweshiek skipperling (*Oarisma poweshiek*) —The following summary is based on information contained in our files. The Poweshiek skipperling is a small butterfly that currently inhabits high-quality tallgrass prairie in Iowa, Minnesota, North Dakota, South Dakota, and Wisconsin and prairie fens in Michigan; it also occurs in the province of Manitoba, Canada. The species is presumed to be extirpated from Illinois and Indiana and from many sites within occupied States.

The Poweshiek skipperling is threatened by degradation of its native prairie habitat by overgrazing, invasive species, gravel mining, and herbicide applications; inbreeding, population isolation, and prescribed fire threaten some populations. Prairie succeeds to shrubland or forest without periodic fire, grazing, or mowing; thus, the species is also threatened at sites where such disturbances are not applied. The Service, State agencies, the Sisseton-Wahpeton Sioux Tribe, and private organizations (e.g., The Nature Conservancy) protect and manage some Poweshiek skipperling sites. Careful and considered management is always necessary to ensure its persistence, even at protected sites. The species may be secure at a few sites where public and private landowners manage native prairie in ways that conserve Poweshiek skipperling, but approximately one-quarter of the inhabited sites are privately owned with little or no protection. A few private sites are protected from conversion by easements, but these do not preclude adverse effects from overgrazing. The threats are such that the Poweshiek skipperling warrants listing; the threats are high in magnitude because habitat degradation and other stressors has resulted in sharp declines in the western portion of its range which contains more than 90 percent of the species site records. We assigned this species an LPN of 2 to reflect the ongoing, and therefore, imminent threats to the species' habitat and sharp population declines documented recently, especially in Iowa and Minnesota.

Flowering Plants

Boechera pusilla (Fremont County rockcress) —We previously announced candidate status for this species, and described the reasons and data on which the finding was based, in a separate warranted-but-precluded 12-month petition finding published on June 9, 2011 (76 FR 33924).

Eriogonum soredium (Frisco buckwheat)—We previously announced candidate status for this species, and described the reasons and data on which the finding was based, in a separate warranted-but-precluded 12-month petition finding published on February 23, 2011 (76 FR 10166).

Lepidium ostleri (Ostler's peppergrass)—We previously announced candidate status for this species, and described the reasons and data on which the finding was based, in a separate warranted-but-precluded 12-month petition finding published on February 23, 2011 (76 FR 10166).

Pinus albicaulis (whitebark pine)—We previously announced candidate status for this species, and described the reasons and data on which the finding was based, in a separate warranted-but-precluded 12-month petition finding published on July 19, 2011 (76 FR 42631).

Streptanthus bracteatus (bracted twistflower)—The following summary is based on information obtained from our files, on-line herbarium databases, surveys and monitoring data, seed-collection data, and scientific publications. Bracted twistflower, an annual herbaceous plant of the Brassicaceae (mustard family), is endemic to a small portion of the Edwards Plateau of Texas. From 1989 to 2010, 32 populations have been documented in five counties; of these, 15 populations remain with intact habitat, 9 persist in degraded or partially destroyed habitats, and 8 are presumed extirpated. Only 9 of the intact populations occur in protected natural areas.

The continued survival of bracted twistflower is imminently threatened by habitat destruction from urban development, severe herbivory from very dense herds of white-tailed deer, and the increased density of woody plant cover. Additional ongoing threats include erosion and trampling from foot and mountain-bike trails, a pathogenic fungus of unknown origin, and insufficient protection by existing regulations. Furthermore, due to the small size and isolation of remaining populations and lack of gene flow between them, several populations are now inbred and may have insufficient genetic diversity for long-term survival. The consistent failure of pilot reintroduction efforts has so far prevented the augmentation and reintroduction of populations in protected, managed sites. Optimal vegetation management of bracted twistflower populations may be incompatible with the management of golden-cheeked warbler nesting habitat. The species is potentially threatened by as-yet unknown impacts of climate change. The Service has established a voluntary Memorandum of Agreement with Texas Parks and Wildlife Department, the City of Austin, Travis County, the Lower Colorado River Authority, and the Lady Bird Johnson Wildflower Center to protect bracted twistflower and its habitats on tracts of Balcones Canyonlands Preserve. The threats to bracted twistflower are of moderate magnitude, and are ongoing and, therefore, imminent. We find that bracted twistflower is warranted for listing throughout all of its range and assigned it an LPN of 8.

Trifolium friscanum (Frisco clover)—We previously announced candidate status for this species, and described the reasons and data on which the finding was based, in a separate warranted-but-precluded 12-month petition finding published on February 23, 2011 (76 FR 10166).

Listing Priority Changes in Candidates

We reviewed the LPN for all candidate species and are changing the numbers for the following species discussed below. Some of the changes reflect actual changes in either the magnitude or immediacy of the threats. For some species, the LPN change reflects efforts to ensure national consistency as well as closer adherence to the 1983 guidelines in assigning these numbers, rather than an actual change in the nature of the threats.

Birds

Kittlitz's murrelet (*Brachyramphus brevirostris*)—The following summary is based on information contained in our files and the petition we received on May 9, 2001. Kittlitz's murrelet is a small diving seabird that inhabits Alaskan coastal waters discontinuously, from Point Lay south to northern portions of southeast Alaska, west to the tip of the Aleutian Islands, and the eastern coastline of Russia. During the breeding season, most Kittlitz's murrelets are associated with tidewater glaciers, but breeding has also been documented throughout their range in areas where glaciers no longer exist. We concluded in the past that the loss of tidewater glaciers was a threat to the species and the magnitude of that threat was high because of the rate of change in the glaciers. There is no doubt that tidewater glaciers are receding most likely due to climate change. It is also clear that in one part of their range, Kittlitz's murrelets are associated with glacially influenced waters during the summer breeding period. What is unclear is the nature of the association and if these areas are more important to the Kittlitz's murrelet's population viability than other areas. Nests have been documented throughout their range; what is unknown is if nest survival is better near glaciers. Although we know that Kittlitz's murrelet habitat will continue to be modified as glaciers continue to recede, we currently do not have evidence that this modification will lead to conditions that will lead to a population-level decline.

In the past we had a high level of concern over the population decline and its magnitude. Although we still conclude that the population has declined, based on ongoing analyses, the magnitude of the decline is much less certain. Work is currently underway to evaluate past surveys and the status and trend of Kittlitz's murrelet across its range. We anticipate that our ability to evaluate trends and population size will be greatly improved when these projects are completed and published.

Based on new information, the focus of our concern has shifted to the low reproductive success of Kittlitz's murrelet. Our concern is based on three lines of reasoning: at the locations where we have the most complete information, Agattu and Kodiak Islands, nest success is very low (less than 10 percent); few juvenile birds have been documented; and there are indications that few females (approximately 10 percent) are breeding in spite of the fact (based on blood chemistry) that approximately 90 percent appear to be physiologically prepared to breed. Although the implications of these results are serious, we must temper our concern with the knowledge that the results are limited to small parts of the murrelet's range and for a long-lived bird, we have data for relatively few years. Consequently, we conclude that the magnitude of this threat is moderate.

For a K-selected species such as Kittlitz's murrelet, loss of the adults is particularly important, and we have identified several sources of adult mortality such as hydrocarbon contamination, entanglement in gillnets, and predation. Although none of these sources of mortality alone rises to the level of a threat, in total, the chronic, low-level loss of adults, in combination with evidence that a small proportion of the population is breeding, and the low reproductive success lead us to conclude that it will be difficult for this species to maintain a stable population level or rebound from a stochastic event that causes population loss. The magnitude of threat from these sources is low to moderate, depending on events that occur in a given year (number and location of oil spills/ship wrecks, number and location of gillnets).

For these reasons, this year, our focus shifted from the loss of glaciers to poor reproductive success. Poor nest success (as opposed to adult mortality) could be the underlying reason for the population decline, and if it is occurring rangewide, the population would be expected to continue to decline. Currently, our most detailed nest information comes from Agattu and Kodiak Islands. Whether these locations and the timeframe observed are representative of the rangewide situation is unknown; therefore, we have determined that threat magnitude is moderate, not high. Because the identified threats are currently occurring, they are imminent. Thus, we are changing the LPN from a 2 to an 8.

Sprague's pipit (*Anthus spragueii*)—The following summary is based on information contained in our files and in the petition we received on October 15, 2008. This species occurs in Arizona, Colorado, Kansas, Louisiana, Minnesota, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, Canada, and Mexico. The Sprague's pipit is a small grassland bird characterized by its high flight display and otherwise very secretive behavior. Sprague's pipits are strongly tied to native prairie (land which has never been plowed) throughout their life cycle.

Threats to this species include: Habitat loss and conversion, habitat fragmentation on the breeding grounds, energy development, roads, and inadequacy of existing regulatory mechanisms. Only 15 to 18 percent of the historical breeding habitat in the United States remains due to prairie habitat loss and fragmentation. The Breeding Bird Survey and Christmas Bird Count both show a 40-year decline of 73 to 79 percent (3.23 to 4.1 percent annually). We anticipate that prairie habitat will continue to be converted and fragmented. Most of the breeding range, including those areas where grassland habitat still remains, has been identified as a prime area for wind energy development, and an oil and gas boom is occurring in the central part of the breeding range in the United States and Canada. On the wintering range, conversion of grassland to agriculture and other uses appears to be accelerating. We recently announced candidate status for Sprague's pipit in a warranted-but-precluded 12-month petition finding published on September 15, 2010 (75 FR 56028). Because of an error in our original GIS analysis of the magnitude of the threats (as presented in our 12-month finding), we have now determined that the magnitude of threats is moderate as a smaller area of the range is affected by the threats, thereby reducing the effect of the threats to a lower level. Thus, we are changing the LPN of the Sprague's pipit from a 2 to an 8.

Reptiles

Eastern massasauga rattlesnake (*Sistrurus catenatus*)—Until 2011, the eastern massasauga was considered one of three recognized subspecies of massasauga. Recent information indicates that the eastern massasauga represents a distinct species, and we recognize it as such beginning in 2011. It is a small, thick-bodied rattlesnake that occupies shallow wetlands and adjacent upland habitat in portions of Illinois, Indiana, Iowa, Michigan, Minnesota, New York, Ohio, Pennsylvania, Wisconsin, and Ontario. Populations in Missouri, formerly included within the previously recognized subspecies of eastern

massasauga, are now considered to be the western massasauga, *Sistrurus tergeminus tergeminus.*

Although the current range of *S. catenatus* resembles the species' historical range, the geographic distribution has been restricted by the loss of the species from much of the area within the boundaries of that range. Approximately 40 percent of the counties that were historically occupied by *S. catenatus* no longer support the species. *Sistrurus catenatus* is currently listed as endangered in every State and province in which it occurs, except for Michigan where it is designated as a species of special concern. Each State and Canadian province across the range of *S. catenatus* has lost more than 30 percent, and for the majority more than 50 percent, of their historical populations. Furthermore, less than 35 percent of the remaining populations are considered secure. Approximately 59 percent of the remaining *S. catenatus* populations occur wholly or in part on public land, and Statewide and site-specific Candidate Conservation Agreements with Assurances (CCAAs) are currently being developed for many of these areas in Iowa, Illinois, Michigan, and Wisconsin. In 2004, a Candidate Conservation Agreement (CCA) with the Lake County Forest Preserve District in Illinois was completed. In 2005, a CCA with the Forest Preserve District of Cook County in Illinois was completed. In 2006, a CCAA with the Ohio Department of Natural Resources Division of Natural Areas and Preserves was completed for Rome State Nature Preserve in Ashtabula County.

The magnitude of threats is moderate at this time. However, a recently completed extinction risk model, and information provided by species experts, indicates that other populations are likely to suffer additional losses in abundance and genetic diversity and some will likely be extirpated unless threats are removed in the near future. Declines have continued or may be accelerating in several States. Thus, we are monitoring the status of this species to determine if a change in listing priority is warranted. Threats of habitat modification, habitat succession, incompatible land management practices, illegal collection for the pet trade, and human persecution are ongoing and imminent threats to many remaining populations, particularly those inhabiting private lands. We do not believe emergency listing is warranted. We are changing the LPN from a 9 to an 8, reflecting the recent information indicating that this snake should be recognized as a species rather than a subspecies.

Amphibians

Relict leopard frog (*Lithobates onca*) (formerly in *Rana*)—The following summary is based on information contained in our files. Natural relict leopard frog populations occur in two general areas in Nevada: near the Overton Arm area of Lake Mead and Black Canyon below Lake Mead. These two areas include a small fraction of the historical distribution of the species. Its historical range included springs, streams, and wetlands within the Virgin River drainage downstream from the vicinity of Hurricane, Utah; along the Muddy River, Nevada; and along the Colorado River from its confluence with the Virgin River downstream to Black Canyon below Lake Mead, Nevada and Arizona.

Factors contributing to the decline of the species include alteration, loss, and degradation of aquatic habitat due to water developments and impoundments, and scouring and erosion; changes in plant communities that result in dense growth and the prevalence of vegetation; introduced predators; climate change; and stochastic events. The presence of chytrid fungus in relict leopard frogs at Lower Blue Point Spring in 2010 warrants further evaluation of the threat of disease to the relict leopard frog. The size of natural and translocated populations is small, and therefore these populations are vulnerable to stochastic events, such as floods and wildfire. Climate change that results in reduced spring flow, habitat loss, and increased prevalence of wildfire would adversely affect relict leopard frog populations.

In 2005, the National Park Service, in cooperation with the Fish and Wildlife Service and other Federal, State, and local partners, developed a conservation agreement and strategy intended to improve the status of the species through prescribed management actions and protection. Conservation actions identified in the agreement and strategy include captive rearing of tadpoles for translocation and refugium populations, habitat and natural history studies, habitat enhancement, population and habitat monitoring, and translocation. New sites within the historical range of the species have been successfully established with captive-reared frogs. Conservation is proceeding under the agreement and strategy; however, additional time is needed to determine whether or not the agreement and strategy will be effective in eliminating or reducing the threats to the point that the relict leopard frog can be removed from candidate status. In consideration of these conservation efforts and the overall threat level to the species, we determined the magnitude of existing threats is moderate to low. However, because water development and other habitat effects, presence of introduced predators, presence of chytrid fungus, limited distribution, small population size, and climate change are ongoing or will occur in the near future, the threats are imminent. The discovery of chytrid fungus in relict leopard frogs in 2010 is a new and potentially serious threat. Therefore, we changed the LPN from an 11 to an 8 for this species.

Snails

Huachuca springsnail (*Pyrgulopsis thompsoni*)—The following is based on information contained in our files. No new information was provided in the petition received on May 11, 2004. The Huachuca springsnail inhabits approximately 19 springs in southeastern Arizona and two springs in Sonora, Mexico. The springsnail is typically found in shallow water habitats, often in rocky seeps at the spring source. Potential threats include habitat modification and destruction through catastrophic wildfire and unmanaged grazing. Overall, the threats are low in magnitude because threats are not occurring throughout the range of the species uniformly and not all populations would likely be affected simultaneously by the known threats. The available information indicates that threats are not currently ongoing in or adjacent to occupied habitats. Accordingly, threats are nonimminent. Therefore, we are reducing the LPN from an 8 to an 11 for this species.

Insects

Meltwater lednian stonefly (*Lednia tumana*)—The following summary is based on information contained in our files and in the petition we received on July 30, 2007. This species is an aquatic insect in the order Plecoptera (stoneflies). Stoneflies are primarily associated with clean, cool streams and rivers. Eggs and nymphs (juveniles) of the meltwater lednian stonefly are found in high-elevation, alpine, and subalpine streams, most typically in locations closely linked to glacial runoff. The species is generally restricted to streams with mean summer water temperature less than 10 °C (50 °F). Adults emerge from the nymph stage and mate in streamside vegetation. The only known meltwater lednian stonefly occurrences are within Glacier National Park (NP), Montana. Climate change, and the associated effects of glacier loss (with glaciers predicted to

be gone by 2030), reduced streamflows, and increased water temperatures, is expected to significantly reduce the occurrence of populations and extent of suitable habitat for the species in Glacier NP. In addition, the existing regulatory mechanisms do not address environmental changes due to global climate change. We recently announced candidate status for the meltwater lednian stonefly in a warranted-but-precluded 12-month petition finding published on April 5, 2011 (76 FR 18684). We originally assigned the species an LPN of 4 based on three criteria: (1) The high magnitude of threat, which is projected to substantially reduce the amount of suitable habitat relative to the species' current range; (2) the low imminence of the threat based on the lack of documented evidence that populations are being affected by climate change now; and (3) the taxonomic status of the species, which was the only described member of its genus (monotypic taxon). Recently, stonefly specimens discovered in Mount Rainier NP, North Cascades NP, and in the Sierra Nevada Mountains of California have been formally described as two additional species in the *Lednia* genus—*L. borealis* and *L. sierra*—which indicates that the meltwater lednian stonefly is no longer in a monotypic genus. Based on this new taxonomic information, we are changing the LPN of this species from a 4 to a 5.

Arachnids

Warton's cave meshweaver (*Cicurina wartoni*)—The following summary is based on information contained in our files. No new information was provided in the petition received on May 11, 2004. Warton's Cave meshweaver is an eyeless, cave-dwelling, unpigmented, 0.23-inch-long invertebrate known only from female specimens. This meshweaver is known to occur in only one cave (Pickle Pit) in Travis County, Texas. Primary threats to the species and its habitat are predation and competition from red-imported fire ants, surface and subsurface effects from polluted runoff from an adjacent subdivision, unauthorized entry into the area surrounding the cave, and trash dumping that may include toxic materials near the feature. The magnitude of threats is low to moderate based on observations made during an April 5, 2011, site visit. In addition, Pickle Pit occurs in a preserve established for mitigation for the endangered golden-cheeked warbler; hence the meshweaver receives some protection. Due to a reduction in the magnitude of threats, we changed the LPN for this species from a 2 to an 8.

Candidate Removals

As summarized below, we have evaluated the threats to the following species and considered factors that, individually and in combination, currently or potentially could pose a risk to these species and their habitats. After a review of the best available scientific and commercial data, we conclude that listing these species under the Endangered Species Act is not warranted because these species are not likely to become an endangered species within the foreseeable future throughout all or a significant portion of their ranges. Therefore, we find that proposing a rule to list them is not warranted, and we no longer consider them to be candidate species for listing. We will continue to monitor the status of these species and to accept additional information and comments concerning this finding. We will reconsider our determination in the event that new information indicates that the threats to the species are of a considerably greater magnitude or imminence than identified through assessments of information contained in our files, as summarized here.

Snails

Gila springsnail (*Pyrgulopsis gilae*)—The following summary is based on information contained in our files and the petition we received on November 20, 1985. Also see our 12-month petition finding published in the **Federal Register** on October 4, 1988 (53 FR 38969). The Gila springsnail is an aquatic species previously known from 13 populations in New Mexico. Surveys conducted in 2008 and 2009 located 37 additional populations, bringing the known total to 50.

The long-term persistence of the Gila springsnail is contingent upon protection of the riparian corridor and maintenance of flow to ensure continuous, oxygenated, flowing water within the species' required thermal range. Based on new information, we now foresee no threats to the habitat of the Gila springsnail. Disturbance to the species from recreational activity is occurring rarely, with minimal effects to the species, and is not likely to become a threat in the foreseeable future due to the inaccessibility of the springsnail populations. Livestock grazing may have affected Gila springsnails in the past, but exclusion of livestock from the riparian habitat has removed this threat. Current springsnail populations are located in areas with minimal fire or flood risk. Groundwater use for geothermal development is unlikely to occur within Gila springsnail habitat. Additionally, the discovery of additional populations in 2008 and 2009 reveals the species is secure from stochastic, habitat-modifying events.

The distribution of the species and variance in the location of its habitat reduces the risk of the loss of the species from stochastic, habitat-modifying events. We have no indication that collection of the species is occurring, other than rarely by researchers confirming its discovery at new springs. Also, as the Gila springsnail occurs on Forest Service land with limited access, we do not anticipate any future collections for other purposes. There are no known diseases that affect Gila springsnails, and no native or nonnative predators occur at these springs. Additionally, we are not aware of any introduced species at the springs that would affect the springsnails.

The effects of future climate change may serve to exacerbate habitat loss from other factors. However, as we have determined that the Gila springsnail is not threatened with habitat loss, we cannot predict with any certainty that the effects of climate change will exacerbate any future habitat concerns sufficiently to consider climate change, on its own, a threat to the species. Therefore, we have determined that climate change is not currently a threat to the Gila springsnail now or in the foreseeable future. In conclusion, due to the lack of threats to the continued existence of the Gila springsnail under any of the five factors now or in the foreseeable future, we find that the Gila springsnail does not meet the definition of a threatened or endangered species and no longer warrants listing throughout all or a significant portion of its range, and we removed it from the candidate list.

New Mexico springsnail (*Pyrgulopsis thermalis*)—The following summary is based on information contained in our files and the petition received on November 20, 1985. Also see our 12-month petition finding published on October 4, 1988 (53 FR 38969). The New Mexico springsnail is an aquatic species that was previously known from only two separate populations associated with a series of spring-brook systems along the Gila River in the Gila National Forest in Grant County, New Mexico. Subsequent surveys in 2008 and 2009 discovered 12 additional populations, for a total of 14 separate populations.

The long-term persistence of the New Mexico springsnail is contingent upon protection of the riparian corridor and maintenance of flow to ensure

continuous, oxygenated, flowing water within the species' required thermal range. Based on new information, we now foresee no threats to the habitat of the New Mexico springsnail. Disturbance to the species from recreational activity is occurring rarely, with minimal impacts to the species, and is not likely to become a threat in the foreseeable future due to the inaccessibility of the springsnail populations. Livestock grazing may have affected New Mexico springsnails in the past, but exclusion of livestock from the riparian habitat has removed this threat. Current springsnail populations are located in areas with minimal fire or flood risk. Groundwater use for geothermal development is unlikely to occur within New Mexico springsnail habitat. Additionally, the discovery of additional populations in 2008 and 2009 reveals the species is secure from stochastic, habitat-modifying events.

The distribution of the species and variance in the location of its habitat reduces the risk of the loss of the species from stochastic, habitat-modifying events. We have no indication that collection of the species is occurring, other than rarely by researchers confirming its discovery at new springs. Also, as the New Mexico springsnail occurs on Forest Service land with limited access, we do not anticipate any future collections for other purposes. There are no known diseases that affect New Mexico springsnails, and no native or nonnative predators occur at these springs. Additionally, we are not aware of any introduced species at the springs that would affect the springsnails.

The effects of future climate change may serve to exacerbate habitat loss from other factors. However, as we have determined that the New Mexico springsnail is not threatened with habitat loss, we cannot predict with any certainty that the effects of climate change will exacerbate any future habitat concerns sufficiently to consider climate change, on its own, a threat to the species. Therefore, we have determined that climate change is not currently a threat to the New Mexico springsnail now or in the foreseeable future.

In conclusion, due to the lack of threats to the continued existence of the New Mexico springsnail under any of the five factors now or in the foreseeable future, we find that the New Mexico springsnail does not meet the definition of a threatened or endangered species and no longer warrants listing throughout all or a significant portion of its range. As a result, we have removed it from the candidate list.

Insects

Wekiu bug (*Nysius wekiuicola*)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. The wekiu bug belongs to the true bug family, Lygaeidae, and occurs only on the summit of Mauna Kea on the island of Hawaii. The wekiu bug was believed to be limited in range to six pu'us (cinder cones) in the summit area and was threatened by loss of habitat on Mauna Kea due to development of observatory facilities, which was believed to be causing a severe decline in its numbers. Surveys and other studies carried out over the last 11 years suggest the wekiu bug has a broader distribution on Mauna Kea than previously known. Surveys now indicate that the wekiu bug is currently found on 16 pu'us. Two of these 16 pu'us occur in an area that has undergone development of astronomy observatory facilities. The previous trend toward loss of habitat due to observatory construction has been curtailed, and no new construction, including the currently planned Thirty-meter Telescope project, will occur on any pu'u occupied by the species. Management of the Mauna Kea summit area by the Office of Mauna Kea Management includes continued monitoring of the wekiu bug and its habitat, and scientific studies to assist in managing and protecting wekiu bug populations and habitat. The 2000 Mauna Kea Science Reserve Management Plan, the Mauna Kea Comprehensive Management Plan, the four subplans (natural resources management plan, cultural resources management plan, decommissioning plan, and public access plan), and a procedure for formal review of new projects on Mauna Kea all contribute to the protection and conservation of the wekiu bug.

Studies over the last 11 years also indicate the wekiu bug has a stable population, and demonstrate that this species exhibits extreme variability in terms of annual densities at any given site, such that the normal bounds of natural population variance for this species are much wider than previously understood. Based on our review of the best available information we no longer conclude that threats across the wekiu bug's expanded range put the species in danger of extinction. In summary, because the wekiu bug is likely stable in numbers, the wekiu bug is more widespread than previously believed, current threats are minimized and restricted within the larger range of the species, and future potential threats are monitored, we find the wekiu bug does not meet the definition of a threatened or endangered species and no longer warrants listing throughout all or a significant portion of its range. Thus, we have removed it from candidate status.

Petition Findings

The ESA provides two mechanisms for considering species for listing. One method allows the Secretary, on his own initiative, to identify species for listing under the standards of section 4(a)(1). We implement this through the candidate program, discussed above. The second method for listing a species provides a mechanism for the public to petition us to add a species to the Lists. The CNOR serves several purposes as part of the petition process: (1) In some instances (in particular, for petitions to list species that the Service has already identified as candidates on its own initiative), it serves as the petition finding; (2) it serves as a ''resubmitted'' petition finding that the ESA requires the Service to make each year; and (3) it documents the Service's compliance with the statutory requirement to monitor the status of species for which listing is warranted-but-precluded to ascertain if they need emergency listing.

First, the CNOR serves as a petition finding in some instances. Under section 4(b)(3)(A), when we receive a listing petition, we must determine within 90 days, to the maximum extent practicable, whether the petition presents substantial information indicating that listing may be warranted (a ''90-day finding''). If we make a positive 90-day finding, we must promptly commence a status review of the species under section 4(b)(3)(A); we must then make and publish one of three possible findings within 12 months of the receipt of the petition (a ''12-month finding''):

(1) The petitioned action is not warranted;

(2) The petitioned action is warranted (in which case we are required to promptly publish a proposed regulation to implement the petitioned action; once we publish a proposed rule for a species, section 4(b)(5) and 4(b)(6) govern further procedures regardless of whether we issued the proposal in response to a petition); or

(3) The petitioned action is warranted but (a) the immediate proposal of a regulation and final promulgation of a regulation implementing the petitioned action is precluded by pending proposals to determine whether any species is endangered or threatened, and

(b) expeditious progress is being made to add qualified species to the Lists of Endangered or Threatened Wildlife and Plants. (We refer to this third option as a ''warranted-but-precluded finding.'').

We define ''candidate species'' to mean those species for which the Service has on file sufficient information on biological vulnerability and threat(s) to support issuance of a proposed rule to list, but for which issuance of the proposed rule is precluded (61 FR 64481; December 5, 1996). This standard for making a species a candidate through our own initiative is identical to the standard for making a warranted-but-precluded 12-month petition finding on a petition to list, and we add all petitioned species for which we have made a warranted-but-precluded 12-month finding to the candidate list.

Therefore, all candidate species identified through our own initiative already have received the equivalent of substantial 90-day and warranted-but-precluded 12-month findings. Nevertheless, we review the status of the newly petitioned candidate species and through this CNOR publish specific section 4(b)(3) findings (i.e., substantial 90-day and warranted-but-precluded 12-month findings) in response to the petitions to list these candidate species. We publish these findings as part of the first CNOR following receipt of the petition. On April 20, 2010, we received a petition to list the magnificent ramshorn (see summary above under New Candidates) after we had initiated our assessment of this species for candidate status. In addition, the following species that were already on our candidate list were also included in this petition: Black Warrior waterdog, sicklefin redhorse, rabbitsfoot, black mudalia, Coleman cave beetle, and *Solidago plumosa* (Yadkin River goldenrod). The petition did not provide any new information on these species. We published a separate substantial 90-day finding for all of the above species on September 27, 2011 (76 FR 59836). As part of this notice, we are making the warranted-but-precluded 12-month finding for these species. We have identified the candidate species for which we received petitions by the code ''C*'' in the category column on the left side of Table 1 below.

Second, the CNOR serves as a ''resubmitted'' petition finding. Section 4(b)(3)(C)(i) of the ESA requires that when we make a warranted-but-precluded finding on a petition, we are to treat such a petition as one that is resubmitted on the date of such a finding. Thus, we must make a 12-month petition finding in compliance with section 4(b)(3)(B) of the ESA at least once a year, until we publish a proposal to list the species or make a final not-warranted finding. We make these annual findings for petitioned candidate species through the CNOR.

Third, through undertaking the analysis required to complete the CNOR, the Service determines if any candidate species needs emergency listing. Section 4(b)(3)(C)(iii) of the ESA requires us to ''implement a system to monitor effectively the status of all species'' for which we have made a warranted-but-precluded 12-month finding, and to ''make prompt use of the [emergency listing] authority [under section 4(b)(7)] to prevent a significant risk to the well being of any such species.'' The CNOR plays a crucial role in the monitoring system that we have implemented for all candidate species by providing notice that we are actively seeking information regarding the status of those species. We review all new information on candidate species as it becomes available, prepare an annual species assessment form that reflects monitoring results and other new information, and identify any species for which emergency listing may be appropriate. If we determine that emergency listing is appropriate for any candidate we will make prompt use of the emergency listing authority under section 4(b)(7). For example, on August 10, 2011, we emergency listed the Miami blue butterfly (76 FR 49542). We have been reviewing and will continue to review, at least annually, the status of every candidate, whether or not we have received a petition to list it. Thus, the CNOR and accompanying species assessment forms constitute the Service's annual finding on the status of petitioned species under section 4(b)(3)(C)(i) of the ESA.

A number of court decisions have elaborated on the nature and specificity of information that must be considered in making and describing the petition findings in the CNOR. The CNOR published on November 9, 2009 (74 FR 57804), describes these court decisions in further detail. As with previous CNORs, we continue to incorporate information of the nature and specificity required by the courts. For example, we include a description of the reasons why the listing of every petitioned candidate species is both warranted and precluded at this time. 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 (see below). Regional priorities can also be discerned from Table 1, below, which includes the lead region and the LPN for each species. Our preclusion determinations are further based upon our budget for listing activities for unlisted species only, and we explain the priority system and why the work we have accomplished does preclude action on listing candidate species.

In preparing this CNOR, we reviewed the current status of, and threats to, the 204 candidates and 5 listed species for which we have received a petition and for which we have found listing or reclassification from threatened to endangered to be warranted but precluded. Included in this work is our review of the current status of, and threats to, the Canada lynx in New Mexico for which we received a petition to add that State to the listed range. We find that the immediate issuance of a proposed rule and timely promulgation of a final rule for each of these species has been, for the preceding months, and continues to be, precluded by higher priority listing actions. Additional information that is the basis for this finding is found in the species assessments and our administrative record for each species.

Our review included updating the status of, and threats to, petitioned candidate or listed species for which we published findings, under section 4(b)(3)(B) of the ESA, in the previous CNOR. We have incorporated new information we gathered since the prior finding and, as a result of this review, we are making continued warranted-but-precluded 12-month findings on the petitions for these species.

The immediate publication of proposed rules to list these species was precluded by our work on higher priority listing actions, listed below, during the period from October 1, 2010, through September 30, 2011. We will continue to monitor the status of all candidate species, including petitioned species, as new information becomes available to determine if a change in status is warranted, including the need to emergency-list a species under section 4(b)(7) of the ESA.

In addition to identifying petitioned candidate species in Table 1 below, we also present brief summaries of why each of these candidates warrants listing. More complete information, including references, is found in the species assessment forms. You may obtain a copy of these forms from the Regional Office having the lead for the species, or from the Fish and Wildlife Service's Internet Web site: *http://ecos.fws.gov/tess_public/pub/SpeciesReport.do?listingType=C&mapstatus=1.* As described above, under section 4 of

the ESA, we may identify and propose species for listing based on the factors identified in section 4(a)(1), and section 4 also provides a mechanism for the public to petition us to add species to the Lists of Endangered or Threatened Wildlife and Plants under the ESA. Below we describe the actions that continue to preclude the immediate proposal and final promulgation of a regulation implementing each of the petitioned actions for which we have made a warranted-but-precluded finding, and we describe the expeditious progress we are making to add qualified species to, and remove species from, the Lists of Endangered or Threatened Wildlife and Plants.

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 ESA; 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 which 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 ESA (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. For FY 2011, we were again able to use some of the critical habitat subcap funds to fund proposed listing determination.

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, represent the resources we must take into consideration when we make 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, 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 April 15, 2011, Congress passed the Full-Year Continuing Appropriations Act (Pub. L. 112–10), which provided funding through September 30, 2011. The Service was provided $20,902,000 for the listing program. Of that, the Service used $9,472,000 for determinations of critical habitat for already listed species. Also $500,000 was appropriated for foreign species listings under the ESA. The Service thus had $10,930,000 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 ESA) 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, the Service was only able to initiate a few new listing determinations for candidate species in FY 2011.

In 2009, the responsibility for listing foreign species under the ESA 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 allocated $500,000 for work on listing actions for foreign species, which reduced funding available for domestic listing actions. Although there are no foreign species issues included in our high-priority listing actions (these are accounted for separately in the Annual Notice of Review for foreign species published on May 3, 2011 (76 FR 25150)), many actions had 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).

Because of the large number of high-priority species, we 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 protections of the ESA 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.

Based on these prioritization factors, we continue to find that proposals to list the petitioned candidate species included in Table 1 are all precluded by higher priority listing actions including those with court-ordered and court-approved settlement agreements, listing actions with absolute statutory deadlines, and work on proposed listing determinations for candidate species with higher listing priorities.

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. During FY 2011, we have completed delisting rules for three species.) Given the limited resources available for listing, we find that we made 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

FY 2011 COMPLETED LISTING ACTIONS—Continued

Publication date	Title	Actions	FR pages
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 FR 77801–77817
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
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 9991–10003
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 Warranted.	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 13121–13122
3/15/2011	Withdrawal of Proposed Rule to List the Flat-tailed Horned Lizard as Threatened.	Proposed rule withdrawal	76 FR 14210–14268
3/15/2011	Proposed Threatened Status for the Chiricahua Leopard Frog and Proposed Designation of Critical Habitat.	Proposed Listing Threatened; Proposed Designation of Critical Habitat.	76 FR 14126–14207
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
4/1/2011	90-Day Finding on a Petition to List the Spring Pygmy Sunfish as Endangered.	Notice of 90-Day Petition Finding, Substantial.	76 FR 18138–18143
4/5/2011	12-Month Finding on a Petition to List the Bearmouth Mountainsnail, Byrne Resort Mountainsnail, and Meltwater Lednian Stonefly as Endangered or Threatened.	Notice of 12-Month petition finding, Not Warranted and Warranted but precluded.	76 FR 18684–18701

FY 2011 COMPLETED LISTING ACTIONS—Continued

Publication date	Title	Actions	FR pages
4/5/2011	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.	Notice of 90-Day Petition Finding, Substantial.	76 FR 18701–18706
4/12/2011	Proposed Endangered Status for the Three Forks Springsnail and San Bernardino Springsnail, and Proposed Designation of Critical Habitat.	Proposed Listing Endangered; Proposed Designation of Critical Habitat.	76 FR 20464–20488
4/13/2011	90-Day Finding on a Petition To List Spring Mountains Acastus Checkerspot Butterfly as Endangered.	Notice of 90-Day Petition Finding, Substantial.	76 FR 20613–20622
4/14/2011	90-Day Finding on a Petition to List the Prairie Chub as Threatened or Endangered.	Notice of 90-Day Petition Finding, Substantial.	76 FR 20911–20918
4/14/2011	12-Month Finding on a Petition to List Hermes Copper Butterfly as Endangered or Threatened.	Notice of 12-Month petition finding, Warranted but precluded.	76 FR 20918–20939
4/26/2011	90-Day Finding on a Petition to List the Arapahoe Snowfly as Endangered or Threatened.	Notice of 90-Day Petition Finding, Substantial.	76 FR 23256–23265
4/26/2011	90-Day Finding on a Petition to List the Smooth-Billed Ani as Threatened or Endangered.	Notice of 90-Day Petition Finding, Not substantial.	76 FR 23265–23271
5/12/2011	Withdrawal of the Proposed Rule to List the Mountain Plover as Threatened.	Proposed Rule, Withdrawal	76 FR 27756–27799
5/25/2011	90-Day Finding on a Petition To List the Spot-tailed Earless Lizard as Endangered or Threatened.	Notice of 90-Day Petition Finding, Substantial.	76 FR 30082–30087
5/26/2011	Listing the Salmon-Crested Cockatoo as Threatened Throughout its Range with Special Rule.	Final Listing Threatened	76 FR 30758–30780
5/31/2011	12-Month Finding on a Petition to List Puerto Rican Harlequin Butterfly as Endangered.	Notice of 12-Month petition finding, Warranted but precluded.	76 FR 31282–31294
6/2/2011	90-Day Finding on a Petition to Reclassify the Straight-Horned Markhor (*Capra falconeri jerdoni*) of Torghar Hills as Threatened.	Notice of 90-Day Petition Finding, Substantial.	76 FR 31903–31906
6/2/2011	90-Day Finding on a Petition to List the Golden-winged Warbler as Endangered or Threatened.	Notice of 90-Day Petition Finding, Substantial.	76 FR 31920–31926
6/7/2011	12-Month Finding on a Petition to List the Striped Newt as Threatened.	Notice of 12-Month petition finding, Warranted but precluded.	76 FR 32911–32929
6/9/2011	12-Month Finding on a Petition to List *Abronia ammophila, Agrostis rossiae, Astragalus proimanthus, Boechera* (*Arabis*) *pusilla,* and *Penstemon gibbensii* as Threatened or Endangered.	Notice of 12-Month petition finding, Not Warranted and Warranted but precluded.	76 FR 33924–33965
6/21/2011	90-Day Finding on a Petition to List the Utah Population of the Gila Monster as an Endangered or a Threatened Distinct Population Segment.	Notice of 90-Day Petition Finding, Not substantial.	76 FR 36049–36053
6/21/2011	Revised 90-Day Finding on a Petition To Reclassify the Utah Prairie Dog From Threatened to Endangered.	Notice of 90-day Petition Finding, Not substantial.	76 FR 36053–36068
6/28/2011	12-Month Finding on a Petition to List *Castanea pumila* var. *ozarkensis* as Threatened or Endangered.	Notice of 12-Month petition finding, Not warranted.	76 FR 37706–37716
6/29/2011	90-Day Finding on a Petition to List the Eastern Small-Footed Bat and the Northern Long-Eared Bat as Threatened or Endangered.	Notice of 90-Day Petition Finding, Substantial.	76 FR 38095–38106
6/30/2011	12-Month Finding on a Petition to List a Distinct Population Segment of the Fisher in Its United States Northern Rocky Mountain Range as Endangered or Threatened with Critical Habitat.	Notice of 12-Month petition finding, Not warranted.	76 FR 38504–38532
7/12/2011	90-Day Finding on a Petition to List the Bay Skipper as Threatened or Endangered.	Notice of 90-Day Petition Finding, Substantial.	76 FR 40868–40871

FY 2011 COMPLETED LISTING ACTIONS—Continued

Publication date	Title	Actions	FR pages
7/19/2011	12-Month Finding on a Petition to List *Pinus albicaulis* as Endangered or Threatened with Critical Habitat.	Notice of 12-Month petition finding, Warranted but precluded.	76 FR 42631–42654
7/19/2011	Petition To List Grand Canyon Cave Pseudoscorpion.	Notice of 12-Month petition finding, Not warranted.	76 FR 42654–42658
7/26/2011	12-Month Finding on a Petition to List the Giant Palouse Earthworm (*Drilolerius americanus*) as Threatened or Endangered.	Notice of 12-Month petition finding, Not warranted.	76 FR 44547–44564
7/26/2011	12-Month Finding on a Petition to List the Frigid Ambersnail as Endangered.	Notice of 12-Month petition finding, Not warranted.	76 FR 44566–44569
7/27/2011	Determination of Endangered Status for *Ipomopsis polyantha* (Pagosa Skyrocket) and Threatened Status for *Penstemon debilis* (Parachute Beardtongue) and *Phacelia submutica* (DeBeque Phacelia).	Final Listing Endangered, Threatened	76 FR 45054–45075
7/27/2011	12-Month Finding on a Petition to List the Gopher Tortoise as Threatened in the Eastern Portion of its Range.	Notice of 12-Month petition finding, Warranted but precluded.	76 FR 45130–45162
8/2/2011	Proposed Endangered Status for the Chupadera Springsnail (*Pyrgulopsis chupaderae*) and Proposed Designation of Critical Habitat.	Proposed Listing Endangered	76 FR 46218–46234
8/2/2011	90-Day Finding on a Petition to List the Straight Snowfly and Idaho Snowfly as Endangered.	Notice of 90-Day Petition Finding, Not substantial.	76 FR 46238–46251
8/2/2011	12-Month Finding on a Petition to List the Redrock Stonefly as Endangered or Threatened.	Notice of 12-Month petition finding, Not warranted.	76 FR 46251–46266
8/2/2011	Listing 23 Species on Oahu as Endangered and Designating Critical Habitat for 124 Species.	Proposed Listing Endangered	76 FR 46362–46594
8/4/2011	90-Day Finding on a Petition To List Six Sand Dune Beetles as Endangered or Threatened.	Notice of 90-Day Petition Finding, Not substantial and substantial.	76 FR 47123–47133
8/9/2011	Endangered Status for the Cumberland Darter, Rush Darter, Yellowcheek Darter, Chucky Madtom, and Laurel Dace.	Final Listing Endangered	76 FR 48722–48741
8/9/2011	12-Month Finding on a Petition to List the Nueces River and Plateau Shiners as Threatened or Endangered.	Notice of 12-Month petition finding, Not warranted.	76 FR 48777–48788
8/9/2011	Four Foreign Parrot Species [crimson shining parrot, white cockatoo, Philippine cockatoo, yellow-crested cockatoo].	Proposed Listing Endangered and Threatened; Notice of 12-Month petition finding, Not warranted.	76 FR 49202–49236
8/10/2011	Proposed Listing of the Miami Blue Butterfly as Endangered, and Proposed Listing of the Cassius Blue, Ceraunus Blue, and Nickerbean Blue Butterflies as Threatened Due to Similarity of Appearance to the Miami Blue Butterfly.	Proposed Listing Endangered Similarity of Appearance.	76 FR 49408–49412
8/10/2011	90-Day Finding on a Petition To List the Saltmarsh Topminnow as Threatened or Endangered Under the Endangered Species Act.	Notice of 90-Day Petition Finding, Substantial.	76 FR 49412–49417
8/10/2011	Emergency Listing of the Miami Blue Butterfly as Endangered, and Emergency Listing of the Cassius Blue, Ceraunus Blue, and Nickerbean Blue Butterflies as Threatened Due to Similarity of Appearance to the Miami Blue Butterfly.	Emergency Listing Endangered and Similarity of Appearance.	76 FR 49542–49567
8/11/2011	Listing Six Foreign Birds as Endangered Throughout Their Range.	Final Listing Endangered	76 FR 50052–50080
8/17/2011	90-Day Finding on a Petition to List the Leona's Little Blue Butterfly as Endangered or Threatened.	Notice of 90-Day Petition Finding, Substantial.	76 FR 50971–50979
9/01/2011	90-Day Finding on a Petition to List All Chimpanzees (*Pan troglodytes*) as Endangered.	Notice of 90-Day Petition Finding, Substantial.	76 FR 54423–54425

FY 2011 COMPLETED LISTING ACTIONS—Continued

Publication date	Title	Actions	FR pages
9/6/2011	12-Month Finding on Five Petitions to List Seven Species of Hawaiian Yellow-faced Bees as Endangered.	Notice of 12-Month petition finding, Warranted but precluded.	76 FR 55170–55203
9/8/2011	12-Month Petition Finding and Proposed Listing of *Arctostaphylos franciscana* as Endangered.	Notice of 12-Month petition finding, Warranted; Proposed Listing Endangered.	76 FR 55623–55638
9/8/2011	90-Day Finding on a Petition To List the Snowy Plover and Reclassify the Wintering Population of Piping Plover.	Notice of 90-Day Petition Finding, Not substantial.	76 FR 55638–55641
9/13/2011	90-Day Finding on a Petition To List the Franklin's Bumble Bee as Endangered.	Notice of 90-Day Petition Finding, Substantial.	76 FR 56381–56391
9/13/2011	90-Day Finding on a Petition to List 42 Great Basin and Mojave Desert Springsnails as Threatened or Endangered with Critical Habitat.	Notice of 90-Day Petition Finding, Substantial and Not substantial.	76 FR 56608–56630
9/21/2011	12-Month Finding on a Petition to List Van Rossem's Gull-billed Tern as Endangered or Threatened.	Notice of 12-Month petition finding, Not warranted.	76 FR 58650–58680
9/22/2011	Determination of Endangered Status for Casey's June Beetle and Designation of Critical Habitat.	Final Listing Endangered	76 FR 58954–58998
9/27/2011	12-Month Finding on a Petition to List the Tamaulipan Agapema, *Sphingicampa blanchardi* (no common name), and *Ursia furtiva* (no common name) as Endangered or Threatened.	Notice of 12-Month petition finding, Not warranted.	76 FR 59623–59634
9/27/2011	Partial 90-Day Finding on a Petition to List 404 Species in the Southeastern United States as Endangered or Threatened With Critical Habitat.	Notice of 90-Day Petition Finding, Substantial.	76 FR 59836–59862
9/29/2011	90-Day Finding on a Petition to List the American Eel as Threatened.	Notice of 90-Day Petition Finding, Substantial.	76 FR 60431–60444
10/4/2011	12-Month Finding on a Petition to List the Lake Sammamish Kokanee Population of *Oncorhynchus nerka* as an Endangered or Threatened Distinct Population Segment.	Notice of 12-Month petition finding, Not warranted.	76 FR 61298–61307
10/4/2011	12-Month Finding on a Petition to List *Calopogon oklahomensis* as Threatened or Endangered.	Notice of 12-Month petition finding, Not warranted.	76 FR 61307–61321
10/4/2011	12-Month Finding on a Petition To List the Amargosa River Population of the Mojave Fringe-toed Lizard as an Endangered or Threatened Distinct Population Segment.	Notice of 12-Month petition finding, Not warranted.	76 FR 61321–61330
10/4/2011	Endangered Status for the Alabama Pearlshell, Round Ebonyshell, Southern Sandshell, Southern Kidneyshell, and Choctaw Bean, and Threatened Status for the Tapered Pigtoe, Narrow Pigtoe, and Fuzzy Pigtoe; with Critical Habitat.	Proposed Listing Endangered	76 FR 61482–61529
10/4/2011	90-Day Finding on a Petition To List 10 Subspecies of Great Basin Butterflies as Threatened or Endangered with Critical Habitat.	Notice of 90-Day Petition Finding, Substantial and Not substantial.	76 FR 61532–61554

Our expeditious progress also included 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 ESA. 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, 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	
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.
Longfin smelt	12-month petition finding.
Actions With Statutory Deadlines	
5 Bird species from Colombia and Ecuador	Final listing determination.
Queen Charlotte goshawk	Final listing determination.
Ozark hellbender [4]	Final listing determination.
Altamaha spinymussel [3]	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.
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.
Leatherside chub (from 206 species petition)	12-month petition finding.
Platte River caddisfly (from 206 species petition) [5]	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.
Mohave Ground Squirrel [1]	12-month petition finding.
Ashy storm-petrel [5]	12-month petition finding.
Honduran emerald	12-month petition finding.
Eagle Lake trout [1]	90-day petition finding.
32 Pacific Northwest mollusks species (snails and slugs) [1]	90-day petition finding.
Spring Mountains checkerspot butterfly	90-day petition finding.
11 of 404 Southeast species	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.
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.
Humboldt marten	90-day petition finding.
Desert massasauga	90-day petition finding.
Western glacier stonefly (*Zapada glacier*)	90-day petition finding.
Thermophilic ostracod (*Potamocypris hunteri*)	90-day petition finding.
Sierra Nevada red fox [5]	90-day petition finding.
Boreal toad (eastern or southern Rocky Mtn population) [5]	90-day petition finding.
Alexander Archipelago wolf [5]	90-day petition finding.
High-Priority Listing Actions	
20 Maui-Nui candidate species [2] (17 plants, 3 tree snails) (14 with LPN = 2, 2 with LPN = 3, 3 with LPN = 8).	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.
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 West Texas 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.

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

Species	Action
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—6 plants & 2 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 also funded work on resubmitted petitions findings for 204 candidate species (species petitioned prior to the last CNOR). We did not include new information in our resubmitted petition finding for the Columbia Basin population of the greater sage-grouse in this notice, as the significance of the Columbia Basin DPS to the greater sage-grouse will require further review and we will update our finding at a later date (see 75 FR 13910; March 23, 2010). We also did not include new information in our resubmitted petition findings for the 64 candidate species for which we are preparing proposed listing determinations; see summaries below regarding publication of these determinations (these species will remain on the candidate list until a proposed listing rule is published). We also funded revised 12-month petition findings for the candidate species that we are removing from candidate status, which are being published as part of this CNOR (see Candidate Removals). Because the majority of these species were already candidate species prior to our receipt of a petition to list them, we had already assessed their status using funds from our Candidate Conservation Program. We also continue to monitor the status of these species through our Candidate Conservation Program. The cost of updating the species assessment forms and publishing the joint publication of the CNOR and resubmitted petition findings is shared between the Listing Program and the Candidate Conservation Program.

During FY 2011, we also funded work on resubmitted petition findings for uplisting two listed species, for which petitions were previously received.

Given the limited resources available for listing, we find that we are making expeditious progress to add qualified species to the lists of threatened and endangered species. First, as the tables above show, we are making expeditious progress by listing qualified species. In FY 2011, we resolved the status of 29 species that we determined, or had previously determined, qualified for listing; for 27 of those 29 species, the resolution was to add them to the lists of threatened and endangered species. We also proposed to list an additional 45 qualified species.

Second, we are making expeditious progress by working on adding qualified species to the lists. In FY 2011, we worked on developing final listing determinations for an additional 17 species, and proposed listing rules for another 85 species. Although we have not yet completed those actions, we are making expeditious progress towards doing so.

Third, we are making expeditious progress to add qualified species to the lists by identifying additional species that qualify for listing. In FY 2011, we completed 90-day petition findings for 480 species, and 12-month petition findings for 52 species. Of those 52 species, we determined that listing of 26 of the species was warranted but precluded. In FY 2011 we also worked on 90-day findings for an additional 50 species and 12-month findings for an additional 43 species.

Finally, the Service is making expeditious progress to add qualified species to the list by developing and beginning to implement a work plan that establishes a framework and schedule for resolving by September 30, 2016, the status of all of the species that the Service had determined to be qualified as of the 2010 Candidate Notice of Review. The Service submitted such a work plan to the U.S. District Court for the District of Columbia in *In re Endangered Species Act Section 4 Deadline Litigation,* No. 10–377 (EGS), MDL Docket No. 2165 (D. DC May 10, 2011), and obtained the court's approval. The Service has already begun to implement that work plan, because we completed most of the work identified in the above tables in accordance with the schedule set out in that work plan.

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 ESA, the actions described above collectively constitute expeditious progress.

Although we have not been able to resolve the listing status of many of the candidates, several programs in the Service contribute to the conservation of these species. In particular, the Candidate Conservation program, which is separately budgeted, focuses on providing technical expertise for developing conservation strategies and agreements to guide voluntary on-the-ground conservation work for candidate and other at-risk species. The main goal of this program is to address the threats facing candidate species. Through this program, we work with our partners (other Federal agencies, State agencies, Tribes, local governments, private landowners, and private conservation organizations) to address the threats to candidate species and other species at-risk. We are currently working with our partners to implement voluntary conservation agreements for more than 140 species covering 5 million acres of habitat. In some instances, the sustained implementation of strategically designed conservation efforts

culminates in making listing unnecessary for species that are candidates for listing or for which listing has been proposed.

Findings for Petitioned Candidate Species

Below are updated summaries for petitioned candidates for which we published findings, under section 4(b)(3)(B). We are making continued warranted-but-precluded 12-month findings on the petitions for these species (for our revised 12-month petition findings for species we are removing from candidate status, see summaries above under ''Candidate Removals'').

Mammals

Florida bonneted bat (*Eumops floridanus*)—The following summary is based on information in our files. No new information was presented in the petition received on January 29, 2010. Endemic to south Florida, this species has been found at 12 locations, 5 on private land and 7 on public land. The entire population may number less than a few hundred individuals. Results from a rangewide acoustical survey found a small number of locations where calls were recorded, and low numbers of calls were recorded at each location. Few active roost sites are known; all are artificial (i.e., bat houses). Prolonged cold temperatures in January and February 2010 affected one active roost. Additional cold temperatures occurred in south Florida in December 2010. In the short term, severe and prolonged cold events resulted in mortality of at least several adult Florida bonneted bats. The long-term effects of prolonged and repeated cold events on the species are not known. Efforts are underway to confirm presence at all previously documented sites. Additionally, a study to determine the northern and southern extent of the species' range and estimate overall abundance was initiated in 2011.

Occurrences are threatened by loss and conversion of habitat to other uses and habitat alteration (e.g., removal of old trees with cavities, removal of manmade structures with suitable roosting sites); this threat is expected to continue and increase. Although occurrences on conservation lands are inherently more protected than those on private lands, habitat alteration during management practices may affect natural roosting sites even on conservation lands if Florida bonneted bats are present but undetected. Therefore, occupied and potential habitat on forested or wooded lands, both private and public, continues to be at risk. The species is vulnerable to a wide array of natural and human factors: low population size, restricted range, low fecundity, large distances between occupied locations, and small number of occupied locations. Such factors may make recolonization unlikely if any site is extirpated, and may make the species vulnerable to extinction due to genetic drift, inbreeding depression, extreme weather events, and random or chance changes to the environment. Where the species occurs in or near human dwellings or structures, it is at risk to persecution, removal, and disturbance. Disturbance from humans, either intentional or inadvertent, can take place at any of the occurrences of this bat on either private or conservation lands. Disturbance of maternity roosts is of particular concern due to the low fecundity and small population of this species. Pesticide applications may be affecting its foraging base, especially in coastal areas.

Due to its overall vulnerability, intense hurricanes are a significant threat; this threat is expected to continue or increase in the future. Intense storms can cause mortality during the storm, exposure to predation immediately following the storm, loss of roost sites, impacts on foraging areas and insect abundance, and disruption of the maternal period. Prolonged and repeated periods of cold temperatures may have severe impacts on the population and increase risks from other threats by weakening individuals, extirpating colonies, or further reducing colony sizes. Although disease is a significant threat for other bat species, it is not known to be a threat for the Florida bonneted bat at this time. The protection currently afforded the Florida bonneted bat is limited, provides little protection to the species' occupied habitat, and includes no provisions to protect suitable but unoccupied habitat within the vicinity of known colony sites. Overall, we find the magnitude of threats is high due to the severity of the threats to this species. We find that most of the threats are currently occurring and, consequently, overall, threats are imminent. Therefore, we assigned an LPN of 2 to this species.

Pacific sheath-tailed bat, American Samoa DPS (*Emballonura semicaudata semicaudata*)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. This small bat is a member of the Emballonuridae, an Old World bat family that has an extensive distribution, primarily in the tropics. The Pacific sheath-tailed bat was once common and widespread in Polynesia and Micronesia, and it is the only insectivorous bat recorded from a large part of this area. The species as a whole (*E. semicaudata*) occurred on several of the Caroline Islands (Palau, Chuuk, and Pohnpei), Samoa (Independent and American), the Mariana Islands (Guam and the Commonwealth of the Northern Mariana Islands (CNMI)), Tonga, Fiji, and Vanuatu. While populations appear to be healthy in some locations, mainly in the Caroline Islands, they have declined substantially in other areas, including Independent and American Samoa, the Mariana Islands, Fiji, and possibly Tonga. Scientists recognize four subspecies: *E. s. rotensis,* endemic to the Mariana Islands (Guam and CNMI); *E. s. sulcata,* occurring in Chuuk and Pohnpei; *E. s. palauensis,* found in Palau; and *E. s. semicaudata,* occurring in American and Independent Samoa, Tonga, Fiji, and Vanuatu. This candidate assessment addresses the distinct population segment (DPS) of *E. s. semicaudata* that occurs in American Samoa.

E. s. semicaudata historically occurred in American and Independent Samoa, Tonga, Fiji, and Vanuatu. It is extant in Fiji and Tonga, but may be extirpated from Vanuatu and Independent Samoa. There is some concern that it is also extirpated from American Samoa, the location of this DPS, where surveys are currently ongoing to ascertain its status. The factors that led to the decline of this subspecies and the DPS are poorly understood; however, current threats to this subspecies and the DPS include habitat loss, predation by introduced species, and its small population size and distribution, which make the taxon extremely vulnerable to extinction due to typhoons and similar natural catastrophes. Thus, since the threats affect the entire DPS, and would likely be permanent, the threats are high in magnitude. The Pacific sheath-tailed bat may also be susceptible to disturbance to roosting caves. The LPN for *E. s. semicaudata* is 3 because the magnitude of the threats is high; the threats are ongoing, and therefore imminent; and the taxon is a distinct population segment of a subspecies.

Pacific sheath-tailed bat (*Emballonura semicaudata rotensis*), Guam and the Commonwealth of the Northern Mariana Islands (CNMI)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. This small bat is a member of the Emballonuridae, an Old World bat family that has an extensive distribution, primarily in the tropics.

The Pacific sheath-tailed bat was once common and widespread in Polynesia and Micronesia, and it is the only insectivorous bat recorded from a large part of this area. *E. s. rotensis* is historically known from the Mariana Islands and formerly occurred on Guam and in the CNMI on Rota, Aguiguan, Tinian (known from prehistoric records only), Saipan, and possibly Anatahan and Maug. Currently, *E. s. rotensis* appears to be extirpated from all but one island in the Mariana archipelago. The single remaining population of this subspecies occurs on Aguiguan, CNMI.

Threats to this subspecies have not changed over the past year. The primary threats to the subspecies are ongoing habitat loss and degradation as a result of feral goat (*Capra hircus*) activity on the island of Aguiguan and the taxon's small population size and limited distribution. Predation by nonnative species and human disturbance are also potential threats to the subspecies. The subspecies is believed near the point where stochastic events, such as typhoons, are increasingly likely to affect its continued survival. The disappearance of the remaining population on Aguiguan would result in the extinction of the subspecies. Thus, since the threats affect the entire subspecies, and would likely be permanent, the threats are high in magnitude. The LPN for *E. s. rotensis* remains at 3 because the magnitude of the threats is high; the threats are ongoing, and therefore imminent; and the taxon is a subspecies.

New England cottontail (*Sylvilagus transitionalis*)—The following summary is based on information contained in our files and information received in response to our notice published on June 30, 2004, when we announced our 90-day petition finding and initiation of a status review (69 FR 39395). We received the petition on August 30, 2000.

The New England cottontail (NEC) is a medium- to large-sized cottontail rabbit that may reach 1,000 grams in weight, and is one of two species within the genus *Sylvilagus* occurring in New England. NEC is considered a habitat specialist, in so far as it is dependent upon early-successional habitats typically described as thickets. The species is the only endemic cottontail in New England. Historically, the NEC occurred in seven States and ranged from southeastern New York (east of the Hudson River) north through the Champlain Valley, southern Vermont, the southern half of New Hampshire, and southern Maine and south throughout Massachusetts, Connecticut, and Rhode Island. The current range of the NEC has declined substantially, and occurrences have become increasingly separated. The species' distribution is fragmented into five apparently isolated metapopulations. The area occupied by the cottontail has contracted from approximately 90,000 sq km to 12,180 sq km. Surveys indicate that the long-term decline in NEC continues. For example, surveys for the species in 2009 documented the presence of NEC in only 7 of the 23 New Hampshire locations that were known to be occupied in 2002 and 2003. Similarly, surveys in Maine found the species no longer present in 9 of the 19 towns identified in an extensive survey that spanned the years 2000 to 2004. Similar surveys were conducted during the winter of 2010–2011 in Rhode Island, but the results are not yet available. Rangewide, it is estimated that less than one third of the occupied sites occur on lands in conservation status and fewer than 10 percent are being managed for early-successional forest species.

The primary threat to the NEC is loss of habitat through succession and alteration. Isolation of occupied patches by areas of unsuitable habitat and high predation rates are resulting in local extirpation of NECs from small patches. The range of the NEC has contracted by 75 percent or more since 1960, and current land uses in the region indicate that the rate of change, about 2 percent range loss per year, will continue. Additional threats include competition for food and habitat with introduced eastern cottontails and large numbers of native white-tailed deer, inadequate regulatory mechanisms to protect habitat, and mortality from predation. The magnitude of the threats continues to be high, because they occur rangewide and have a negative effect on the survival of the species. The threats are imminent because they are ongoing. Thus, we retained an LPN of 2 for this species. Conservation measures that address the threats to the species are being developed.

Fisher, West Coast DPS (*Martes pennanti*)—The following summary is based on information in our files and in the Service's initial warranted-but-precluded finding published in the **Federal Register** on April 8, 2004 (69 FR 18770). The fisher is a carnivore in the family Mustelidae, and is the largest member of the genus *Martes.* Historically, the West Coast population of the fisher extended south from British Columbia into western Washington and Oregon, and in the North Coast Ranges, Klamath-Siskiyou Mountains, and Sierra Nevada in California. Because of a lack of detections with standardized survey efforts over much of the fisher's historical range, the fisher is believed to be extirpated or reduced to scattered individuals from the lower mainland of British Columbia through Washington and northern Oregon and in the central and northern Sierra Nevada in California. Native extant populations of fisher are isolated to the North Coast of California, the Klamath-Siskiyou Mountains of northern California and southern Oregon, and the southern Sierra Nevada in California. Descendents of a fisher reintroduction effort also occur in the southern Cascades in Oregon. The Washington Department of Fish and Wildlife in conjunction with the Olympic National Park has completed the third year of a reintroduction effort as the State's first step in implementing their recovery goals for fisher. The California Department of Fish and Game and other collaborators are in the second year of their translocation efforts into the northern Sierra Nevada. Both of the reintroduction efforts still need several years to determine if populations are successfully established. Estimates of fisher numbers in native populations of the West Coast DPS vary widely. A rigorous monitoring program is lacking for the northern California-southwestern Oregon and southern Oregon Cascades populations, making estimates of fisher numbers for these two populations difficult. The fisher monitoring program in the southern Sierra Nevada population has provided preliminary estimates indicating no decline in the index of abundance within the monitored portion of the population. The two populations of native fisher in the northern California southern Oregon and southern Sierra Nevada are separated by four times the species' maximum dispersal distance. The extant fisher populations are either small (southern Sierra Nevada and southern Oregon Cascades) or isolated from one another or both.

Major threats that fragment or remove key elements of fisher habitat include various forest vegetation management practices such as timber harvest and fuels reduction treatments. Other potential major threats in portions of the range include: Large stand-replacing wildfires, changes in forest composition and structure related to the effects of climate change, forest and fuels management, and urban and rural development. Threats to fishers that lead to direct mortality and injury include: Collisions with vehicles; predation; rodenticides; and viral borne diseases such as rabies, parvovirus, and canine distemper. Existing regulatory mechanisms on Federal, State, and

private lands do not provide sufficient protection for the key elements of fisher habitat, or the certainty that conservation efforts will be effective or implemented. The magnitude of threats is high as they occur across the range of the DPS resulting in negative impacts on fisher distribution and abundance. However, the threats are nonimminent as the greatest long-term risks to the fisher in its west coast range are the subsequent ramifications of the isolation of small populations and their interactions with the listed threats. Therefore, we assigned an LPN of 6 to this DPS.

New Mexico meadow jumping mouse (*Zapus hudsonius luteus*)—The following summary is based on information contained in our files and the petition we received on October 15, 2008. The New Mexico meadow jumping mouse (jumping mouse) is endemic to New Mexico, Arizona, and a small area of southern Colorado. The jumping mouse nests in dry soils but uses moist, streamside, dense, riparian/wetland vegetation. Recent genetic studies confirm that the New Mexico meadow jumping mouse is a distinct subspecies from other *Zapus hudsonius* subspecies, confirming the currently accepted subspecies designation.

The threats that have been identified are excessive grazing pressure, water use and management, highway reconstruction, development, recreation, and beaver removal.

Since the early to mid-1990s, over 100 historical localities have been surveyed. Currently only 25 are believed to be extant including 1 in Colorado, 11 in New Mexico (including one that is contiguous with another Colorado locality), and 13 in Arizona. Moreover, the highly fragmented nature of its distribution is also a major contributor to the vulnerability of this species and increases the likelihood of very small, isolated populations being extirpated. The insufficient number of secure populations, and the destruction, modification, or curtailment of its habitat, continue to pose the most immediate threats to this species. Because the threats affect the jumping mouse in all but two of the extant localities, and the populations are small and fragmented, the impact of the threats on the species is of high severity. Thus, the threats are of a high magnitude. These threats are currently occurring and, therefore, are imminent. Thus, we continue to assign an LPN of 3 to this subspecies.

Mazama pocket gopher (*Thomomys mazama* ssp. *couchi, douglasii, glacialis, louiei, melanops, pugetensis, tacomensis, tumuli, yelmensis*) — We continue to find that listing this species is warranted but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted petition 12-month finding.

Canada lynx, within the State of New Mexico (*Lynx canadensis*)—In our finding of December 17, 2009 (74 FR 66937), we determined that adding the lynx in New Mexico to the listing of the lynx DPS was warranted, because the lynx is now present in the state as a result of the Colorado reintroduction effort, and we assigned an LPN of 12 to amending the listing of lynx to include New Mexico. We reconfirm that assigning an LPN of 12 is appropriate based on nonimminent threats of a low magnitude. The threats to the lynx in New Mexico from human-caused mortality are low in magnitude, because they do not occur at a level that creates a significant threat to the lynx DPS in the contiguous United States. We do not consider lynx in New Mexico, or its habitat in New Mexico, to be essential to the survival or recovery of the DPS; as a result, neither human-caused mortality nor habitat modification in New Mexico occurs at a level such that it creates a significant threat to the lynx DPS in the contiguous United States. Potential impacts to the habitat in New Mexico have not been documented to threaten lynx, either in New Mexico or outside of it. The amount of suitable habitat for lynx in New Mexico is considered negligible relative to the amount of habitat within the listed range, and the majority of lynx habitats within the contiguous United States are already protected by the Act. The threats are also nonimminent, because they occur infrequently. Because lynx in the lower 48 are already listed as a DPS and conditions affecting the lynx in New Mexico are neither imminent nor of sufficient magnitude to pose a threat to the lynx DPS throughout the contiguous United States, the appropriate LPN for this level of magnitude and immediacy of threats is 12.

Gunnison's prairie dog (*Cynomys gunnisoni*)—Gunnison's prairie dogs occur in Arizona, Colorado, New Mexico, and Utah. In our February 5, 2008, 12-month finding (73 FR 6660), we determined that listing the Gunnison prairie dog was warranted but precluded, with an LPN of 6, due to threats in a significant portion of its range—the montane portion of the species' range within Colorado and New Mexico—where the effects from plague and other factors threaten those populations. This finding was challenged by WildEarth Guardians in September of 2008. On September 30, 2010, the Court set aside our 2008 finding and remanded the matter back to us for further action. The Court found that we arbitrarily and capriciously ''determined that something other than a species was an endangered or threatened species which warranted listing.''

In response to the decision of the Court, we will reevaluate the status of the Gunnison's prairie dog and deliver a revised 12-month finding to the **Federal Register**. However, we are currently unable to complete a status review due to budget and workload limitations. Furthermore, initiating a revised status review for the species would be premature at this time because of a significant ongoing genetics study initiated by the Colorado Division of Wildlife (CDOW) addressing Gunnison's prairie dog taxonomy. CDOW indicates preliminarily that this work strongly supports the existence of genetic differences between Gunnison's prairie dogs in the montane and prairie portions of its range indicating that they may constitute two putative subspecies. We anticipate the analysis of these data will likely be completed by the fall of 2011 and we will evaluate the information thereafter. It is critical for us to consider this potentially significant taxonomic revision in our revised status review after the CDOW releases its final genetics report. Gunnison's prairie dogs will remain a candidate within the montane portion of their range until we complete this analysis.

Southern Idaho ground squirrel (*Spermophilus brunneus endemicus*)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. The southern Idaho ground squirrel is endemic to four counties in southwest Idaho; its total known range is approximately 426,000 hectares (1,050,000 acres). Threats to southern Idaho ground squirrels include: Habitat degradation and fragmentation; direct killing from shooting, trapping, or poisoning; predation; competition with Columbian ground squirrels; and inadequacy of existing regulatory mechanisms. Habitat degradation and fragmentation appear to be the primary threats to the species. Nonnative annuals now dominate much of this species' range, have changed the species composition of vegetation used as forage for the southern Idaho ground squirrel, and have altered the fire regime by accelerating the frequency of wildfire. Nonnative annuals do not provide

consistent forage quality for southern Idaho ground squirrels as compared to the native vegetation. Habitat deterioration, destruction, and fragmentation contribute to the current patchy distribution of southern Idaho ground squirrels. However, some human-altered landscapes, such as golf courses and row crops of alfalfa, seem to provide habitat sufficient to maintain high densities of southern Idaho ground squirrels.

Two candidate conservation agreements with assurances (CCAAs) have been completed for this species. Both CCAAs include conservation measures that minimize ground-disturbing activities, allow for the investigation of methods to restore currently degraded habitat, provide additional protection to southern Idaho ground squirrels from recreational shooting and other direct killing on enrolled lands, and also allow for the translocation of squirrels to or from enrolled lands, if necessary. The acreage enrolled through these two CCAAs is 38,000 ha (94,000 ac), or approximately 9 percent of the approximate known range. While the ongoing conservation efforts have helped to reduce the magnitude of threats to moderate, habitat degradation remains the primary threat to the species throughout most of its range. This threat is imminent due to the ongoing and increasing prevalence of nonnative vegetation, and the current patchy distribution of the species. Thus, we assign an LPN of 9 to this subspecies.

Washington ground squirrel (*Spermophilus washingtoni*)—The following summary is based on information contained in our files and in the petition we received on March 2, 2000. The Washington ground squirrel is endemic to the Deschutes-Columbia Plateau sagebrush-steppe and grassland communities in eastern Oregon and south-central Washington. Although widely abundant historically, recent surveys suggest that its current range has contracted toward the center of its historical range. Approximately two-thirds of the Washington ground squirrel's total historical range has been converted to agricultural and residential uses. The most contiguous, least-disturbed expanse of suitable habitat within the species' range occurs on a site owned by Boeing, Inc., and on the Naval Weapons Systems Training Facility near Boardman, Oregon. In Washington, the largest expanse of known suitable habitat occurs on State and Federal lands.

Agricultural, residential, and wind power development, among other forms of development, continue to eliminate Washington ground squirrel habitat in portions of its range. Throughout much of its range, Washington ground squirrels are threatened by the establishment and spread of invasive plant species, particularly cheatgrass, which alter available cover and food quantity and quality, and increase fire intervals. Additional threats include habitat fragmentation, recreational shooting, genetic isolation and drift, and predation. Potential threats include disease, drought, and possible competition with related species in disturbed habitat at the periphery of their range. In Oregon, some threats are being addressed as a result of the State listing of this species, and by implementation of the Threemile Canyon Farms Multi-Species CCAA. In Washington, there are currently no formal agreements with private landowners or with State or Federal agencies to protect the Washington ground squirrel. Additionally, no State or Federal management plans have been developed that specifically address the needs of the species or its habitat. Since current and potential threats are widespread, and, in some areas, severe, we conclude the magnitude of threats remains high. The Washington ground squirrel has both imminent and nonimminent threats. At a range-wide scale, we conclude the threats are nonimminent based largely on the following: The CCAA addressed the imminent loss of a large portion of habitat to agriculture; there are no other large-scale efforts to convert suitable habitat to agriculture; and wind power project impacts can be minimized through compliance with the Oregon State Endangered Species Act (OESA) and/or the Columbia Basin Ecoregion wind energy siting and permitting guidelines. We also consider the potential development of shooting ranges on the Naval Weapons Systems Training Facility as nonimminent, because the proposed action is still being developed, making us unable to assess its timing and impact, which could be minimized through compliance with the OESA. We, therefore, have retained an LPN of 5 for this species.

North American wolverine, contiguous U.S. DPS (*Gulo gulo luscus*)—The following summary is based on information contained in our files, in the petition received July 13, 2000 and in our initial warranted-but-precluded finding published in the **Federal Register** on December 14, 2010 (75 FR 78030). The wolverine is a terrestrial mammal that occurs in a wide variety of alpine, boreal, and arctic habitats. Wolverines naturally occur at low densities, and require cold areas that maintain deep, persistent snow cover into the warm season for successful denning. Within the contiguous United States, which constitutes a DPS, wolverine habitat is restricted to high-elevation areas in the West. Their current distribution includes functioning populations in the North Cascades Mountains and the northern Rocky Mountains, as well as populations that have not yet reestablished in the southern Rocky Mountains and the Sierra Nevada. The primary threat to this DPS is from habitat and range loss due to climate warming. Climate changes are predicted to reduce wolverine habitat and range by 23 percent over the next 30 years, and 63 percent over the next 75 years, rendering remaining habitat significantly smaller and more fragmented. This increased fragmentation and isolation of subpopulations is expected to limit the regular dispersal of wolverines that is necessary to maintain genetic exchange and metapopulation dynamics. Other secondary threats to the wolverine that could work in concert with climate change include harvest, disturbance, infrastructure, transportation corridors, and small effective population sizes. The primary threat of habitat and range loss due to climate change would affect wolverine habitat across the entire DPS and, therefore, the magnitude of threats to the wolverine is high. However climate change has not yet had a detectable effect on the DPS to this point in time; the threat is nonimminent. Therefore, we have assigned the wolverine contiguous U.S. DPS an LPN of 6.

Birds

Spotless crake, American Samoa DPS (*Porzana tabuensis*)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. *Porzana tabuensis* is a small, dark, cryptic rail found in wetlands and rank scrub or forest in the Philippines, Australia, Fiji, Tonga, Society Islands, Marquesas, Independent Samoa, and American Samoa (Ofu, Tau). The genus *Porzana* is widespread in the Pacific, where it is represented by numerous island-endemic and flightless species (many of which are extinct as a result of anthropogenic disturbances) as well as several more cosmopolitan species, including *P. tabuensis.* No subspecies of *P. tabuensis* are recognized.

The American Samoa population is the only population of spotless crakes

under U.S. jurisdiction. The available information indicates that distinct populations of the spotless crake, a species not noted for long-distance dispersal, are definable. The population of spotless crakes in American Samoa is discrete in relation to the remainder of the species as a whole, which is distributed in widely separated locations. Although the spotless crake (and other rails) have dispersed widely in the Pacific, island rails have tended to reduce or lose their power of flight over evolutionary time and so become isolated (and vulnerable to terrestrial predators such as rats). The population of this species in American Samoa is therefore distinct based on geographic and distributional isolation from spotless crake populations on other islands in the oceanic Pacific, the Philippines, and Australia. The American Samoa population of the spotless crake links the Central and Eastern Pacific portions of the species' range. The loss of this population would result in an increase of roughly 500 miles (805 kilometers) in the distance between the central and eastern Polynesian portions of the spotless crake's range, and could result in the isolation of the Marquesas and Society Islands populations by further limiting the potential for even rare genetic exchange. Based on the discreteness and significance of the American Samoa population of the spotless crake, we consider this population to be a distinct vertebrate population segment.

Threats to this population have not changed over the past year. The population in American Samoa is threatened by small population size, limited distribution, predation by nonnative and native animals, continued development of wetland habitat, and natural catastrophes such as hurricanes. The co-occurrence of a known predator of ground-nesting birds, the Norway rat (*Rattus norvegicus*), and native predators, including the Pacific boa (*Candoia bibroni*) and the purple swamphen (*Porphyrio porphyrio*), along with the extremely restricted observed distribution and low numbers, indicate that the magnitude of the threats to the American Samoa DPS of the spotless crake continues to be high, because the threats have a significant likelihood of bringing about extinction on a short time frame. The threats are ongoing, and therefore imminent. Based on this assessment of existing information about the imminence and high magnitude of these threats, we assigned the spotless crake an LPN of 3.

Yellow-billed cuckoo, western U.S. DPS (*Coccyzus americanus*)—We continue to find that listing this species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted petition 12-month finding.

Friendly ground-dove, American Samoa DPS (*Gallicolumba stairi*)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. The genus *Gallicolumba* is distributed throughout the Pacific and Southeast Asia. The genus is represented in the oceanic Pacific by six species: Three are endemic to Micronesian islands or archipelagos, two are endemic to island groups in French Polynesia; and *G. stairi* is endemic to Samoa, Tonga, and Fiji. Some authors recognize two subspecies of the friendly ground-dove, one, slightly smaller, in the Samoan archipelago (*G. s. stairi*); and one in Tonga and Fiji (*G. s. vitiensis*). However, because morphological differences between the two are minimal, we are not recognizing separate subspecies at this time.

In American Samoa, the friendly ground-dove has been found on the islands of Ofu and Olosega (Manua Group). Threats to this subspecies have not changed over the past year. Predation by nonnative species and natural catastrophes such as hurricanes are the primary threats to the subspecies. Of these, predation by nonnative species is thought to be occurring now and likely has been occurring for several decades. This predation may be an important impediment to increasing the population. Predation by introduced species has played a significant role in reducing, limiting, and extirpating populations of island birds, especially ground-nesters like the friendly ground-dove, in the Pacific and other locations worldwide. Nonnative predators known or thought to occur in the range of the friendly ground-dove in American Samoa are feral cats (*Felis catus*), Polynesian rats (*Rattus exulans*), black rats (*R. rattus*), and Norway rats (*R. norvegicus*).

In January 2004 and February 2005, hurricanes virtually destroyed the habitat of *G. stairi* in the area on Olosega Island where the species had been most frequently recorded. Although this species has coexisted with severe storms for millennia, this example illustrates the potential for natural disturbance to exacerbate the effects of anthropogenic disturbance on small populations. Consistent monitoring using a variety of methods over the last 5 years yielded few observations and no change in the relative abundance of this taxon in American Samoa. The total population size is poorly known, but is unlikely to number more than a few hundred pairs. The distribution of the friendly ground-dove is limited to steep, forested slopes with an open understory and a substrate of fine scree or exposed earth; this habitat is not common in American Samoa. The threats are ongoing, and therefore imminent, and the magnitude is moderate because the relative abundance has remained the same for several years. Thus, we assign this subspecies an LPN of 9.

Streaked horned lark (*Eremophila alpestris strigata*)—We continue to find that listing this species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted petition 12-month finding.

Red knot (*Calidris canutus rufa*)—The following summary is based on information contained in our files and information provided by petitioners. Four petitions to emergency list the red knot have been received: one on August 9, 2004, two others on August 5, 2005, and the most recent on February 27, 2008. The *rufa* subspecies is one of six recognized subspecies of red knot and one of three subspecies occurring in North America. This subspecies makes one of the longest distance migrations known in the animal kingdom, as it travels between breeding areas in the central Canadian Arctic and wintering areas that are primarily in southern South America along the coast of Chile and Argentina. They migrate along the Atlantic coast of the United States, where they may be found from Maine to Florida.

The Delaware Bay area (in Delaware and New Jersey) is the largest known spring migration stopover area, with far fewer migrants congregating elsewhere along the Atlantic coast. The concentration in the Delaware Bay area occurs from the middle of May to early June, corresponding to the spawning season of horseshoe crabs. The knots feed on horseshoe crab eggs, rebuilding energy reserves needed to complete migrations to the Arctic and arrive on the breeding grounds in good condition. In the past, horseshoe crab eggs at Delaware Bay were so numerous that a red knot could dependably eat enough in 2 to 3 weeks to double its weight.

Surveys at wintering areas and at Delaware Bay during spring migration indicate a substantial decline in the red knot in recent years. At the Delaware Bay area, peak counts between 1982 and 1998 were as high as 95,360 individuals.

Counts may vary considerably between years. Some of the fluctuations can be attributed to predator-prey cycles on the breeding grounds, and counts show that knots rebound from such reductions. Peak counts of red knots observed during aerial surveys flown in Delaware Bay from 2004 to 2008 were consistently below 16,000 birds, with an all time low of only 12,375 red knots found in 2007. In recent years, the highest concentrations of red knots at the Delaware Bay stopover have been within Mispillion Harbor, Delaware, an area that has likely been undercounted during past aerial surveys.

Beginning in 2009, a new survey methodology was implemented for the Delaware Bay stopover area to include ground counts that more accurately reflect concentrations of red knots using Mispillion Harbor and to include aerial surveys of red knots using Atlantic coastal marshes near Stone Harbor, New Jersey. The highest count using the new methodology showed 27,187 red knots in Delaware and 900 in New Jersey, for a total count of 28,087 birds. Poor weather conditions in 2009 prevented aerial surveys during the period when red knots were thought to be at a peak, so no comparison with the past aerial survey peak count method was possible. While the number of red knots using Delaware Bay likely increased in 2009, much of the increase is attributed to improved survey methods and an expanded area of coverage. In 2010, the peak aerial count of red knots was 14,475; however, flight delays and scheduling issues prevented simultaneous aerial and ground counts, so aerial counts could not be calibrated. Further analysis is needed to correlate peak counts using the new methodology with the past aerial-survey-only counts.

Counts in recent years in South America also are substantially lower than in the past. In the mid-1980s, an estimated 67,500 red knots were observed from Tierra del Fuego, Chile, and along the coast of Argentina to northern Patagonia. Since 2003, the largest concentrations of red knots have occurred at the principal wintering areas in Bahia Lomas and other portions of Tierra del Fuego and southern Patagonia, with few birds found farther north along the coast of Argentina. More than 50,000 red knots were counted in the principal winter areas in 1985 and 2000. Since 2005, fewer than 18,000 have been counted within the same area, with only 16,260 red knots observed in 2010.

The primary threat to the red knot has been attributed to destruction and modification of its habitat, particularly the reduction in key food resources resulting from reductions in horseshoe crabs, which are harvested primarily for use as bait and secondarily to support a biomedical industry. Commercial harvest increased substantially in the 1990s. Research shows that, since 1998, a high proportion of red knots leaving the Delaware Bay failed to achieve threshold departure masses needed to fly to breeding grounds and survive an initial few days of snow cover, and this corresponded to reduced annual survival rates and reduced reproductive success. Since 1999, to protect the Atlantic coast population of the horseshoe crab and to increase availability of horseshoe crab eggs in Delaware Bay for hemispheric migratory shorebird populations, a series of timing restrictions and substantially lower harvest quotas have been adopted by the Atlantic States Marine Fisheries Commission, as well as by the States of New Jersey, Delaware, and Maryland. In March 2008, New Jersey passed legislation imposing a moratorium on horseshoe crab harvest or landing within the State until the red knot has fully recovered.

The reductions in commercial horseshoe crab harvest by Atlantic coastal States since 1999 are substantial. From 2004 to 2009, annual landings of horseshoe crabs have been reduced by over 70 percent from the reference period landings of the mid to late 1990s. For Delaware and New Jersey, horseshoe crab landings for bait have decreased from 726,660 reported in 1999, to a preliminary number of 102,659 in Delaware and none in New Jersey in 2009. No horseshoe crabs have been landed for bait in New Jersey since 2007, as a result of the State-imposed harvest moratorium. In the Delaware Bay area, continued recruitment of small horseshoe crabs has been observed, with a substantial increase in numbers of the smallest sizes of immature males and females in 2009 over previous years. The continued increase in immature males and females would be expected in a recovering population and suggests recent harvest restrictions may be having the desired effect, but it may be several more years until this increase is realized in spawning age adults, as horseshoe crabs need 8 to 10 years to reach sexual maturity.

Other identified threat factors include habitat destruction due to beach erosion and various shoreline protection and stabilization projects that are affecting areas used by migrating knots for foraging, the inadequacy of existing regulatory mechanisms, human disturbance, and competition with other species for limited food resources. Also, the concentration of red knots in the Delaware Bay areas and at a relatively small number of wintering areas makes the species vulnerable to potential large-scale events such as oil spills or severe weather. Overall, we conclude that the threats, in particular the modification of habitat through the effects, particularly of the past, harvesting of horseshoe crabs, are severe enough to put the viability of the red knot at substantial risk and are therefore of a high magnitude. The threats are currently occurring and therefore imminent because of continuing suppressed horseshoe-crab-egg forage conditions for the red knot within the Delaware Bay stopover. Based on imminent threats of a high magnitude, we retain an LPN of 3 for this species.

Yellow-billed loon (*Gavia adamsii*)—The following summary is based on information contained in our files and the petition we received on April 5, 2004. The yellow-billed loon is a migratory bird. Solitary pairs breed on lakes in the arctic tundra of the United States, Russia, and Canada from June to September. During the remainder of the year, the species winters in more southern coastal waters of the Pacific Ocean and the Norway and North Seas.

During most of the year, individual yellow-billed loons are so widely dispersed that high adult mortality from any single factor is unlikely. However, during migration, yellow-billed loons are more concentrated, and hundreds are likely subject to subsistence harvest, based on the best available information; the population could decline substantially if such harvest continues. Future subsistence harvest in Alaska, by itself, constitutes a threat to the species rangewide. This subsistence harvest is occurring despite the species being closed to hunting under the Migratory Bird Treaty Act (16 U.S.C. 703–712). In addition, up to several hundred yellow-billed loons may be taken annually on Russian breeding grounds, and small numbers of yellow-billed loons may be taken in Canada. Other risk factors evaluated were found to be threats to the species; these included oil and gas development (i.e., disturbance, changes in freshwater chemistry and pollutant loads, and changes in freshwater hydrology); pollution; overfishing; climate change; vessel traffic; commercial- and subsistence-fishery bycatch; and contaminants other than those associated with oil and gas. Although these other risk factors may not rise to the level of a threat individually, when taken collectively with the effects of subsistence hunting in other areas, they may reduce the rangewide population even further. The

primary threat of subsistence harvest is currently occurring and one or more of the threats discussed above is occurring throughout the range of the yellow-billed loon, either in its breeding or wintering grounds, or during migration; therefore, the threats are imminent. The magnitude of the primary threat to the species, subsistence harvest, is moderate. Although subsistence harvest is ongoing, the numbers taken have varied substantially between years; however, we have concerns about the accuracy and precision of the numbers reported in harvest surveys. Thus, we assigned the yellow-billed loon an LPN of 8.

Kittlitz's murrelet (*Brachyramphus brevirostris*)—See above in ''Listing Priority Changes in Candidates.'' The above summary is based on information contained in our files.

Xantus's murrelet (*Synthliboramphus hypoleucus*)—The following summary is based on information contained in our files and the petition we received on April 16, 2002. The Xantus's murrelet is a small seabird in the family Alcidae that occurs along the west coast of North America in the United States, Mexico, and Canada. The species has a limited breeding distribution, only nesting on the Channel Islands in southern California and on islands off the west coast of Baja California, Mexico. Although data on population trends are scarce, the population is suspected to have declined greatly over the last century, mainly due to predators such as rats (*Rattus* sp.) and feral cats (*Felis catus*) introduced to nesting islands, with possible extirpations on three islands in Mexico. A dramatic decline (up to 70 percent) from 1977 to 1991 was detected at the largest nesting colony in southern California, possibly due to high levels of predation on eggs by the endemic deer mouse (*Peromyscus maniculatus elusus*). Identified threats include introduced predators at nesting colonies, oil spills and oil pollution, reduced prey availability, human disturbance, and artificial light pollution.

Although substantial declines in the Xantus's murrelet population likely occurred over the last century, some of the largest threats are being addressed, and, to some degree, ameliorated. Declines and possible extirpations at several nesting colonies were thought to have been caused by nonnative predators, which have been removed from many of the islands where they once occurred. Most notably, since 1994, Island Conservation and Ecology Group has systematically removed rats, cats, and dogs from every murrelet nesting colony in Mexico, with the exception of cats and dogs on Guadalupe Island. In 2002, rats were eradicated from Anacapa Island in southern California, which has resulted in improvements in reproductive success at that island. In southern California, efforts to restore nesting habitat on Santa Barbara Island through the Montrose Settlements Restoration Project may benefit the Xantus's murrelet population at that island.

Artificial lighting from squid fishing and other vessels, or lights on islands, remains a potential threat to the species. Bright lights make Xantus's murrelets more susceptible to predation, and they can also become disoriented and exhausted from continual attraction to bright lights. Chicks can become disoriented and separated from their parents at sea, which could result in death of the dependent chicks. High-wattage lights on commercial market squid (*Loligo opalescens*) fishing vessels used at night to attract squid to the surface of the water in the Channel Islands was the suspected cause of unusually high predation on Xantus's murrelets by western gulls (*Larus occidentalis*) and barn owls (*Tyto alba*) at Santa Barbara Island in 1999. To address this threat, in 2000, the California Fish and Game Commission required light shields and a limit of 30,000 watts per boat; it is unknown if this is sufficient to reduce impacts. Since 1999, no significant squid fishing has occurred near any of the colonies in the Channel Islands; however, this remains a potential future threat.

A proposal to build three liquid natural gas facilities near the Channel Islands could affect the nesting colonies due to bright lights at night from the facility and visiting tanker vessels, noise from the facilities or from helicopters visiting the facilities, and the threat of oil spills associated with visiting tanker vessels. However, these facilities are early in the complex and long-term planning processes, and it is possible that none of these facilities will be built. In addition, none of them is directly adjacent to nesting colonies, where the impacts would be expected to be more significant. The remaining threats to the species are of a high magnitude, because they have the potential to compromise the only nesting areas for the species. However, because the liquid natural gas facilities are early in the planning process and may not be completed and currently, little squid fishing vessels occurs near the nesting colonies, the threats are nonimminent. Therefore, we retained a LPN of 5 for this species.

Sprague's pipit (*Anthus spragueii*)—See above in ''Listing Priority Changes in Candidates.'' The above summary is based on information contained in our files.

Lesser prairie-chicken (*Tympanuchus pallidicinctus*)—We continue to find that listing this species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted petition 12-month finding.

Gunnison sage-grouse (*Centrocercus minimus*)—We continue to find that listing this species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted petition 12-month finding.

Greater sage-grouse (*Centrocercus urophasianus)*—The following summary is based on information in our files and in the petition we received on January 30, 2002. Currently, greater sage-grouse occur in 11 States (Washington, Oregon, California, Nevada, Idaho, Montana, Wyoming, Colorado, Utah, South Dakota, and North Dakota), and 2 Canadian provinces (Alberta and Saskatchewan), occupying approximately 56 percent of their historical range. Greater sage-grouse depend on a variety of shrub-steppe habitats throughout their life cycle, and are considered obligate users of several species of sagebrush. The primary threat to greater sage-grouse is ongoing fragmentation and loss of shrub-steppe habitats through a variety of mechanisms. Most importantly, increasing fire cycles and invasive plants (and the interaction between them) in more westerly parts of the range, along with energy development and related infrastructure in more easterly areas are negatively affecting species' persistence. In addition, direct loss of habitat and fragmentation is occurring due to agriculture, urbanization, and infrastructure such as roads and power lines built in support of several activities. We also have determined that existing regulatory mechanisms are inadequate to protect the species from these ongoing threats. However, many of these habitat impacts are being actively addressed through conservation actions taken by local working groups, and State and Federal agencies. Notably, the National Resource Conservation Service has committed significant financial and technical resources to address threats to this species on private lands through their Sage-grouse Initiative. These efforts, when fully implemented, will potentially provide important conservation benefits to the greater sage-

grouse and its habitats. We consider the threats to the greater sage-grouse to be of moderate magnitude, because the threats are not occurring with uniform intensity or distribution across the wide range of the species at this time, and substantial habitat still remains to support the species in many areas. The threats are imminent because the species is currently facing them in many portions of its range. Therefore, we assigned the greater sage-grouse an LPN of 8.

Greater sage-grouse, Bi-State DPS (*Centrocercus urophasianus*) — We continue to find that listing this species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted petition 12-month finding.

Greater sage-grouse, Columbia Basin DPS (*Centrocercus urophasianus*)—The following summary is based on information in our files and a petition, dated May 14, 1999, requesting the listing of the Washington population of the western sage-grouse (*C. u. phaios*). On May 7, 2001, we concluded that listing the Columbia Basin DPS of the western sage-grouse was warranted, but precluded by higher priority listing actions (66 FR 22984); this population was historically found in northern Oregon and central Washington. Following our May 7, 2001, finding, the Service received additional petitions requesting listing actions for various other greater sage-grouse populations, including one for the nominal western subspecies, dated January 24, 2002, and three for the entire species, dated June 18, 2002, and March 19 and December 22, 2003. The Service subsequently found that the petition for the western subspecies did not present substantial information (68 FR 6500; February 7, 2003), and that listing the greater sage-grouse throughout its historical range was not warranted (70 FR 2244; January 12, 2005). These two findings were challenged, and remanded to the Service for further consideration. In response, we initiated a new rangewide status review for the entire species (73 FR 10218; February 26, 2008). On March 5, 2010, we found that listing of the greater sage-grouse was warranted but precluded by higher priority listing actions (75 FR 13910; March 23, 2010), and it was added to the list of candidates. We also found that the western subspecies of the greater sage-grouse, the taxonomic entity on which we based our DPS analysis for the Columbia Basin population, was no longer considered a valid subspecies. In light of our conclusions regarding the invalidity of the western sage-grouse subspecies, we will now need to analyze the significance of the Columbia Basin DPS to the greater sage-grouse. As priorities allow, the Service intends to complete an analysis to determine if this population continues to warrant recognition as a DPS in accordance with our Policy Regarding the Recognition of Distinct Vertebrate Population Segments (61 FR 4722; February 7, 1996). Until that time, the Columbia Basin DPS will remain a candidate for listing as a separate population of sage-grouse. Even if this population does not meet our DPS policy, the sage-grouse population in the Columbia Basin will remain a candidate for listing as part of the process for listing the greater sage-grouse entity.

Band-rumped storm-petrel, Hawaii DPS (*Oceanodroma castro*)—The following summary is based on information contained in our files and the petition we received on May 8, 1989. No new information was provided in the second petition received on May 11, 2004. The band-rumped storm-petrel is a small seabird that is found in several areas of the subtropical Pacific and Atlantic Oceans. In the Pacific, there are three widely separated breeding populations: one in Japan, one in Hawaii, and one in the Galapagos. Populations in Japan and the Galapagos are comparatively large and number in the thousands, while the Hawaiian birds represent a small, remnant population of possibly only a few hundred pairs. Band-rumped storm-petrels are most commonly found in close proximity to breeding islands. The three populations in the Pacific are separated by long distances across the ocean where birds are not found. Extensive at-sea surveys of the Pacific have revealed a broad gap in distribution of the band-rumped storm-petrel to the east and west of the Hawaiian Islands, indicating that the distribution of birds in the central Pacific around Hawaii is disjunct from other nesting areas. The available information indicates that distinct populations of band-rumped storm-petrels are definable and that the Hawaiian population is distinct based on geographic and distributional isolation from other band-rumped storm-petrel populations in Japan, the Galapagos, and the Atlantic Ocean. A population also can be considered discrete if it is delimited by international boundaries that have differences in management control of the species. The Hawaiian population of the band-rumped storm-petrel is the only population within U.S. borders or under U.S. jurisdiction. Loss of the Hawaiian population would cause a significant gap in the distribution of the band-rumped storm-petrel in the Pacific, and could result in the complete isolation of the Galapagos and Japan populations without even occasional genetic exchanges. Therefore, the population is both discrete and significant, and constitutes a DPS.

The band-rumped storm-petrel probably was common on all of the main Hawaiian Islands when Polynesians arrived about 1,500 years ago, based on storm-petrel bones found in middens on the island of Hawaii and in excavation sites on Oahu and Molokai. Nesting colonies of this species in the Hawaiian Islands currently are restricted to remote cliffs on Kauai and Lehua Island and high-elevation lava fields on Hawaii. Vocalizations of the species were heard in Haleakala Crater on Maui as recently as 2006; however, no nesting sites have been located on the island to date. The significant reduction in numbers and range of the band-rumped storm-petrel is due primarily to predation by nonnative predators introduced by humans, including the domestic cat (*Felis catus*), small Indian mongoose (*Herpestes auropunctatus*), common barn owl (*Tyto alba*), black rat (*Rattus rattus*), Polynesian rat (*R. exulans*), and Norway rat (*R. norvegicus*), which occur throughout the main Hawaiian Islands, with the exception of the mongoose, which is not established on Kauai. Attraction of fledglings to artificial lights, which disrupts their night-time navigation, resulting in collisions with building and other objects, and collisions with artificial structures such as communication towers and utility lines are also threats. Erosion of nest sites caused by the actions of nonnative ungulates is a potential threat in some locations. Efforts are under way in some areas to reduce light pollution and mitigate the threat of collisions, but there are no large-scale efforts to control nonnative predators in the Hawaiian Islands. The threats are imminent because they are ongoing, and they are of a high magnitude because they can severely affect the survival of this DPS throughout its range, leading to a relatively high likelihood of extinction. Therefore, we assign this distinct population segment an LPN of 3.

Elfin-woods warbler (*Dendroica angelae*)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. *Dendroica angelae,* or elfin-woods warbler, is a small, entirely black and white warbler, distinguished by its white eyebrow stripe, white patches on

ear covers and neck, incomplete eye ring, and black crown. The elfin-woods warbler was at first thought to occur only in high elevations at dwarf or elfin forests, but it has since been found at lower elevations including shade coffee plantations and secondary forests. These birds build a compact cup nest, usually close to the trunk and well hidden among the epiphytes of small trees. Its breeding season extends from March to June. Elfin-woods warblers forage in the middle part of trees, gleaning insects from leaves in the outer portion of tree crowns. The species has been documented from four locations in Puerto Rico: Luquillo Mountains, Sierra de Cayey, and the Commonwealth forests of Maricao and Toro Negro. However, it has not been recorded again in Toro Negro and Sierra de Cayey, following the passing of Hurricane Hugo in 1989. In 2003 and 2004, surveys were conducted for the elfin-woods warbler in the Carite Commonwealth Forest, Toro Negro Forest, Guilarte Forest, Bosque del Pueblo, Maricao Forest and the El Yunque National Forest. These surveys only reported sightings at Maricao Commonwealth Forest (778 individuals), and El Yunque National Forest (196 individuals).

The elfin-woods warbler is potentially threatened by habitat modification. Elfin-woods warblers have been historically common in the elfin woodland of El Yunque National Forest and the *Podocarpus* forest type of Maricao Commonwealth Forest. Removal and replacement of this forest vegetation with infrastructure (e.g., telecommunication towers, recreational facilities) may have impacted the species in the past. Although this loss of habitat has been permanent and restoration process would take a few decades, present regulatory process at both the Commonwealth and Federal levels have reduced this threat. Unrestricted development within the El Yunque buffer zone needs to be addressed to determine the impact on the migratory behavior of the species. Conversion of elfin-woods warbler habitat (e.g., mature secondary forests, young secondary forests, and shaded-coffee plantations) along the periphery of the Maricao Commonwealth Forest to marginal habitat (e.g., pastures, dry slope forests, residential rural forests, gallery forests, and unshaded coffee plantations), has affected potential corridors for the elfin-woods warbler, resulting in a reduced dispersal and expansion capability of the species. These threats are not imminent because most of the range of the species is within protected lands. The magnitude of threat to *Dendroica angelae* is low to moderate because there is no indication that the two populations of the elfin-woods warbler are declining in numbers. The species can thrive in disturbed and plantation habitats, although abundance of the species on these habitats is lower than in primary habitats. Moreover, elfin-woods warblers appear to recover well, and in a relatively short time, from damaging effects of hurricanes to the forest structure. Therefore, we assign a listing priority number of 11 to *Dendroica angelae.*

Reptiles

Northern Mexican Gartersnake (*Thamnophis eques megalops*)—The following summary is based on information contained in our files. The northern Mexican gartersnake generally occurs in three types of habitat: (1) Ponds and cienegas; (2) lowland river riparian forests and woodlands; and (3) upland stream gallery forests. Within the United States, the distribution of the northern Mexican gartersnake has been reduced by close to 90 percent, and it occurs in fragmented populations within the middle and upper Verde River drainage, middle and lower Tonto Creek, and the upper Santa Cruz River, as well as in a small number of isolated wetland habitats in southeastern Arizona; its status in New Mexico is uncertain. Within Mexico, the northern Mexican gartersnake is distributed along the Sierra Madre Occidental and the Mexican Plateau in the Mexican States of Sonora, Chihuahua, Durango, Coahila, Zacatecas, Guanajuato, Nayarit, Hidalgo, Jalisco, San Luis Potosí, Aguascalientes, Tlaxacala, Puebla, México, Michoacán, Oaxaca, Veracruz, and Querétaro. The primary threat to the northern Mexican gartersnake is competition and predation from nonnative species such as sportfish, bullfrogs, and crayfish. Degradation and elimination of its habitat and native prey base are also significant threats, most notably in areas where nonnative species co-occur. Threats, particularly competition and predation by nonnative species, are high in magnitude because they result in direct mortality or reduced reproductive capacity and may be irreversible in complex habitat. The threats are ongoing and, therefore, imminent. Thus, we retained an LPN of 3 for this subspecies.

Eastern massasauga rattlesnake (*Sistrurus catenatus*)—See above in ''Listing Priority Changes in Candidates.'' The above summary is based on information contained in our files.

Black pine snake (*Pituophis melanoleucus lodingi*)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. There are historical records for the black pine snake from one parish in Louisiana, 14 counties in Mississippi, and 3 counties in Alabama west of the Mobile River Delta. Black pine snake surveys and trapping indicate that this species has been extirpated from Louisiana and from four counties in Mississippi. Moreover, the distribution of remaining populations has become highly restricted due to the destruction and fragmentation of the remaining longleaf pine habitat within the range of the subspecies. Most of the known Mississippi populations are concentrated on the DeSoto National Forest. In Alabama, populations occurring on properties managed by State and other governmental agencies, as gopher tortoise mitigation banks or wildlife sanctuaries, represent the best opportunities for long-term survival of the subspecies there. Other factors affecting the black pine snake include vehicular mortality and low reproductive rates, which magnify the threats from destruction and fragmentation of longleaf pine habitat and increase the likelihood of local extinctions. Due to the imminent threats of high magnitude caused by the past destruction of most of the longleaf pine habitat of the black pine snake, and the continuing persistent degradation of the habitat that remains, we assigned an LPN of 3 to this subspecies.

Louisiana pine snake (*Pituophis ruthveni*)—The following summary is based on information contained in our files and the petition we received on July 20, 2000, and updated through April 30, 2011. The Louisiana pine snake historically occurred in the fire-maintained longleaf pine ecosystem within west-central Louisiana and extreme east-central Texas. The historic and ongoing loss of potential habitat (via fire suppression, conversion to pine plantations, increases in the number and width of roads, and urbanization) on private lands in the matrix between these extant populations reduces the potential for dispersal among remnant populations and the potential for natural re-colonization of vacant suitable habitat patches. The primary threats coupled with the disruption of natural fire regimes have reduced the Louisiana pine snake to seven isolated populations. Several of these remnant populations may be vulnerable to factors associated with low population

sizes and demographic isolation such as reduced genetic heterozygosity. Because it is unlikely that corridors linking extant populations will be established, the loss of any extant population is likely to be permanent. Additional threats that may occur even within quality Louisiana pine snake habitat include mortality from on- and off-road mortality, entanglement in erosion control devices installed in rights-of-way, and intentional killing. Finally, the Louisiana pine snake has an extremely low reproductive rate, thereby magnifying the effects of the above listed threats. Currently occupied habitat in Louisiana and Texas is estimated to be approximately 163,000 acres, with 53 percent occurring on public lands and 47 percent in private ownership.

Louisiana pine snake populations on Federal lands have received increased management attention (via prescribed burning and thinning) in recent years, and as a result, the successional degradation of occupied and potential habitat within these populations has been stabilized or reversed. Nonetheless, not all areas of occupied habitat on Federal lands have received recent prescribed burning, and in the absence of adequate burning, Louisiana pine snake habitat becomes degraded via vegetative succession. The largest and perhaps most important extant Louisiana pine snake population exists on private industrial timberland. Although two conservation areas are managed to benefit Louisiana pine snakes on this property, the majority of the occupied habitat between the conservation areas is threatened by land management activities (habitat conversion to short-rotation pine plantations) that are expected to decrease habitat quality. The candidate conservation agreement (CCA) for the Louisiana pine snake which includes the Service, U.S. Forest Service, Department of Defense, Texas Parks and Wildlife, and Louisiana Department of Wildlife was completed in 2003, and is currently being implemented. The CCA is designed to identify and establish management for the Louisiana pine snake on Federal lands in Louisiana and Texas, and provides a means for the partnering agencies to work cooperatively on projects that avoid and minimize impacts to the snake. It also sets up a mechanism to exchange information on successful management practices and coordinate research efforts.

In 2001, the Service provided funds, through the Private Stewardship Grant Program, to a private landowner for habitat restoration and prescribed burning on several tracts of their Bienville Parish property containing a known Louisiana pine snake population. A habitat management plan for those sites was developed, and in August of 2005, that landowner was awarded a grant for continued habitat improvement on that same property. Subsequently, that property has been transferred to a new landowner. Through the use of those grant funds and voluntary investment, those private landowners have converted lands to longleaf pine within those Core Management Areas and completed prescribed burning.

The Louisiana Pine Snake Conservation Group consists of representatives from a variety of organizations having an interest in Louisiana pine snake conservation and includes approximately 90 individuals representing State and Federal government, non-profit and private organizations, zoos, academia, and private landowners. This group has been holding annual stakeholder meetings since 2003. At those meetings, stakeholders discuss issues and threats to the Louisiana pine snake, identify possible strategies to deal with those threats, report on land management activities beneficial to stability or recovery, and discuss and share successful results. Five significant actions have resulted from cooperative efforts of this group's members: (1) Completion of a threats assessment; (2) development and completion of a landscape—scaled resources selection function model; (3) training and experimental testing of a scent dog to assist in survey efforts; (4) initiation of an experimental captive breeding and reintroduction program; and (5) initiation of a DNA microsatellite study that will help define genetic structure among populations.

While the extent of Louisiana pine snake habitat loss has been great in the past and much of the remaining habitat has been degraded, habitat loss does not represent an imminent threat, primarily because the rate of habitat loss appears to be declining on public lands. However, all populations require active habitat management, and the lack of adequate habitat remains a threat for several populations. The potential threats to a large percentage of extant Louisiana pine snake populations, coupled with the likely permanence of these effects and the species' low fecundity and low population sizes, lead us to conclude that the threats have significant effects on the survival of the species and therefore remain high in magnitude. Thus, based on nonimminent, high-magnitude threats, we assign a LPN of 5 to this species. We find that listing this species is warranted throughout all its range.

Tucson shovel-nosed snake (*Chionactis occipitalis klauberi*)—The Tucson shovel-nosed snake is a small, burrowing snake in the Colubridae family that occupied a roughly 35-mile-wide swath running along the Phoenix-Tucson corridor in northeastern Pima, southwestern Pinal, and eastern Maricopa Counties, Arizona. No systematic surveys have been conducted to assess the status of the subspecies throughout its range, but it has apparently disappeared from some areas.

Threats to the Tucson shovel-nosed snake include urban and rural development; road construction, use, and maintenance; concentration of solar power facilities and transmission corridors; agriculture; wildfires; and lack of adequate management and regulation. Comprehensive plans encompassing the entire range of the snake encourage large growth areas in the next 20 years and beyond. These plans also call for an increase in roads and transportation corridors, which have been documented to affect the snake through direct mortality. Additionally, development of solar energy facilities and transmission corridors throughout the State is being pursued, and demand for these facilities will likely increase. Some of these facilities are being considered within the range of the Tucson shovel-nosed snake. Wildfires due to infestations of nonnative grasses in the snake's habitat, dominated by native plants not adapted to survive wildfires, are likely to increase in frequency and magnitude in the future as these invasive grasses continue to spread rapidly. Regulations are not in place to minimize or mitigate these threats to the Tucson shovel-nosed snake and its habitat, and, therefore, they are likely to put the snake at risk of local extirpation or extinction. These threats, particularly those that lead to a loss of habitat, are likely to reduce the population of the Tucson shovel-nosed snake across its entire range. Given the limited geographic distribution of this snake and the fact that its entire range lies within the path of development in the foreseeable future, these threats are of high magnitude and are imminent. Accordingly, we have assigned an LPN of 3 for the Tucson shovel-nosed snake.

Desert tortoise, Sonoran DPS (*Gopherus agassizii*)—The following summary is based on information contained in our files. Sonoran desert tortoises are most closely associated with Sonoran and Mojave desertscrub vegetation types, but may also be found

in other habitat types within their distribution and elevation range. They occur most commonly on rocky, steep slopes and bajadas in paloverde-mixed cacti associations. Washes and valley bottoms may be used in dispersal and, in some areas, as all or part of home ranges. Most Sonoran desert tortoises in Arizona occur between 904 to 4,198 feet (275 to 1280 meters) in elevation. The Sonoran desert tortoise is distributed south and east of the Colorado River in Arizona in all counties except for Navajo, Apache, Coconino, and Greenlee Counties, south to the Rio Yaqui in southern Sonora, Mexico. A recently published paper on the genetics of desert tortoise indicates this population should be treated as a separate species. We will be analyzing this new information, and will make any necessary changes to the nomenclature and LPN in the next candidate notice.

Threats include nonnative plant species invasions and altered fire regimes; urban and agricultural development, and human population growth; barriers to dispersal and genetic exchange; off-highway vehicles; roads and highways; historical ironwood and mesquite tree harvest in Mexico; improper livestock grazing (predominantly in Mexico); undocumented human immigration and interdiction activities; illegal collection; predation from feral dogs; human depredation and vandalism; drought; and climate change. Threats to the Sonoran desert tortoise differ geographically and are highly synergistic in their effects on the population. The threats identified to affect the Sonoran desert tortoise currently or in the foreseeable future are of high magnitude but, overall, are nonimminent. Therefore, we assigned an LPN of 6 to this population of desert tortoise.

Sonoyta mud turtle (*Kinosternon sonoriense longifemorale*)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. The Sonoyta mud turtle occurs in a spring and pond at Quitobaquito Springs on Organ Pipe Cactus National Monument in Arizona, and in the Rio Sonoyta and Quitovac Spring of Sonora, Mexico. Loss and degradation of stream habitat from water diversion and groundwater pumping, along with its very limited distribution, are the primary threats to the Sonoyta mud turtle. Sonoyta mud turtles are highly aquatic and depend on permanent water for survival. The area of southwest Arizona and northern Sonora where the Sonoyta mud turtle occurs is one of the driest regions in the Southwest. Due to continued drought, irrigated agriculture, and development in the region, surface water in the Rio Sonoyta can be expected to dwindle further and therefore have a significant impact on the survival of this subspecies, which may also be vulnerable to aerial spraying of pesticides on nearby agricultural fields. We retained an LPN of 3 for this subspecies because threats are of a high magnitude and continue to date, and therefore are imminent.

Amphibians

Columbia spotted frog, Great Basin DPS (*Rana luteiventris*)—The following summary is based on information contained in our files and the petition we received on May 1, 1989. Currently, Columbia spotted frogs appear to be widely distributed throughout southwestern Idaho, southeastern Oregon, and northeastern and central Nevada, but local populations within this general area appear to be small and isolated from each other. Recent work by researchers in Idaho and Nevada have documented the loss of historically known sites, reduced numbers of individuals within local populations, and declines in the reproduction of those individuals.

Small, highly fragmented populations, characteristic of the majority of existing populations of Columbia spotted frogs in the Great Basin, are highly susceptible to extinction processes. Threats to Columbia spotted frog include poor management of habitat including water development, improper grazing, mining activities, and nonnative species, all of which have contributed, and continue to contribute, to the degradation and fragmentation of habitat. Emerging fungal diseases, such as chytridiomycosis, and the spread of parasites may be contributing factors to Columbia spotted frog's population declines throughout portions of its range. Effects of climate change, such as drought, and stochastic events, such as fire, often have detrimental effects to small, isolated populations and can often exacerbate existing threats. A 10-year conservation agreement and strategy was signed in September 2003 for both the Northeast and the Toiyabe subpopulations in Nevada. The goals of the conservation agreements are to reduce threats to Columbia spotted frogs and their habitat to the extent necessary to prevent populations from becoming extirpated throughout all or a portion of their historical range and to maintain, enhance, and restore a sufficient number of populations of Columbia spotted frogs and their habitat to ensure their continued existence throughout their historical range. Additionally, a candidate conservation agreement with assurances was completed in 2006, for the Owyhee subpopulation at Sam Noble Springs, Idaho. Several habitat enhancement projects have been conducted throughout the range that have benefitted these populations. We conclude that the threats are of moderate magnitude, because the DPS is still widely distributed, and several regulatory mechanisms are benefitting the populations and working to reduce threats. Based on imminent threats of moderate magnitude, we assigned an LPN of 9 to this DPS of the Columbia spotted frog.

Mountain yellow-legged frog, Sierra Nevada DPS (*Rana muscosa*)—The following summary is based on information contained in our files and the petition received on February 8, 2000. Also see our 12-month petition finding published on January 16, 2003 (68 FR 2283) and our amended 12-month petition finding published on June 25, 2007 (72 FR 34657). The mountain yellow-legged frog inhabits the high elevation lakes, ponds, and streams in the Sierra Nevada Mountains of California, from near 4,500 feet (ft) (1,370 meters (m)) to 12,000 ft (3,650 m). The distribution of the mountain yellow-legged frog is from Butte and Plumas Counties in the north to Tulare and Inyo Counties in the south. A separate population in southern California is already listed as endangered (67 FR 44382; July 2, 2002). Based on mitochondrial DNA, morphological, and acoustic studies, Vredenburg *et al.* recently recognized two distinct species of mountain yellow-legged frog in the Sierra Nevada, *R. muscosa* and *R. sierrae.* This taxonomic distinction has been recently adopted by the American Society of Ichthyologists and Herpetologists, the Herpetologists' League, and the Society for the Study of Amphibians and Reptiles. The Vredenburg study determined that two species exist, as described by Camp in 1917, but have different geographical ranges than first described. Camp described *R. muscosa* as only occurring in southern California. A recent study determined that *R. muscosa* also occurs in the southern portion of the Sierra Nevada and that *R. sierrae* occurs both in the southern and northern portions of the Sierra Nevada with no range overlap. We accept the taxonomic distinction of two species, and the taxonomic split between the mountain yellow-legged frogs in the northern and central Sierra Nevada Mountains of California (*Rana sierrae*)

and the mountain yellow-legged frogs in the southern Sierra Nevada and the mountains of southern California (*R. muscosa*) and we intend to propose this taxonomic change in a proposed rule. In the interim, we continue to recognize all mountain yellow-legged frogs in the Sierra Nevada Mountains of California as *R. muscosa* and as the candidate entity.

Predation by introduced trout is the best-documented cause of the decline of the Sierra Nevada mountain yellow-legged frog, because it has been repeatedly observed that fishes and mountain yellow-legged frogs rarely co-exist. Mountain yellow-legged frogs and trout (native and nonnative) do co-occur at some sites, but these co-occurrences probably are mountain yellow-legged frog populations with negative population growth rates in the absence of immigration. To help reverse the decline of the mountain yellow-legged frog, the Sequoia and Kings Canyon National Parks have been removing introduced trout since 2001. Over 18,000 introduced trout have been removed from 11 lakes since the project started in 2001. The lakes are completely, to mostly, fish-free, and substantial mountain yellow-legged frog population increases have resulted. The California Department of Fish and Game (CDFG) has also removed or is in the process of removing nonnative trout from a total of between 10 and 20 water bodies in the Inyo, Humboldt-Toiyabe, Sierra, and El Dorado National Forests. In the El Dorado National Forest, golden trout were removed from Leland Lake, and attempts have been made to remove trout from two sites near Gertrude Lake, three lakes in the Pyramid Creek watershed, and a tributary of Cole Creek; no data showing increase in mountain yellow-legged frogs at these sites were available.

In California, chytridiomycosis, more commonly known as chytrid fungus (*Batrachochytrium dendrobatidis*) or Bd, has been detected in many amphibian species, including the mountain yellow-legged frog within the Sierra Nevada. Recent research has shown that this pathogenic fungus has become widely distributed throughout the Sierra Nevada, and that infected mountain yellow-legged frogs often die soon after metamorphosis. Several infected and uninfected populations were monitored in Sequoia and Kings Canyon National Parks over multiple years, documenting dramatic declines and extirpations in infected but not in uninfected populations. In the summer of 2005, 39 of 43 populations assayed in Yosemite National Park were positive for chytrid fungus.

The current distribution of the Sierra Nevada mountain yellow-legged frog is restricted primarily to public lands at high elevations, including streams, lakes, ponds, and meadow wetlands located on national forests, including wilderness and non-wilderness on the forests, and national parks. In several areas where detailed studies of the effects of chytrid fungus on the mountain yellow-legged frog are ongoing, substantial declines have been observed over the past several years. For example, in 2007 surveys in Yosemite National Park, mountain yellow-legged frogs were not detectable at 37 percent of 285 sites where they had been observed in 2000–2002; in 2005 in Sequoia and Kings Canyon National Parks, mountain yellow-legged frogs were not detected at 54 percent of sites where they had been recorded 3 to 8 years earlier. A compounding effect of disease-caused extinctions of mountain yellow-legged frogs is that recolonization may never occur because streams connecting extirpated sites to extant populations now contain introduced fishes, which act as barriers to frog movement within metapopulations. The most recent assessment of the species status in the Sierra Nevada indicates that mountain-yellow legged frogs occur at less than 8 percent of the sites from which they were historically observed. A group of prominent scientists further suggest a 10-percent decline per year in the number of remaining *Rana mucosa.* Based on threats that are imminent (because they are ongoing) and high-magnitude (because they significantly affect the survival of the DPS throughout its range), we continue to assign the population of mountain yellow-legged frog in the Sierra Nevada an LPN of 3.

Oregon spotted frog (*Rana pretiosa*)—The following summary is based on information contained in our files and the petition we received on May 4, 1989. Historically, the Oregon spotted frog ranged from British Columbia to the Pit River drainage in northeastern California. Based on surveys of historical sites, the Oregon spotted frog is now absent from at least 76 percent of its former range. The majority of the remaining Oregon spotted frog populations are small and isolated.

The threats to the species' habitat include development, livestock grazing, introduction of nonnative plant species, vegetation succession, changes in hydrology due to construction of dams and alterations to seasonal flooding, lack of management of exotic vegetation, predators, and poor water quality. Additional threats to the species are predation by nonnative fish and introduced bullfrogs; competition with bullfrogs and nonnative fish for habitat; and diseases, such as oomycete water mold *Saprolegnia* and chytrid fungus infections. The magnitude of threat is high for this species because this wide range of threats to both individuals and their habitats could seriously reduce or eliminate any of these isolated populations and further reduce the species' range and potential survival. Habitat restoration and management actions have not prevented population declines. The threats are imminent because each population is faced with multiple ongoing and potential threats as identified above. Therefore, we retain an LPN of 2 for the Oregon spotted frog.

Relict leopard frog (*Lithobates onca*)—See above in ''Listing Priority Changes in Candidates.'' The above summary is based on information contained in our files.

Austin blind salamander (*Eurycea waterlooensis*)—We continue to find that listing this species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted petition 12-month finding.

Berry Cave salamander (*Gyrinophilus gulolineatus*)—The following summary is based on information in our files. We have no new information since this species was afforded candidate status through our 12-month warranted-but-precluded finding published on March 22, 2011 (76 FR 15919). The Berry Cave salamander is recorded from Berry Cave in Roane County; from Mud Flats, Aycock Spring, Christian, Meades Quarry, Meades River, and Fifth Caves in Knox County; from Blythe Ferry Cave in Meigs County; and from an unknown cave in Athens, McMinn County, Tennessee. These cave systems are all located within the Upper Tennessee River and Clinch River drainages. A total of 113 caves in Middle and East Tennessee were surveyed from the time period of April 2004 through June 2007, resulting in observations of 63 Berry Cave salamanders. These surveys concluded that Berry Cave salamander populations are robust at Berry and Mudflats Caves, where population declines had been previously reported, and documented two new populations of Berry Cave salamanders at Aycock Spring and Christian caves.

Ongoing threats to this species include lye leaching in the Meades Quarry Cave as a result of past quarrying activities, a proposed roadway with potential to impact the recharge area for the Meades Quarry Cave system, urban

development in Knox County, water quality impacts despite existing State and Federal laws, and possibly hybridization between spring salamanders and Berry Cave salamanders in Meades Quarry Cave. These threats, coupled with confined distribution of the species and apparent low population densities, leave the Berry Cave salamander vulnerable to extirpation. We have determined that the Berry Cave salamander faces imminent threats, and that the threats are of moderate magnitude, because some populations appear to be robust and new populations are emerging. We have therefore assigned it an LPN of 8.

Georgetown salamander (*Eurycea naufragia*)—We continue to find that listing this species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted petition 12-month finding.

Jollyville Plateau salamander (*Eurycea tonkawae*)—We continue to find that listing this species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted petition 12-month finding.

Salado salamander (*Eurycea chisholmensis*)—We continue to find that listing this species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted petition 12-month finding.

Yosemite toad (*Anaxyrus canorus*)—The following summary is based on information contained in our files and the petition we received on April 3, 2000. See also our 12-month petition finding published on December 10, 2002 (67 FR 75834). Yosemite toads are moderately sized toads with females having black spots that are edged with white or cream, and set against a grey, tan, or brown background. Males have a nearly uniform coloration of yellow-green to olive drab to greenish brown. Yosemite toads have been grouped within the genus ''*Bufo.*'' Recently, Frost *et al.* divided the ''*Bufo*'' genus into three separate genera, assigning the North American toads to the genus *Anaxyrus.* This taxonomic distinction has been recently adopted by the American Society of Ichthyologists and Herpetologists, the Herpetologists' League, and the Society for the Study of Amphibians and Reptiles, and we are acknowledging the change in genus name, and referring to the Yosemite toad accordingly in this document.

Yosemite toads are most likely to be found in areas with thick meadow vegetation or patches of low willows near or in water, and use rodent burrows for overwintering and temporary refuge during the summer. Breeding habitat includes the edges of wet meadows, slow-flowing streams, shallow ponds, and shallow areas of lakes. The historic range of Yosemite toads in the Sierra Nevada occurs from the Blue Lakes region north of Ebbetts Pass (Alpine County) to south of Kaiser Pass in the Evolution Lake/Darwin Canyon area (Fresno County). The historic elevational range of Yosemite toads is 1,460 to 3,630 m (4,790 to 11,910 ft).

The threats facing the Yosemite toad include cattle grazing, timber harvesting, recreation, disease, and climate change. Inappropriate grazing has been shown to cause loss in vegetative cover and to destroy peat layers in meadows, both of which lower groundwater tables and summer flows of surface water. This may increase the stranding and mortality of tadpoles, or make these areas completely unsuitable for Yosemite toads. Grazing can also degrade or destroy moist upland areas used as non-breeding habitat by Yosemite toads and collapse rodent burrows used by Yosemite toads as cover and hibernation sites. Timber harvesting and associated road construction could severely alter the terrestrial environment and result in the reduction and occasional extirpation of amphibian populations in the Sierra Nevada. Habitat gaps created by timber harvest and road construction may act as dispersal barriers and contribute to the fragmentation of Yosemite toad habitat and populations. Trails (foot, horse, bicycle, or off-highway motor vehicle) compact soil in riparian habitat, which increases erosion, displaces vegetation, and can lower the water table. Trampling or the collapsing of rodent burrows by recreationists, pets, and vehicles could lead to direct mortality of all life stages of the Yosemite toad and disrupt the species' behavior. Various diseases have been confirmed in Yosemite toads. Mass die-offs of amphibians have been attributed to: Chytrid fungal infections of metamorphs and adults; saprolegnia fungal infections of eggs; iridovirus infection of larvae, metamorphs, or adults; and bacterial infections. Yosemite toads probably are exposed to a variety of pesticides and other chemicals throughout their range. Environmental contaminants could negatively affect the species by causing direct mortality; suppressing the immune system; disrupting breeding behavior, fertilization, growth or development of young; and disrupting the ability to avoid predation.

There is no indication that any of these threats are ongoing or planned; therefore the threats are nonimminent. In addition, as there are a number of substantial populations and these threats tend to have localized effects, the threats are moderate to low in magnitude. We therefore retained an LPN of 11 for the Yosemite toad.

Black Warrior waterdog (*Necturus alabamensis*)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. The Black Warrior waterdog is a salamander that inhabits streams above the Fall Line within the Black Warrior River Basin in Alabama. There is very little specific locality information available on the historical distribution of the Black Warrior waterdog as little attention was given to this species between its description in 1937 and the 1980s. At that time, there were a total of only 11 known historical records from four Alabama counties. Two of these sites have now been inundated by impoundments. Extensive survey work was conducted in the 1990s to look for additional populations. As a result of that work, the species was documented at 14 sites in five counties.

Water-quality degradation is the biggest threat to the continued existence of the Black Warrior waterdog. Most streams that have been surveyed for the waterdog showed evidence of pollution and many appeared biologically depauperate. Sources of point and nonpoint pollution in the Black Warrior River Basin have been numerous and widespread. Pollution is generated from inadequately treated effluent from industrial plants, sanitary landfills, sewage treatment plants, poultry operations, and cattle feedlots. Surface mining represents another threat to the biological integrity of waterdog habitat. Runoff from old, abandoned coal mines generates pollution through acidification, increased mineralization, and sediment loading. The North River, Locust Fork, and Mulberry Fork, all streams that this species inhabits, are on the Environmental Protection Agency's list of impaired waters. An additional threat to the Black Warrior waterdog is the creation of large impoundments that have flooded thousands of square hectares of its habitat. These impoundments are likely marginal or unsuitable habitat for the salamander. Suitable habitat for the Black Warrior

waterdog is limited, and available data indicate extant populations are small and their viability is questionable. This situation is pervasive and problematic; water-quality issues are persistent, and regulatory mechanisms are not ameliorating these threats, although we have no indication of population declines, at present. Therefore, the overall magnitude of the threat is moderate. Water-quality degradation in the Black Warrior basin is ongoing. Therefore, the threats are imminent. Additional surveys, initiated in 2011, may clarify the status of populations in the face of existing threats. We assigned an LPN of 8 to this species.

Fishes

Headwater chub (*Gila nigra*)—The following summary is based on information contained in our files, in the 12-month finding published in the **Federal Register** on May 3, 2006 (71 FR 26007), and in the petition received November 9, 2009. The headwater chub is a moderate-sized cyprinid fish. The range of the headwater chub has been reduced by approximately 60 percent. Twenty-three streams (125 miles (200 kilometers) of stream) are thought to be occupied out of 26 streams (312 miles (500 kilometers) of stream) formerly occupied in the Gila River Basin in Arizona and New Mexico. All remaining populations are fragmented and isolated, and threatened by a combination of factors.

Headwater chubs are threatened by introduced, nonnative fish that prey on them and compete with them for food. Habitat destruction and modification have occurred and continue to occur as a result of dewatering, impoundment, channelization, and channel changes caused by alteration of riparian vegetation and watershed degradation from mining, grazing, roads, water pollution, urban and suburban development, groundwater pumping, and other human actions. Existing regulatory mechanisms do not appear to be adequate for addressing the impact of nonnative fish and also have not removed or eliminated the threats that continue to be posed through habitat degradation. The fragmented nature and rarity of existing populations makes them vulnerable to other natural or manmade factors, such as drought and wildfire. Climate change is predicted to worsen these threats through increased aridity of the region, thus reducing stream flows and warming aquatic habitats, which makes the habitat more suitable to nonnative species.

The Arizona Game and Fish Department has finalized the Arizona Statewide Conservation Agreement for Roundtail Chub (*G. robusta*), Headwater Chub, Flannelmouth Sucker (*Catostomus latipinnis*), Little Colorado River Sucker (*Catostomus* spp.), Bluehead Sucker (*C. discobolus*), and Zuni Bluehead Sucker (*C. discobolus yarrowi*). The New Mexico Department of Game and Fish has listed the headwater chub as endangered and created a recovery plan for the species: Colorado River Basin Chubs (Roundtail Chub, Gila Chub (*G. intermedia*), and Headwater Chub) Recovery Plan, which was approved by the New Mexico State Game Commission on November 16, 2006. Both Arizona's agreement and New Mexico's recovery plan recommend preservation and enhancement of extant populations and restoration of historical headwater-chub populations. The recovery and conservation actions prescribed by Arizona's and New Mexico's plans, which we predict will reduce and remove threats to this species, will require further discussions and authorizations before they can be implemented. The recently completed Arizona Game and Fish Department Sportfish Stocking Program's Conservation and Mitigation Program contains significant conservation actions for the headwater chub that will be implemented over the next 10 years.

Although threats are ongoing, existing information indicates long-term persistence and stability of existing populations. Currently 7 of the 23 extant stream populations are considered stable based on abundance and evidence of recruitment. We evaluated information provided in the 2009 petition relating to our 2008 change in LPN for the headwater chub from 2 to 8 as part of our annual analysis. In making that 2008 decision, we recognize that we inadvertently relied on some information and did not consider other available information. Additional information will be available on population status and threats later in 2011 that we will use to reassess the LPN for the headwater chub next year. We have retained an LPN of 8 for this species at this time.

Least Chub (*Iotichthys phlegethontis*)—The following summary is based on information contained in our files and in the petition received June 25, 2007. The least chub is a small, colorful fish species in Utah that follows thermal patterns for habitat use. Least chub use flooded, warmer, vegetated marsh areas to spawn in the spring, and retreat to spring heads to overwinter as the water recedes in the late summer and fall. Historically, many least chub occurrences were reported across the State of Utah, but the current distribution of the species is highly reduced from its historic range. Currently, only six known wild populations remain, but one of these is considered functionally extirpated. Least chub also currently exist at several genetic refuge sites. The species faces threats from the effects of livestock grazing, which affects most least chub sites despite efforts to protect least chub habitat with grazing enclosures and management plans. Least chub habitat also is affected by current and proposed future groundwater withdrawals, especially when combined with the threat of drought. These threats also act cumulatively with climate change to put the least chub at further risk. Existing regulatory mechanisms are currently inadequate to regulate groundwater withdrawals and ameliorate their effects on least chub habitat. Nonnative species, particularly mosquitofish, also are a continuing threat to least chub. There is no known means of controlling mosquitofish, and they have already caused the functional extirpation of one wild least chub population.

In 1998, several State and Federal agencies including the Service and the Utah Division of Wildlife Resources developed a Least Chub Conservation Agreement and Strategy, and formed the Least Chub Conservation Team. Their objectives are to eliminate or significantly reduce threats to the least chub and its habitat, and to ensure the continued existence of the species by restoring and maintaining a minimum number of least chub populations throughout its historic range. Recent State-led least chub conservation actions have included restoration of habitat affected by grazing, reintroduction and range expansion, nonnative removal, population monitoring, and working cooperatively with landowners to conserve water and aquatic habitat. This group also has recently begun a structured decision making modeling process that will provide additional guidance for conservation activities.

Although grazing, groundwater withdrawal, and predation by nonnative species are high magnitude threats to some populations, they are of low magnitude or nonexistent in other populations. Therefore the threats to the least chub are of moderate magnitude overall. The threats are imminent because they are identifiable and the species is currently facing them in many portions of its range. Therefore, we have assigned the least chub an LPN of 7.

Roundtail chub (*Gila robusta*), Lower Colorado River DPS—The following summary is based on information contained in our files and the 12-month

finding published in the **Federal Register** on July 7, 2009 (74 FR 32352). The roundtail chub is a moderate to large cyprinid fish. The range of the roundtail chub has been reduced by approximately 68 to 82 percent. Thirty-two streams are currently occupied, representing approximately 18 to 32 percent of the species' former range, or 800 km (500 miles) to 1,350 km (840 mi) of 3,050 km (1,895 mi) of formerly occupied streams in the Gila River Basin in Arizona and New Mexico. Most of the remaining populations are fragmented and isolated, and all are threatened by a combination of factors.

Roundtail chub are threatened by introduced, nonnative fish that prey on them and compete with them for food. Habitat destruction and modification have occurred and continue to occur as a result of dewatering, impoundment, channelization, and channel changes caused by alteration of riparian vegetation and watershed degradation from mining, grazing, roads, water pollution, urban and suburban development, groundwater pumping, and other human actions. Existing regulatory mechanisms do not appear to be adequate for addressing the impact of nonnative fish and also have not removed or eliminated the threats that continue to be posed through habitat destruction or modification. The fragmented nature and rarity of existing populations makes them vulnerable to other natural or manmade factors, such as drought and wildfire. Climate change is predicted to worsen these threats through increased aridity of the region, thus reducing stream flows and warming aquatic habitats, which makes the habitat more suitable to nonnative species.

The Arizona Game and Fish Department has finalized the Arizona Statewide Conservation Agreement for Roundtail Chub, Headwater Chub (*G. nigra*), Flannelmouth Sucker (*Catostomus latipinnis*), Little Colorado River Sucker (*Catostomus* spp.), Bluehead Sucker (*C. discobolus*), and Zuni Bluehead Sucker (*C. discobolus yarrowi*). The New Mexico Department of Game and Fish lists the roundtail chub as endangered and has created a recovery plan for the species: Colorado River Basin Chubs (Roundtail Chub, Gila Chub (*G. intermedia*), and Headwater Chub) Recovery Plan, which was approved by the New Mexico State Game Commission on November 16, 2006. Both the Arizona Agreement and the New Mexico Recovery Plan recommend preservation and enhancement of extant populations and restoration of historical roundtail chub populations. The recovery and conservation actions prescribed by the Arizona and New Mexico plans, which we predict will reduce and remove threats to this species, will require further discussions and authorizations before they can be implemented, although some actions have been completed and several are planned for the immediate future. The recently completed Arizona Game and Fish Department Sportfish Stocking Program's Conservation and Mitigation Program contains significant conservation actions for the roundtail chub that will be implemented over the next 10 years.

Although threats are ongoing, existing information indicates long-term persistence and stability of existing populations. Currently, 9 of the 32 extant stream populations are considered stable, based on abundance and evidence of recruitment. Based on our assessment, threats (primarily nonnative species and habitat loss from land uses) remain imminent and are of a moderate magnitude. Thus, we have retained an LPN of 9 for this distinct population segment.

Arkansas darter (*Etheostoma cragini*)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. This fish species occurs in Arkansas, Colorado, Kansas, Missouri, and Oklahoma. The species is found most often in sand- or pebble-bottomed pools of small, spring-fed streams and marshes, with cool water and broadleaved aquatic vegetation. Its current distribution is indicative of a species that once was widely dispersed throughout its range, but has been relegated to isolated areas surrounded by unsuitable habitat that prevents dispersal. Factors influencing the current distribution include: Surface and groundwater irrigation resulting in decreased flows or stream dewatering; the dewatering of long reaches of riverine habitat necessary for species movement when surface flows do occur; conversion of prairie to cropland, which influences groundwater recharge and spring flows; water quality degradation from a variety of sources; and the construction of dams, which act as barriers preventing emigration upstream and downstream through the reservoir pool. The magnitude of threats facing this species is moderate to low, given the number of different locations where the species occurs and the fact that no single threat or combination of threats affects more than a portion of the widespread population occurrences. Overall, the threats are nonimminent as groundwater pumping is declining and development, spills, and runoff are not currently affecting the species rangewide. Thus, we are retaining an LPN of 11 for the Arkansas darter.

Pearl darter (*Percina aurora*)—The following summary is based on information contained in our files. Little is known about the specific habitat requirements or natural history of the Pearl darter. Pearl darters have been collected from a variety of river/stream attributes, mainly over gravel bottom substrate. This species is historically known only from localized sites within the Pascagoula and Pearl River drainages in Mississippi and Louisiana. Currently, the Pearl darter is considered extirpated from the Pearl River drainage and rare in the Pascagoula River drainage. Since 1983, the range of the Pearl darter has decreased by 55 percent.

The Pearl darter is vulnerable to nonpoint source pollution caused by urbanization and other land use activities; gravel mining and resultant changes in river geomorphology, especially head cutting; and the possibility of water quantity decline from the proposed Department of Energy Strategic Petroleum Reserve project and a proposed dam on the Bouie River. Additional threats are posed by the apparent lack of adequate State and Federal water quality regulations due to the continuing degradation of water quality within the species' habitat. The Pearl darter's localized distribution and apparent low population numbers may indicate a species with lower genetic diversity, and this would also make the species more vulnerable to catastrophic events. Threats affecting the Pearl darter are localized in nature, affecting portions of the population within the drainage; thus, a threat magnitude of moderate to low is assigned for this species. In addition, the threats are imminent because the identified threats are currently affecting this species in some portions of its range. Therefore, we have assigned an LPN of 8 for this species.

Arctic grayling, Upper Missouri River DPS (*Thymallus arcticus*)—The following summary is based on information contained in our files. This fish species has a broad, nearly circumpolar distribution, occurring in a variety of cold-water habitats including small streams, large rivers, lakes, and even bogs. We determined in our September 8, 2010, status review (75 FR 54708) that the upper Missouri River population of arctic grayling in Montana and Wyoming represents a DPS because it is discrete due to geographic separation and genetic differences, and it is significant to the taxon as a whole.

The historical range of Arctic grayling in the upper Missouri River basin has declined dramatically in the past century. The five remaining indigenous populations are isolated from one another by dams or other factors.

All populations face potential threats from competition with and predation by nonnative trout, and most populations face threats resulting from the alteration of their habitats, such as habitat fragmentation from dams or irrigation diversion structures, stream dewatering, high summer water temperatures, loss of riparian habitats, and entrainment in irrigation ditches. Severe drought likely also affects all populations by reducing water availability and reducing the extent of thermally suitable habitat. Projected climate changes will likely influence the severity and scope of these threats in the future. As applied, existing regulatory mechanisms do not appear to be adequate to address the primary threats to arctic grayling. In addition, four of five populations are at risk from random environmental fluctuations and genetic drift due to their low abundance and isolation. The magnitude of these threats is high because one or more of these threats occurs in each known population in the Missouri River basin. The threats are imminent because they are currently occurring and expected to continue in the foreseeable future. Therefore, we have assigned the upper Missouri River DPS of arctic grayling an LPN of 3.

Sicklefin redhorse (*Moxostoma* sp.)—The following summary is based on information contained in our files. No new information was provided in the petition we received on April 20, 2010. The sicklefin redhorse, a freshwater fish, occupies cool to warm, moderate gradient creeks and rivers; during parts of its early life stages, it also occupies the near-shore areas in large reservoirs. It feeds and spawns in gravel, cobble, and boulder substrates with no, or very little, silt overlay. There are only two metapopulations of the species known to survive: one in the Hiwassee River system in North Carolina and Georgia, and one in the Little Tennessee River system in North Carolina.

All of the surviving occurrences of the sicklefin redhorse continue to be restricted to relatively short reaches of the streams they occupy and expansion of the populations is to a large degree prohibited by existing hydropower dams and in several cases cold-water discharges from hydroelectric dam operations. Other impacts and threats to the species and its habitat include: Siltation resulting from inadequate erosion/sedimentation control during agricultural, timbering, and construction activities; run-off and discharge of organic and inorganic pollutants from industrial, municipal, agricultural, and other point and nonpoint sources; habitat alterations associated with channelization and instream dredging/mining activities; and other natural and human-related factors that adversely modify the aquatic environment (e.g., illegal dumping, introduction of invasive predators, drought, flooding). The sicklefin redhorse's limited distribution make the species extremely vulnerable to the effects from single catastrophic events (such as toxic chemical spills, major sedimentation events, channel modification, etc.) and the cumulative effects of lesser impacts to the species habitat and numbers. Although the majority of the streams still occupied by the species occur in areas that are presently primarily rural, many of the communities within the watersheds of these streams are experiencing increasing development pressure, both commercial and residential, and continue to develop and implement plans for upgrading and improving their infrastructure (e.g., roads, water supplies, sewer/wastewater treatment systems, etc.) to provide for increased densities of development. Because of the effects this development can have on water quality and habitat suitability for the sicklefin, along with its restricted distribution, the magnitude of the threat to the species is high; however, although the threats faced by the sicklefin redhorse are significant, it is not anticipated that the species will be subjected to these threats in the immediate future (within the next 1 to 2 years) and the immediacy of the threats thus remains nonimminent. Accordingly, we have assigned an LPN of 5 to this species.

Grotto sculpin (*Cottus* sp., sp. nov.)—We continue to find that listing this species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted petition 12-month finding.

Sharpnose shiner (*Notropis oxyrhynchus*)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. The sharpnose shiner is a small, slender minnow, endemic to the Brazos River Basin in Texas. Historically, the sharpnose shiner existed throughout the Brazos River and several of its major tributaries. It has also been found in the Wichita River (within the Red River Basin) where it may have once naturally occurred, but has since been extirpated. Current information indicates that the population upstream of Possum Kingdom Reservoir is apparently stable, while the downstream population may be extirpated, representing a 69-percent reduction of its historical range.

The most significant threat to the existence of the sharpnose shiner is reservoir development within its current range. The current water plan for Texas provides several reservoir options that could be implemented within the Brazos River drainage. Additional threats include irrigation and water diversion, sedimentation, desalination, industrial and municipal discharges, agricultural activities, instream sand and gravel mining, and the spread of invasive saltcedar. The current limited distribution of the sharpnose shiner within the Upper Brazos River Basin makes it vulnerable to catastrophic events such as the introduction of competitive species or prolonged drought. The magnitude of threat is considered high as reservoir development within the species' current range may render remaining habitat unsuitable. The immediacy of threat is nonimminent because the most significant threat—major reservoir construction—is not likely to occur in the near future, and there is potential for implementing other water supply options that could preclude reservoir development. For these reasons, we assigned an LPN of 5 to this species.

Smalleye shiner (*Notropis buccula*)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. The smalleye shiner is a small, pallid minnow endemic to the Brazos River Basin in Texas. Smalleye shiners were historically known to occur downstream of the three major reservoirs occurring on the Brazos River. Currently, the species is found upstream of Possum Kingdom Reservoir (Upper Brazos River drainage) and may be extirpated from the downstream reach, representing a 54-percent reduction of its historical range.

The most significant threat to the existence of the smalleye shiner is reservoir development within its current range. The current water plan for Texas provides several reservoir options that could be implemented within the Brazos River drainage. Additional threats include irrigation and water diversion, sedimentation, desalination, industrial and municipal discharges, agricultural activities, instream sand and gravel mining, and the spread of invasive saltcedar. The current limited distribution of the smalleye shiner within the Upper Brazos River drainage

makes it vulnerable to catastrophic events such as the introduction of competitive species or prolonged drought. State law does not provide protection for the smalleye shiner. The magnitude of threat is considered high, as reservoir development within the species' current range may render remaining habitat unsuitable. The immediacy of threat is nonimminent because the most significant threat—major reservoir construction—is not likely to occur in the near future, and there is potential for implementing other water supply options that could preclude reservoir development. For these reasons, we assigned a LPN of 5 to this species.

Zuni bluehead sucker (*Catostomus discobolus yarrowi*)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. The Zuni bluehead sucker is a colorful fish less than 20 centimeters (8 inches) long. The range of the Zuni bluehead sucker has been reduced by over 95 percent. The Zuni bluehead sucker currently occupies 4.8 river kilometers (3 miles) in three headwater streams of the Rio Nutria in New Mexico, and potentially occurs in 44 river kilometers (27.5 miles) in the Kinlichee drainage of Arizona. However, the number of occupied miles in Arizona is unknown, and the genetic composition of these fish is still under investigation.

Zuni bluehead sucker's range reduction and fragmentation is caused by discontinuous surface-water flow, introduced species, and habitat degradation from fine sediment deposition. The Zuni bluehead sucker persists in very small creeks that are subject to very low flows and drying during periods of drought. Because of climate change (warmer air temperatures), streamflow is predicted to decrease in the Southwest. Warmer winter and spring temperatures cause an increased fraction of precipitation to fall as rain, resulting in a reduced snow pack, an earlier snow melt, and a longer dry season leading to decreased streamflow in the summer and a longer fire season. These changes would have a negative effect on Zuni bluehead sucker. Another major impact to populations of Zuni bluehead sucker was the application of fish toxicants through at least two dozen treatments in the Rio Nutria and Rio Pescado between 1960 and 1975. Large numbers of Zuni bluehead suckers were killed during these treatments. The Zuni bluehead sucker is most likely extirpated from Rio Pescado, as not one has been collected from that river since 1993.

The New Mexico Department of Game and Fish developed a recovery plan for Zuni bluehead sucker, which was approved by the New Mexico State Game Commission on December 15, 2004. The recovery plan recommends preservation and enhancement of extant populations and restoration of historical Zuni bluehead sucker populations. We predict that the recovery actions prescribed by the recovery plan will reduce and remove threats to this subspecies, but these actions will require further development and authorization before they can be implemented and threats are reduced. Because of the ongoing (imminent) threats of high magnitude, including loss of habitat (historical and current from beaver activity), degradation of remaining habitat (nonnative species and land development), drought, fire, and climate change, we maintained an LPN of 3 for this subspecies.

Rio Grande cutthroat trout (*Oncorhynchus clarki virginalis*)—The following summary is based on information contained in our files and our status review published on May 14, 2008 (73 FR 27900). Rio Grande cutthroat trout is one of 14 subspecies of cutthroat trout found in the western United States. Populations of this subspecies are in New Mexico and Colorado in drainages of the Rio Grande, Pecos, and Canadian Rivers. Although once widely distributed in connected stream networks, Rio Grande cutthroat trout populations now occupy about 10 percent of historical habitat, and the populations are fragmented and isolated from one another. The majority of populations occur in high-elevation streams.

Major threats include the loss of suitable habitat that has occurred and is likely to continue occurring due to water diversions, dams, stream drying, habitat quality degradation, and, changes in hydrology; introduction of nonnative trout and ensuing competition, predation, and hybridization; and whirling disease. In addition, average air temperatures in the Southwest have increased about 1 °C (2.5 °F) in the past 30 years, and they are projected to increase by another 1.2 to 2.8 °C (3 to 7 °F) by 2050. Because trout require cold water, and water temperatures depend in large part on air temperature, there is concern that the habitat of Rio Grande cutthroat trout will further decrease in response to warmer water temperatures caused by climate change. Wildfire and drought (stream drying) are additional threats to Rio Grande cutthroat trout populations that are likely to increase in magnitude in response to climate change. Research is occurring to assess the effects of climate change on this subspecies, and agencies are working to restore historically occupied streams and develop a conservation plan to direct conservation. The threats are of moderate magnitude because there is good distribution and a comparatively large number of populations across the landscape, some populations have few threats present, and in other areas management actions are being taken to help control the threat of nonnative trout. Overall, the threats are ongoing and, therefore, imminent. Based on imminent threats of moderate magnitude, we assigned an LPN of 9 to this subspecies.

Clams

Texas hornshell (*Popenaias popei*)—The following summary is based on information contained in our files and information provided by the New Mexico Department of Game and Fish and Texas Parks and Wildlife Department. The Texas hornshell is a freshwater mussel found in the Black River in New Mexico, and in the Rio Grande and the Devils River in Texas. Until March 2008, the only known extant populations were in New Mexico's Black River and one locality in the Rio Grande near Laredo, Texas. In March 2008, two new localities were confirmed in Texas: one in the Devils River, and one in the mainstem Rio Grande in the Rio Grande Wild and Scenic River segment downstream of Big Bend National Park. In 2011, the Rio Grande population near Laredo was resurveyed and found to be large and robust.

The primary threats to this species are habitat alterations such as streambank channelization, impoundments, and diversions for agriculture and flood control, including a proposed low-water diversion dam just downstream of the Rio Grande population near Laredo; contamination of water by oil and gas activity; alterations in the natural riverine hydrology; and increased sedimentation and flood pulses from prolonged overgrazing and loss of native vegetation. Although riverine habitats throughout the species' known occupied range are under constant threat from these ongoing or potential activities, numerous conservation actions that will benefit the species are under way in New Mexico, including the completion of a State recovery plan for the species and the drafting of a candidate conservation agreement with assurances, and are beginning in Texas on the Big Bend reach of the Rio Grande. Due to these ongoing conservation efforts, and because at

least one of the populations appears to be robust, the magnitude of the threats is moderate. However, the threats to the species are ongoing, and remain imminent. Thus, we maintained the LPN of 8 for this species.

Fluted kidneyshell (*Ptychobranchus subtentum*)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. The fluted kidneyshell is a freshwater mussel (Unionidae) endemic to the Cumberland and Tennessee River systems (Cumberlandian Region) in Alabama, Kentucky, Tennessee, and Virginia. It requires shoal habitats in free-flowing rivers to survive and successfully recruit new individuals into its populations.

This species has been extirpated from numerous regional streams and is no longer found in the State of Alabama. Habitat destruction and alteration (e.g., impoundments, sedimentation, and pollutants) are the chief factors that contributed to its decline. The fluted kidneyshell was historically known from at least 37 streams but is currently restricted to no more than 12 isolated populations. Current status information for most of the 12 populations deemed to be extant is available from recent periodic sampling efforts (sometimes annually) and other field studies, particularly in the upper Tennessee River system. Some populations in the Cumberland River system have had recent surveys as well (e.g., Wolf, Little Rivers; Little South Fork; Horse Lick, Buck Creeks). Populations in Buck Creek, Little South Fork, Horse Lick Creek, Powell River, and North Fork Holston River have clearly declined over the past two decades. Based on recent information, the overall population of the fluted kidneyshell is declining rangewide. At this time, there is only one population—the Clinch River/Copper Creek –where the species remains in large numbers and is viable, although smaller, viable populations remain (e.g., Wolf, Little, North Fork Holston Rivers; Rock Creek). Most other populations are of questionable or limited viability, with some on the verge of extirpation (e.g., Powell River; Little South Fork; Horse Lick, Buck, and Indian Creeks). Newly reintroduced populations in the Little Tennessee, Nolichucky, and Duck Rivers will hopefully begin to reverse the downward population trend of this species. The threats are high in magnitude, as the majority of populations of this species are severely affected by numerous threats (impoundments, sedimentation, small population size, isolation of populations, gravel mining, municipal pollutants, agricultural runoff, nutrient enrichment, and coal processing pollution) that result in mortality or reduced reproductive output. As the threats are ongoing, they are imminent. We assigned an LPN of 2 to this mussel species.

Neosho mucket (*Lampsilis rafinesqueana*)—We continue to find that listing this species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted petition 12-month finding.

Slabside pearlymussel (*Lexingtonia dolabelloides*)—The following summary is based on information contained in our files. The slabside pearlymussel is a freshwater mussel (Unionidae) endemic to the Cumberland and Tennessee River systems (Cumberlandian Region) in Alabama, Kentucky, Tennessee, and Virginia. It requires shoal habitats in free-flowing rivers to survive and successfully recruit new individuals into its populations.

Habitat destruction and alteration (e.g., impoundments, sedimentation, and pollutants) are the chief factors contributing to the decline of this species, which has been extirpated from numerous regional streams and is no longer found in Kentucky. The slabside pearlymussel was historically known from at least 32 streams, but is currently restricted to no more than 11 isolated stream segments. Current status information for most of the 11 populations deemed to be extant is available from recent periodic sampling efforts (sometimes annually) and other field studies. Comprehensive surveys have taken place in the Middle and North Forks of the Holston River, Paint Rock River, and Duck River in the past several years. Based on recent information, the overall population of the slabside pearlymussel is declining rangewide. Of the five streams in which the species remains in good numbers (i.e., Clinch, North and Middle Forks of the Holston River, Paint Rock River, and Duck River), the Middle and upper North Fork Holston Rivers have undergone drastic recent declines, while the Clinch population has been in a longer-term decline. Most of the remaining five populations (i.e., Powell River, Big Moccasin Creek, Hiwassee River, Elk River, Bear Creek) have doubtful viability, and several if not all of them may be on the verge of extirpation.

The threats remain high in magnitude, as all populations of this species are severely affected in numerous ways (impoundments, sedimentation, small population size, isolation of populations, gravel mining, municipal pollutants, agricultural runoff, nutrient enrichment, and coal processing pollution) that result in mortality or reduced reproductive output. As the threats are ongoing, they are imminent. We assigned an LPN of 2 to this mussel species.

Rabbitsfoot (*Quadrula cylindrica cylindrica*)—We continue to find that listing this species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted petition 12-month finding.

Snails

Black mudalia (*Elimia melanoides*)—The following summary is based on information contained in our files. No new information was provided in the petition we received on April 20, 2010. The black mudalia is a small snail that is found clinging to clean gravel, cobble, boulders and/or logs in flowing water on shoals and riffles. The historical distribution of the black mudalia encompassed over 250 miles of stream channel in the upper the Black Warrior River drainage in Alabama. The species has been extirpated from more than 80 percent of that range by the construction of two major dams on the main stem Black Warrior River and another dam on the lower Sipsey Fork. Other historical causes of range curtailment in the un-dammed river and stream channels of the upper Black Warrior River drainage include coal mine drainage, industrial and municipal pollution events, and agricultural runoff. The mudalia is currently known from 10 shoal populations in five streams.

Water quality and habitat degradation are the biggest threats to the continued existence of the black mudalia. Sources of point and nonpoint pollution in the Black Warrior River Basin have been numerous and widespread. Pollution is generated from inadequately treated effluent from industrial plants, sanitary landfills, sewage treatment plants, poultry operations, and cattle feedlots. Surface mining represents another threat to the biological integrity of stream habitats. Runoff from old, abandoned coal mines generates pollution through acidification, increased mineralization, and sediment loading. Most of the stream segments draining into black mudalia habitat currently support their water quality classification standards. However, the reach of the Locust Fork where the species is found is identified on the

Alabama 303(d) List (a list of water bodies failing to meet their designated water-use classifications) as impaired by siltation, nutrients, or other habitat alterations. Additional surveys that were initiated in 2011, will clarify the extent and status of black mudalia populations. Because most of the stream segments currently occupied by black mudalia have sufficient water quality, we conclude that the threats to the species are moderate. Based on ongoing threats of moderate magnitude, we assigned an LPN of 8 to this species.

Phantom Cave snail (*Cochliopa texana*) and Phantom springsnail (*Tryonia cheatumi*)—We continue to find that listing these species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted petition 12-month finding.

Sisi snail (*Ostodes strigatus*)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. The sisi snail is a ground-dwelling species in the Potaridae family, and is endemic to American Samoa. The species is now known from a single population on the island of Tutuila, American Samoa.

This species is currently threatened by habitat loss and modification and by predation from nonnative predatory snails. The decline of the sisi snail in American Samoa has resulted, in part, from loss of habitat to forestry and agriculture, and loss of forest structure to hurricanes and alien weeds that establish after these storms. All live sisi snails have been found in the leaf litter beneath remaining intact forest canopy. No snails were found in areas bordering agricultural plots or in forest areas that were severely damaged by three hurricanes (1987, 1990, and 1991). Under natural historical conditions, loss of forest canopy to storms did not pose a great threat to the long-term survival of these snails; enough intact forest with healthy populations of snails would support dispersal back into newly regrown canopy forest. However, the presence of alien weeds such as mile-a-minute vine (*Mikania micrantha*) may reduce the likelihood that native forest will re-establish in areas damaged by the hurricanes. This loss of habitat to storms is greatly exacerbated by expanding agriculture. Agricultural plots on Tutuila have spread from low elevations up to middle and some high elevations, greatly reducing the forest area and thus reducing the resilience of native forests and Tutuila's populations of native snails. These reductions also increase the likelihood that future storms will lead to the extinction of populations or species that rely on the remaining canopy forest. In an effort to eradicate the giant African snail (*Achatina fulica*), the alien rosy carnivore snail (*Euglandia rosea*) was introduced in 1980. The rosy carnivore snail has spread throughout the main island of Tutuila. Numerous studies show that the rosy carnivore snail feeds on endemic island snails including the sisi, and is a major agent in their declines and extirpations. At present, the major threat to long-term survival of the native snail fauna in American Samoa is predation by nonnative predatory snails. These threats are ongoing and are therefore imminent. As the threats occur throughout the entire range of the species and have a severe effect on the survival of the snails, leading to a relatively high likelihood of extinction, they are of a high magnitude. Therefore we assigned this species an LPN of 2.

Diamond Y Spring snail (*Pseudotryonia adamantina*) and Gonzales springsnail (*Tryonia circumstriata*)—We continue to find that listing these species is warranted but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted petition 12-month finding.

Rosemont talussnail (*Sonorella rosemontensis*)—the following summary is based on information in our files. The petition we received on June 24, 2010, provided no new information beyond what we had already included in our assessment of this species. The Rosemont talussnail, a land snail in the family Helminthoglyptidae, is known from three talus slopes in the Santa Rita Mountains, Pima County, Arizona. The primary threat to Rosemont talussnail is hard rock mining. The entire range of the species is located on patented mining claims and can reasonably be expected to be subjected to mining activities in the foreseeable future. Hard rock mining typically involves the blasting of hillsides and the crushing of ore-laden rock. Such activities would kill talussnails and render their habitats unsuitable for occupation. Because mining may occur across the entire range of the species within the foreseeable future, potentially resulting in rangewide habitat destruction and population losses, the threats are of a high magnitude. However, mining on patented mining claims, although a reasonably anticipated action, is neither currently ongoing nor imminent. Although the Rosemont Copper Mine is scheduled to commence operations in the near future, there exists uncertainty regarding its scope, and therefore its potential effect on habitat of the Rosemont talussnail. Accordingly, we find that overall threats to the Rosemont talussnail are nonimminent, and we retain an LPN of 5 for this species.

Fragile tree snail (*Samoana fragilis*)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. A tree-dwelling species, the fragile tree snail is a member of the Partulidae family of snails, and is endemic to the islands of Guam and Rota (Mariana Islands). Requiring cool and shaded native forest habitat, the species is now known from one population on Guam and from one population on Rota.

This species is currently threatened by habitat loss and modification and by predation from nonnative predatory snails and flatworms. Large numbers of Philippine deer (*Cervus mariannus*) (Guam and Rota), pigs (*Sus scrofra*) (Guam), water buffalo (*Bubalus bubalis*) (Guam), and cattle (*Bos taurus*) (Rota) directly alter the understory plant community and overall forest microclimate, making it unsuitable for snails. Predation by the alien rosy carnivore snail (*Euglandina rosea*), the Manokwar flatworm (*Platydemus manokwari*), and possibly rats (*Rattus* spp.) is a serious threat to the survival of the fragile tree snail. Field observations have established that the rosy carnivore snail and the Manokwar flatworm will readily feed on native Pacific island tree snails, including the Partulidae, such as those of the Mariana Islands. The rosy carnivore snail has caused the extirpation of many populations and species of native snails throughout the Pacific islands. The Manokwar flatworm has also contributed to the decline of native tree snails, in part due to its ability to ascend into trees and bushes that support native snails. Areas with populations of the flatworm usually lack partulid tree snails or have declining numbers of snails. In addition, predation by rats may be a serious and ongoing threat to the fragile tree snail. Because all of the threats occur rangewide and have a significant effect on the survival of this snail species, leading to a relatively high likelihood of extinction, they are high in magnitude. The threats are also ongoing and thus are imminent. Therefore, we assigned this species an LPN of 2.

Guam tree snail (*Partula radiolata*)—The following summary is based on information contained in our files. No new information was provided in the

petition we received on May 11, 2004. A tree-dwelling species, the Guam tree snail is a member of the Partulidae family of snails and is endemic to the island of Guam. Requiring cool and shaded native forest habitat, the species is now known from 22 populations on Guam.

This species is primarily threatened by predation from nonnative predatory snails, flatworms, and possibly rats (*Rattus* spp.). In addition, the species is also threatened by habitat loss and degradation. Predation by the alien rosy carnivore snail (*Euglandina rosea*) and the alien Manokwar flatworm (*Platydemus manokwari*) is a serious threat to the survival of the Guam tree snail (see summary for the fragile tree snail, above). In addition, predation by rats may be a serious and ongoing threat to the Guam tree snail. On Guam, open agricultural fields and other areas prone to erosion were seeded with tangantangan (*Leucaena leucocephala*) by the U.S. military. Tangantangan grows as a single species stand with no substantial understory. The microclimatic condition is dry with little accumulation of leaf litter humus and is particularly unsuitable as Guam tree snail habitat. In addition, native forest cannot reestablish and grow where this alien weed has become established. Because all of the threats occur rangewide and have a significant effect on the survival of this snail species, leading to a relatively high likelihood of extinction, they are high in magnitude. The threats are also ongoing and thus are imminent. Therefore, we assigned this species an LPN of 2.

Humped tree snail (*Partula gibba*)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. A tree-dwelling species, the humped tree snail is a member of the Partulidae family of snails, and was originally known from the island of Guam and the Commonwealth of the Northern Mariana Islands (islands of Rota, Aguiguan, Tinian, Saipan, Anatahan, Sarigan, Alamagan, and Pagan). Most recent surveys revealed a total of 14 populations on the islands of Guam, Rota, Aguiguan, Sarigan, Saipan, Alamagan, and Pagan. Although still the most widely distributed tree snail endemic in the Mariana Islands, remaining population sizes are often small.

This species is currently threatened by habitat loss and modification and by predation from nonnative predatory snails, flat worms, and possibly rats (*Rattus* spp.). Throughout the Mariana Islands, feral ungulates (pigs (*Sus scrofa*), Philippine deer (*Cervus mariannus*), cattle (*Bos taurus*), water buffalo (*Bubalus bubalis*), and goats (*Capra hircus*)) have caused severe damage to native forest vegetation by browsing directly on plants, causing erosion and retarding forest growth and regeneration. This in turn reduces the quantity and quality of forested habitat for the humped tree snail. Currently, populations of feral ungulates are found on the islands of Guam (deer, pigs, and water buffalo), Rota (deer and cattle), Aguiguan (goats), Saipan (deer, pigs, and cattle), Alamagan (goats, pigs, and cattle), and Pagan (cattle, goats, and pigs). Goats were eradicated from Sarigan in 1998, and the humped tree snail has increased in abundance on that island, likely in response to the removal of all the goats. However, the population of humped tree snails on Anatahan is likely extirpated due to the massive volcanic explosions of the island beginning in 2003 and still continuing, and the resulting loss of up to 95 percent of the vegetation on the island. Predation by the alien rosy carnivore snail (*Euglandina rosea*) and the alien Manokwar flatworm (*Platydemus manokwari*) is a serious threat to the survival of the humped tree snail (see summary for the fragile tree snail, above). In addition, predation by rats (*Rattus* spp.) may be a serious and ongoing threat to the humped tree snail. The magnitude of threats is high because these alien predators cause significant population declines to the humped tree snail rangewide. These threats are ongoing and thus are imminent. Therefore, we assigned this species an LPN of 2.

Lanai tree snail (*Partulina semicarinata*)—We continue to find that listing this species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted petition 12-month finding.

Lanai tree snail (*Partulina variabilis*)—We continue to find that listing this species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted petition 12-month finding.

Langford's tree snail (*Partula langfordi*)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. A tree-dwelling species, Langford's tree snail is a member of the Partulidae family of snails, and is known from one population on the island of Aguiguan.

This species is currently threatened by habitat loss and modification and by predation from nonnative predatory snails. In the 1930s, the island of Aguiguan was mostly cleared of native forest to support sugar cane and pineapple production. The abandoned fields and airstrip are now overgrown with alien weeds. The remaining native forest understory has greatly suffered from large and uncontrolled populations of alien goats and the invasion of weeds. Goats (*Capra hircus*) have caused severe damage to native forest vegetation by browsing directly on plants, causing erosion and retarding forest growth and regeneration. This in turn reduces the quantity and quality of forested habitat for Langford's tree snail. Predation by the alien rosy carnivore snail (*Euglandina rosea*) and by the Manokwar flatworm (*Platydemus manokwari*) (see summary for the fragile tree snail, above) is also a serious threat to the survival of Langford's tree snail. In addition, predation by rats (*Rattus* spp.) may be a serious and ongoing threat to Langford's tree snail. All of the threats are occurring rangewide, and no efforts to control or eradicate the nonnative predatory snail species or rats, or to reduce habitat loss, are being undertaken. The magnitude of threats is high because they result in direct mortality or significant population declines to Langford's tree snail rangewide. A survey of Aguiguan in November 2006 failed to find any live Langford's tree snails. These threats are also ongoing and thus are imminent. Therefore, we assigned this species an LPN of 2.

Newcomb's tree snail (*Newcombia cumingi*)—We continue to find that listing this species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted petition 12-month finding.

Tutuila tree snail (*Eua zebrina*)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. A tree-dwelling species, the Tutuila tree snail is a member of the Partulidae family of snails, and is endemic to American Samoa. The species is known from 32 populations on the islands of Tutuila, Nuusetoga, and Ofu.

This species is currently threatened by habitat loss and modification and by predation from nonnative predatory snails and rats. All live Tutuila tree snails were found on understory

vegetation beneath remaining intact forest canopy. No snails were found in areas bordering agricultural plots or in forest areas that were severely damaged by three hurricanes (1987, 1990, and 1991). (See summary for the sisi snail, above, regarding impacts of alien weeds and of the rosy carnivore snail.) Rats (*Rattus* spp.) have also been shown to devastate snail populations, and rat-chewed snail shells have been found at sites where the Tutuila snail occurs. At present, the major threat to the long-term survival of the native snail fauna in American Samoa is predation by nonnative predatory snails and rats. The magnitude of threats is high because they result in direct mortality or significant population declines to the Tutuila tree snail rangewide. The threats are also ongoing and thus are imminent. Therefore, we assigned this species an LPN of 2.

Elongate mud meadows springsnail (*Pyrgulopsis notidicola*)—The following summary is based on information contained in our files. No new information was provided in the petition received on May 11, 2004. The following summary is based on information contained in our files. *Pyrgulopsis notidicola* is endemic to Soldier Meadow, which is located at the northern extreme of the western arm of the Black Rock Desert in the transition zone between the Basin and Range Physiographic Province and the Columbia Plateau Province, Humboldt County, Nevada. The type locality, and the only known location of the species, occurs in four separate stretches of thermal (between 45° and 32 °C, 113° and 90 °F) aquatic habitat. The first stretch is the largest at approximately 600 m (1,968 ft) long and 2 m (6.7 ft) wide. The other stretches where *P. notidicola* occurs are less than 6 m (19.7 ft) long and 0.5 m (1.6 ft) wide. *Pyrgulopsis notidicola* occurs only in shallow, flowing water on gravel substrate. The species does not occur in deep water (i.e., impoundments) where water velocity is low, gravel substrate is absent, and sediment levels are high.

The species and its habitat are threatened by recreational use in the areas where it occurs as well as the ongoing impacts of past water diversions and livestock grazing and current off-highway vehicle travel. Conservation measures implemented by the Bureau of Land Management include installing fencing to exclude livestock, wild horses, burros and other large mammals; closing access roads to spring, riparian, and wetland areas and the limiting vehicles to designated routes; establishing a designated campground away from the habitats of sensitive species; installing educational signage; and increasing staff presence, including law enforcement and a volunteer site steward during the 6-month period of peak visitor use. These conservation measures have reduced the magnitude of threats to the species to moderate to low; all remaining threats are nonimminent and involve long-term changes to the habitat for the species resulting from past impacts. Until we can get data from a monitoring program that allows us to assess the long-term trend of the species, we have assigned a LPN of 11.

Gonzales springsnail (*Tryonia circumstriata*)—See summary above under Diamond Y Spring snail (*Pseudotryonia adamantina*).

Huachuca springsnail (*Pyrgulopsis thompsoni*)—See above in ''*Listing* Priority Changes in Candidates.'' The above summary is based on information contained in our files.

Page springsnail (*Pyrgulopsis morrisoni*)—The following summary is based on information contained in our files. The Page springsnail is known to exist only within a complex of springs located within an approximately 0.93-mi (1.5-km) stretch along the west side of Oak Creek around the community of Page Springs, and within springs located along Spring Creek, tributary to Oak Creek, Yavapai County, Arizona.

The primary threat to the Page springsnail is modification of habitat by domestic use, agriculture, ranching, fish hatchery operations, recreation, and groundwater withdrawal. Many of the springs where the species occurs have been subjected to some level of modification. Based on recent survey data, it appears that the Page springsnail is abundant within natural habitats and persists in modified habitats, albeit at reduced densities. Arizona Game and Fish Department (AGFD) management plans for the Bubbling Ponds and Page Springs fish hatcheries include commitments to replace lost habitat and to monitor remaining populations of invertebrates such as the Page springsnail. The candidate conservation agreement with assurances (CCAA) for the Page springsnail calls for implementation of conservation measures such as restoration and creation of natural springhead integrity, including springs on AGFD properties. In fact, several conservation measures benefitting the species have already been implemented. Additionally, the National Park Service has expressed an interest in restoring natural springhead integrity to Shea Springs, a site historically occupied by Page springsnail. Accordingly, ongoing implementation of the CCAA reduces the magnitude of threats to a moderate level and greatly reduces the chances of extirpation or extinction. The immediacy of the threat of groundwater withdrawal is uncertain, due to conflicting information regarding imminence. However, overall, the threats are imminent, because modification of the species' habitat by threats other than groundwater withdrawal is currently occurring. Therefore, we retain an LPN of 8 for the Page springsnail.

Phantom springsnail (*Tyronia cheatumi*)—See summary above under Phantom Cave snail (*Cochliopa texana*).

Insects

Mariana eight spot butterfly (*Hypolimnas octucula mariannensis*)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. The Mariana eight spot butterfly is a nymphalid butterfly species that feeds upon two host plants, *Procris pedunculata* and *Elatostema calcareum.* Endemic to the islands of Guam and Saipan, the species is now known from 10 populations on Guam. This species is currently threatened by predation and parasitism. The Mariana eight spot butterfly has extremely high mortality of eggs and larvae due to predation by alien ants and wasps. Because the threat of parasitism and predation by nonnative insects occur rangewide and can cause significant population declines to this species, they are high in magnitude. The threats are imminent because they are ongoing. Therefore, we assigned an LPN of 3 for this subspecies.

Mariana wandering butterfly (*Vagrans egestina*)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. The Mariana wandering butterfly is a nymphalid butterfly species that feeds upon a single host plant species, *Maytenus thompsonii.* Originally known from and endemic to the islands of Guam and Rota, the species is now known from one population on Rota. This species is currently threatened by alien predation and parasitism. The Mariana wandering butterfly is likely predated by alien ants and parasitized by native and nonnative parasitoids. Because the threats of parasitism and predation by nonnative insects occur rangewide and can cause significant population declines to this species, leading to a relatively high likelihood of extinction, they are high in magnitude. These threats are imminent because they are ongoing. Therefore, we assigned an LPN of 2 for this species.

Sequatchie caddisfly (*Glyphopsyche sequatchie*)—The following summary is based on information in our files. No new information was provided in the petition we received on May 11, 2004. The Sequatchie caddisfly is known from two spring runs that emerge from caves in Marion County, Tennessee: Owen Spring Branch (the type locality) and Martin Spring run in the Battle Creek system. In 1998, biologists estimated population sizes at 500 to 5,000 individuals for Owen Spring Branch and 2 to 10 times higher at Martin Spring, due to the greater amount of apparently suitable habitat. In spite of greater amounts of suitable habitat at the Martin Spring run, Sequatchie caddisflies are more difficult to find at this site, and in 2001 (the most recent survey) the Sequatchie caddisfly was relatively ''abundant'' at the Owen Spring Branch location, while only two individuals were observed at the Martin Spring.

Threats to the Sequatchie caddisfly include siltation, point and nonpoint discharges from municipal and industrial activities, and introduction of toxicants during episodic events. These threats, coupled with the extremely limited distribution of the species, its apparent small population size, the limited amount of occupied habitat, ease of accessibility, and the annual life cycle of the species, are all factors that leave the Sequatchie caddisfly vulnerable to extirpation. Therefore, the magnitude of the threat is high. These threats are gradual, and there is no basis to conclude that they are imminent. Based on high-magnitude and nonimminent threats, we assigned this species an LPN of 5.

Clifton Cave beetle (*Pseudanophthalmus caecus*)—The following summary is based upon information contained in our files. No new information was provided in the petition we received on May 11, 2004. Clifton Cave beetle is a small, eyeless, reddish-brown, predatory insect that feeds upon small cave invertebrates. It is cave dependent, and is not found outside the cave environment. Clifton Cave beetle is only known from two privately owned Kentucky caves. Soon after the species was first collected in 1963 in one cave, the cave entrance was enclosed due to road construction. We do not know whether the species still occurs at the original location or if it has been extirpated from the site by the closure of the cave entrance. Other caves in the vicinity of this cave were surveyed for the species during 1995 and 1996, and only one additional site was found to support the Clifton Cave beetle. The limestone caves in which the Clifton Cave beetle is found provide a unique and fragile environment that supports a variety of species that have evolved to survive and reproduce under the demanding conditions found in cave ecosystems. The limited distribution of the species makes it vulnerable to isolated events that would only have a minimal effect on more wide-ranging insects. Events such as toxic chemical spills, discharges of large amounts of polluted water or indirect impacts from off-site construction activities, closure of entrances, alteration of entrances, or the creation of new entrances could have serious adverse impacts on this species. Therefore, the magnitude of threat is high for this species. The threats are nonimminent because there are no known projects planned that would affect the species in the near future. We therefore have assigned an LPN of 5 to this species.

Coleman cave beetle (*Pseudanophthalmus colemanensis*)—The following summary is based upon information contained in our files. No new information was provided in the petition we received on April 20, 2010. The Coleman cave beetle is a small, eyeless, reddish-brown, predatory insect that feeds upon small cave invertebrates. It is cave dependent and is not found outside the cave environment. It is only known from three Tennessee caves.

The limestone caves in which this species is found provide a unique and fragile environment that support a variety of species that have evolved to survive and reproduce under the demanding conditions found in cave ecosystems. Caves and the species that are completely dependent upon them receive the energy that forms the basis of the cave food chain from outside the cave. This energy can be in the form of bat guano deposited by cave-dependent bats, large or small woody debris washed or blown into the cave, or tiny bits of organic matter carried into the cave by water through small cracks in the rocks overlaying the cave.

The Coleman cave beetle was originally known only from the privately owned Coleman Cave in Montgomery County. This cave formerly supported a colony of endangered gray bats. The bats have abandoned this cave because of air flow changes in the cave caused by closure of an upper entrance to the cave. Although the cave is protected by a cooperative management agreement with the landowner, the upper entrance has not been restored and the bats have not returned to the cave. A new location for the species was discovered during a biological inventory of Foster Cave (also known as Darnell Cave) when one specimen of the species was found during that survey. Foster Cave is on a preserve owned and managed by the Tennessee Department of Conservation. In 2006, specimens of this species were discovered in Bellamy Cave and in Darnell Spring Cave (part of the same cave complex as Foster Cave). All of these sites are in close proximity to each other. Bellamy Cave is owned and managed by the Tennessee Wildlife Resources Agency (TWRA). Both Foster Cave and Bellamy Cave were first acquired and protected by The Nature Conservancy and later transferred to the State for long-term protection and management.

The threats are nonimminent because there are no known projects planned that would affect the species in the next few years. Because it occurs at three locations and it receives some protection under a cooperative management agreement and protective ownership, the magnitude of threats is moderate to low. Thus, we have assigned an LPN of 11 to this species.

Icebox Cave beetle (*Pseudanophthalmus frigidus*)—The following summary is based upon information contained in our files. No new information was provided in the petition we received on May 11, 2004. Icebox Cave beetle is a small, eyeless, reddish-brown, predatory insect that feeds upon small cave invertebrates. It is not found outside the cave environment, and is only known from one privately owned Kentucky cave.

The limestone cave in which this species is found provides a unique and fragile environment that supports a variety of species that have evolved to survive and reproduce under the demanding conditions found in cave ecosystems. The species has not been observed since it was originally collected, but species experts believe that it may still exist in the cave in low numbers. The limited distribution of the species makes it vulnerable to isolated events that would only have a minimal effect on more wide-ranging insects. Events such as toxic chemical spills or discharges of large amounts of polluted water, or indirect impacts from off-site construction activities, closure of entrances, alteration of entrances, or the creation of new entrances, could have serious adverse impacts on this species. Therefore, the magnitude of threat is high for this species because it is limited in distribution and the threats would result in a high level of mortality or reduced reproductive capacity. The threats are nonimminent because there are no known projects planned that would affect the species in the near

future. We therefore have assigned an LPN of 5 to this species.

Inquirer Cave beetle (*Pseudanophthalmus inquisitor*)—The following summary is based upon information contained in our files. No new information was provided in the petition we received on May 11, 2004. The Inquirer Cave beetle is a fairly small, eyeless, reddish-brown, predatory insect that feeds upon small cave invertebrates. It is not found outside the cave environment, and is only known from one privately owned Tennessee cave.

The limestone cave in which this species is found provides a unique and fragile environment that supports a variety of species that have evolved to survive and reproduce under the demanding conditions found in cave ecosystems. The species was last observed in 2006. The limited distribution of the species makes it vulnerable to isolated events that would only have a minimal effect on more wide-ranging insects. The area around the only known site for the species is in a rapidly expanding urban area. The entrance to the cave is protected by the landowner through a cooperative management agreement with the Service, The Nature Conservancy, and Tennessee Wildlife Resources Agency; however, a sinkhole that drains into the cave system is located away from the protected entrance and is near a highway. Events such as toxic chemical spills, discharges of large amounts of polluted water, or indirect impacts from off-site construction activities could adversely affect the species and the cave habitat.

The magnitude of threat is high for this species because it is limited in distribution and the threats would have negative impacts on its continued existence. The threats are nonimminent because there are no known projects planned that would affect the species in the near future and the species receives some protection under a cooperative management agreement. We therefore have assigned an LPN of 5 to this species.

Louisville Cave beetle (*Pseudanophthalmus troglodytes*)—The following summary is based upon information contained in our files. No new information was provided in the petition we received on May 11, 2004. The Louisville cave beetle is a small, eyeless, reddish-brown, predatory insect that feeds upon cave invertebrates. It is not found outside the cave environment, and is only known from two privately owned Kentucky caves.

The limestone caves in which this species is found provide a unique and fragile environment that supports a variety of species that have evolved to survive and reproduce under the demanding conditions found in cave ecosystems. The limited distribution of the species makes it vulnerable to isolated events that would only have a minimal effect on more wide-ranging insects. Events such as toxic chemical spills, discharges of large amounts of polluted water, or indirect impacts from off-site construction activities, closure of entrances, alteration of entrances, or the creation of new entrances could have serious adverse impacts on this species. The magnitude of threat is high for this species, because it is limited in distribution and the threats would have severe negative impacts on the species. The threats are nonimminent because there are no known projects planned that would affect the species in the near future. We therefore have assigned an LPN of 5 to this species.

Tatum Cave beetle (*Pseudanophthalmus parvus*) — The following summary is based upon information contained in our files. No new information was provided in the petition we received on May 11, 2004. Tatum Cave beetle is a small, eyeless, reddish-brown, predatory insect that feeds upon cave invertebrates. It is not found outside the cave environment, and is only known from one privately owned Kentucky cave.

The limestone cave in which this species is found provides a unique and fragile environment that supports a variety of species that have evolved to survive and reproduce under the demanding conditions found in cave ecosystems. The species has not been observed since 1965, but species experts believe that it still exists in low numbers. The limited distribution of the species makes it vulnerable to isolated events that would only have a minimal effect on more wide-ranging insects. Events such as toxic chemical spills, discharges of large amounts of polluted water, or indirect impacts from off-site construction activities, closure of entrances, alteration of entrances, or the creation of new entrances could have serious adverse impacts on this species. The magnitude of threat is high for this species, because its limited numbers mean that any threats could severely affect its continued existence. The threats are nonimminent because there are no known projects planned that would affect the species in the near future. We therefore have assigned an LPN of 5 to this species.

Taylor's (Whulge, Edith's) checkerspot butterfly (*Euphydryas editha taylori*)—We continue to find that listing this species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted petition 12-month finding.

Orangeblack Hawaiian damselfly (*Megalagrion xanthomelas*)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. The orangeblack Hawaiian damselfly is a stream-dwelling species endemic to the Hawaiian Islands of Kauai, Oahu, Molokai, Maui, Lanai, and Hawaii. The species no longer is found on Kauai, and is now restricted to 16 populations on the islands of Oahu, Maui, Molokai, Lanai, and Hawaii. This species is threatened by predation from alien aquatic species such as fish and predacious insects, and habitat loss through dewatering of streams and invasion by nonnative plants. Nonnative fish and insects prey on the naiads of the damselfly, and loss of water reduces the amount of suitable naiad habitat available. Invasive plants (e.g., California grass (*Brachiaria mutica*)) also contribute to loss of habitat by forming dense, monotypic stands that completely eliminate any open water. Nonnative fish and plants are found in all the streams the orangeblack damselfly occur in, except the Oahu location, where there are no nonnative fish. We assigned this species an LPN of 8 because, although the threats are ongoing and therefore imminent, they affect the survival of the species in varying degrees throughout the range of the species and are therefore of moderate magnitude.

Picture-wing fly (*Drosophila digressa*)—We continue to find that listing this species is warranted but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted petition 12-month finding.

Stephan's riffle beetle (*Heterelmis stephani*)—The following summary is based on information contained in our files. No new information was provided in the petition received on May 11, 2004. The Stephan's riffle beetle is an endemic riffle beetle found in limited spring environments within the Santa Rita Mountains, Pima County, Arizona. The beetle is known from Sylvester Spring in Madera Canyon, within the Coronado National Forest. Threats to that spring are largely from habitat modification, recreational activities in the springs, and potential changes in water quality and quantity due to

catastrophic natural events and climate change. The threats are of low to moderate magnitude based on our current knowledge of the permanence of threats and the likelihood that the species will persist in areas that are unaffected by the threats. Although the threats from climate change are expected to occur over many years, the threats from recreational use are ongoing. Therefore, the threats are imminent. Thus, we retain an LPN of 8 for the Stephan's riffle beetle.

Dakota skipper (*Hesperia dacotae*)—The following summary is based on information contained in our files, including information from the petition received on May 12, 2003. The Dakota skipper is a small- to mid-sized butterfly that inhabits high-quality tallgrass and mixed-grass prairie in Minnesota, North Dakota and South Dakota in the United States, and the provinces of Manitoba and Saskatchewan in Canada. The species is presumed to be extirpated from Iowa and Illinois and from many sites within occupied U.S. States.

The Dakota skipper is threatened by degradation of its native prairie habitat by overgrazing, invasive species, gravel mining, and herbicide applications; inbreeding, population isolation, and prescribed fire threaten some populations. Prairie succeeds to shrubland or forest without periodic fire, grazing, or mowing; thus, the species is also threatened at sites where such disturbances are not applied. The Service and other Federal agencies, State agencies, the Sisseton-Wahpeton Sioux Tribe, and some private organizations (e.g., The Nature Conservancy) protect and manage some Dakota skipper sites. Careful and considered management is always necessary to ensure the species' persistence, even at protected sites. The species may be secure at a few sites where public and private landowners manage native prairie in ways that conserve Dakota skipper, but approximately half of the inhabited sites are privately owned with little or no protection. A few private sites are protected from conversion by easements, but these do not preclude adverse effects from overgrazing. The threats are such that the Dakota skipper warrants listing. The threats are moderate in magnitude because some sites are protected through careful and considered management, and therefore they do not affect the species uniformly throughout its range. The threats are ongoing, and therefore imminent. We assigned this species an LPN of 8 to reflect the immediacy of threats to remnant habitat, particularly on private lands.

Mardon skipper (*Polites mardon*)—We continue to find that listing this species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted petition 12-month finding.

Meltwater lednian stonefly (*Lednia tumana*)—See above in ''Listing Priority Changes in Candidates.'' The above summary is based on information contained in our files.

Coral Pink Sand Dunes tiger beetle (*Cicindela limbata albissima*)—We continue to find that listing this species is warranted but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted 12-month petition finding.

Highlands tiger beetle (*Cicindela highlandensis*)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. The Highlands tiger beetle is narrowly distributed and restricted to areas of bare sand within scrub and sandhill on ancient sand dunes of the Lake Wales Ridge in Polk and Highlands Counties, Florida. Adult tiger beetles have been most recently found at 40 sites at the core of the Lake Wales Ridge. In 2004–2005 surveys, a total of 1,574 adults were found at 40 sites, compared with 643 adults at 31 sites in 1996, 928 adults at 31 sites in 1995, and 742 adults at 21 sites in 1993. Of the 40 sites in the 2004–2005 surveys with one or more adults, results ranged from 3 sites with large populations of over 100 adults, to 13 sites with fewer than 10 adults. Results from a limited removal study at four sites and similar studies suggest that the actual population size at some survey sites can be as much as two times as high as indicated by the visual index counts. If assumptions are correct and unsurveyed habitat is included, then the total number of adults at all survey sites might be 3,000 to 4,000.

Habitat loss and fragmentation and lack of fire and disturbances to create open habitat conditions are serious threats; remaining patches of suitable habitat are disjunct and isolated. Populations occupy relatively small patches of habitat and are small and isolated; individuals have difficulty dispersing between suitable habitats. These factors pose serious threats to the species. Although significant progress in implementing prescribed fire has occurred over the last 10 years through collaborative partnerships and the Lake Wales Ridge Prescribed Fire Team, a backlog of long-unburned habitat within conservation areas remains. Overcollection and pesticide use are additional concerns. Because this species is narrowly distributed with specific habitat requirements and small populations, any of the threats could have a significant impact on the survival of the species. Therefore, the magnitude of threats is high. Although the majority of its historical range has been lost, degraded, and fragmented, numerous sites are protected and land managers are implementing prescribed fire at some sites; these actions are expected to restore habitat and help reduce threats and have already helped stabilize and improve the populations. Therefore, overall, the threats are nonimminent, and we assigned the Highlands tiger beetle an LPN of 5.

Arachnids

Warton's cave meshweaver (*Cicurina wartoni*)—See above in ''Listing Priority Changes in Candidates.'' The above summary is based on information contained in our files.

Crustaceans

Anchialine pool shrimp (*Metabetaeus lohena*)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. *Metabetaeus lohena* is an anchialine pool-inhabiting species of shrimp belonging to the family Alpheidae. This species is endemic to the Hawaiian Islands and is currently known from populations on the islands of Oahu, Maui, and Hawaii. The primary threats to this species are predation by fish (which do not naturally occur in the pools inhabited by this species) and habitat loss from degradation (primarily from illegal trash dumping). The pools where this species occurs on the islands of Maui and Hawaii are located within State Natural Area Reserves (NAR) and in a National Park. Both the State NARs and the National Park prohibit the collection of the species and the disturbance of the pools. However, enforcement of collection and disturbance prohibitions is difficult, and the negative effects from the introduction of fish are extensive and happen quickly. On Oahu, one pool is located in a National Wildlife Refuge, and is protected from collection and disturbance to the pool. However, on State-owned land where the species occurs, there is no protection from collection or disturbance of the pools. Therefore, threats to this species could have a significant adverse effect on the survival of the species, leading to a relatively high likelihood of extinction,

and are of a high magnitude. However, the primary threats of predation from fish and loss of habitat due to degradation are nonimminent overall, because on the islands of Maui and Hawaii no fish were observed in any of the pools where this species occurs and there has been no documented trash dumping in these pools. Only one site on Oahu had a trash dumping instance, and in that case the trash was cleaned up immediately and the species subsequently observed. No additional dumping events are known to have occurred. Therefore, we assigned this species an LPN of 5.

Anchialine pool shrimp (*Palaemonella burnsi*)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. *Palaemonella burnsi* is an anchialine pool-inhabiting species of shrimp belonging to the family Palaemonidae. This species is endemic to the Hawaiian Islands and is currently known from 3 pools on the island of Maui and 22 pools on the island of Hawaii. The primary threats to this species are predation by fish (which do not naturally occur in the pools inhabited by this species) and habitat loss due to degradation (primarily from illegal trash dumping). The pools where this species occurs on Maui are located within a State Natural Area Reserve (NAR). Hawaii's State statutes prohibit the collection of the species and the disturbance of the pools in State NARs. On the island of Hawaii, the species occurs within a State NAR and a National Park, and collection and disturbance are also prohibited. However, enforcement of these prohibitions is difficult, and the negative effects from the introduction of fish are extensive and happen quickly. Therefore, threats to this species could have a significant adverse effect on the survival of the species, leading to a relatively high likelihood of extinction, and are of a high magnitude. However, the threats are nonimminent, because surveys in 2004 and 2007 did not find fish in the pools where these shrimp occur on Maui or the island of Hawaii. Also, there was no evidence of recent habitat degradation at those pools. We assigned this species an LPN of 5.

Anchialine pool shrimp (*Procaris hawaiana*)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. *Procaris hawaiana* is an anchialine pool-inhabiting species of shrimp belonging to the family Procarididae. This species is endemic to the Hawaiian Islands, and is currently known from 2 pools on the island of Maui and 13 pools on the island of Hawaii. The primary threats to this species are predation from fish (which do not naturally occur in the pools inhabited by this species) and habitat loss due to degradation (primarily from illegal trash dumping). The pools where this species occurs on Maui are located within a State Natural Area Reserve (NAR). Twelve of the pools on the island of Hawaii are located within a State NAR. Hawaii's State statutes prohibit the collection of the species and the disturbance of the pools in State NARs. However, enforcement of these prohibitions is difficult, and the negative effects from the introduction of fish are extensive and happen quickly. In addition, there are no prohibitions for either removal of the species or disturbance to the pool for the one pool located outside a NAR on the island of Hawaii. Therefore, threats to this species could have a significant adverse effect on the survival of the species, leading to a relatively high likelihood of extinction, and thus remain at a high magnitude. However, the threats to the species are nonimminent because, during 2004 and 2007 surveys, no fish were observed in the pools where these shrimp occur on Maui, and no fish were observed in the one pool on the island of Hawaii during a site visit in 2005. In addition, there were no signs of trash dumping or fill in any of the pools where the species occurs. Therefore, we assigned this species an LPN of 5.

Anchialine pool shrimp (*Vetericaris chaceorum*)—We continue to find that listing this species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted 12-month petition finding.

Flowering Plants

Abronia alpina (Ramshaw Meadows sand-verbena)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. *Abronia alpina* is a small perennial herb, 2.5 to 15.2 centimeters (1 to 6 inches) across, forming compact mats with lavender-pink, trumpet-shaped, and generally fragrant flowers. *Abronia alpina* is known from one main population center at Ramshaw Meadow and a smaller population at the adjacent Templeton Meadow. The meadows are located on the Kern River Plateau in the Sierra Nevada, on lands administered by the Inyo National Forest, in Tulare County, California. The total estimated area occupied is approximately 6 hectares (15 acres). The population fluctuates from year to year without any clear trends. Population estimates for the years from 1985 through 2009, ranged from a high of approximately 130,000 plants in 1997, to a low of approximately 40,000 plants in 2003. In 2009, when the population was last monitored, the estimated total population increased again to just over 120,000 plants.

The factors currently threatening *Abronia alpina* include natural and human habitat alteration, lowering of the water table due to erosion within the meadow system, and recreational use within meadow habitats. Lodgepole pines are encroaching upon meadow habitat with trees germinating within *A. alpina* habitat, occupying up to 20 percent of two *A. alpina* subpopulations. Lodgepole pine encroachment may alter soil characteristics by increasing organic matter levels, decreasing porosity, and moderating diurnal temperature fluctuations, thus reducing the competitive ability of *A. alpina* to persist in an environment more hospitable to other plant species.

The habitat occupied by *Abronia alpina* directly borders the meadow system, which is supported by the South Fork of the Kern River. The river flows through the meadow, at times coming within 15 m (50 ft) of *Abronia alpina* habitat, particularly in the vicinity of five subpopulations. Livestock trampling, along with the removal of bank stabilizing vegetation by grazing livestock, has contributed to downcutting of the river channel through the meadow, leaving the meadow subject to potential alteration by lowering of the water table. In 2001, the U.S. Forest Service began resting the grazing allotment for 10 years, eliminating cattle use up through the present time. The U.S. Forest Service is currently assessing the data collected on the rested allotment and, if the data indicate that sufficient watershed recovery has occurred, may conduct an environmental analysis to consider resumption of grazing.

Established hiker, packstock, and cattle trails pass through *A. alpina* subpopulations. Two main hiker trails pass through Ramshaw Meadow, but in 1988 and 1997, they were rerouted out of *A. alpina* subpopulations where feasible. Occasional incidental use by horses and hikers sometimes occurs on the remnants of cattle trails that pass through subpopulations in several places. The Service has funded studies to determine appropriate conservation measures for the species, and is working

with the U.S. Forest Service on developing a conservation strategy for the species. The threats are of a low magnitude and nonimminent because of the conservation actions already implemented. The LPN for *A. alpina* remains an 11, with nonimminent threats of moderate to low magnitude.

Arabis georgiana (Georgia rockcress)—The following summary is based on information in our files. No new information was provided in the petition we received on May 11, 2004. The Georgia rockcress grows in a variety of dry situations, including shallow soil accumulations on rocky bluffs, ecotones of gently sloping rock outcrops, and sandy loam along eroding river banks. It is occasionally found in adjacent mesic woods, but it will not persist in heavily shaded conditions. Currently, 16 natural populations are known from the Gulf Coastal Plain, Piedmont, and Ridge and Valley physiographic provinces of Alabama and Georgia. Populations of this species typically have a limited number of individuals over a small area.

Habitat degradation, more than outright habitat destruction, is the most serious threat to the continued existence of this species. Disturbance, associated with timber harvesting, road building, and grazing, has created favorable conditions for the invasion of exotic weeds, especially Japanese honeysuckle (*Lonicera japonica*), in this species' habitat. A large number of the populations are currently or potentially threatened by the presence of exotics. The heritage programs in Alabama and Georgia have initiated plans for exotic control at several populations. The magnitude of threats to this species is moderate to low due to the number of populations (16) across multiple counties in two States and due to the fact that several sites are protected. However, as a number of the populations are currently being affected by nonnative plants, the threat is imminent. Thus, we assigned an LPN of 8 to this species.

Argythamnia blodgettii (Blodgett's silverbush)—The following summary is based on information in our files. No new information was provided in the petition we received on May 11, 2004. Blodgett's silverbush occurs in Florida and is found in open, sunny areas in pine rockland, edges of rockland hammock, edges of coastal berm, and sometimes disturbed areas at the edges of natural areas. Plants can be found growing from crevices on limestone, or on sand. The pine-rockland habitat where the species occurs in Miami-Dade County and the Florida Keys requires periodic fires to maintain habitat with a minimum amount of hardwoods. There are approximately 22 extant occurrences, 12 in Monroe County and 10 in Miami-Dade County; many occurrences are on conservation lands. However, 4 to 5 sites are recently thought to be extirpated. The estimated population size of Blodgett's silverbush in the Florida Keys, excluding Big Pine Key, is roughly 11,000; the estimated population in Miami-Dade County is 375 to 13,650 plants.

Blodgett's silverbush is threatened by habitat loss, which is exacerbated by habitat degradation due to fire suppression, the difficulty of applying prescribed fire to pine rocklands, and threats from exotic plants. Remaining habitats are fragmented. Threats such as road maintenance and enhancement, infrastructure, and illegal dumping threaten some occurrences. Blodgett's silverbush is vulnerable to natural disturbances, such as hurricanes, tropical storms, and storm surges. Climatic changes, including sea-level rise, are long-term threats that are expected to continue to affect pine rocklands and ultimately substantially reduce the extent of available habitat, especially in the Keys. Overall, the magnitude of threats is moderate because not all of the occurrences are affected by the threats. In addition, land managers are aware of the threats from exotic plants and lack of fire, and are, to some extent, working to reduce these threats where possible. While a number of threats are occurring in some areas, the threat from development is nonimminent as most occurrences are on public land, and sea level rise is not currently affecting this species. Overall, the threats are nonimminent. Thus, we assigned an LPN of 11 to this species.

Artemisia borealis var. *wormskioldii* (Northern wormwood)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. Historically known from eight sites, northern wormwood is currently known from two populations in Klickitat and Grant Counties, Washington. This plant is restricted to exposed basalt, cobbly-sandy terraces, and sand habitat along the shore and on islands in the Columbia River. The two populations are separated by 200 miles (322 kilometers) of the Columbia River and three large hydroelectric dams. The Klickitat County population is declining; the status is unclear for the Grant County population; however, both are vulnerable to environmental variability. Numerous surveys have not detected additional plants.

Threats to northern wormwood include direct loss of habitat through regulation of water levels in the Columbia River and placement of riprap along the river bank; human trampling of plants from recreation; competition with nonnative, invasive species; burial by wind- and water-borne sediments; small population sizes; susceptibility to genetic drift and inbreeding; and the potential for hybridization with two other species of *Artemisia.* Ongoing conservation actions have reduced trampling, but have not eliminated or reduced the other threats at the Grant County site. Active conservation measures are not currently in place at the Miller Island site. The magnitude of threat is high for this subspecies because, although the two remaining populations are widely separated and distributed, one or both populations could be eliminated by a single disturbance. The threats are imminent because recreational use is ongoing; invasive nonnative species occur at both sites; windblown erosion and deposition of the substrate is ongoing at the Klickitat County site; and high water flows may occur unpredictably in any year. Therefore, we have retained an LPN of 3 for this subspecies.

Astragalus anserinus (Goose Creek milkvetch)—The following summary is based on information in our files and in the petition received on February 3, 2004. The majority (over 80 percent) of *Astragalus anserinus* sites in Idaho, Utah, and Nevada occur on Federal lands managed by the Bureau of Land Management. The rest of the sites occur as small populations on private and State lands in Utah and on private land in Idaho and Nevada. *A. anserinus* occurs in a variety of habitats, but is typically associated with dry, tuffaceous (made up of rock consisting of smaller kinds of volcanic detritus) soils from the Salt Lake Formation. The species grows on steep or flat sites, with soil textures ranging from silty to sandy to somewhat gravelly. The species tolerates some level of disturbance, based on its occurrence on steep slopes where downhill movement of soil is common.

The primary threats to remaining *A. anserinus* individuals consist of habitat degradation and modifications to the ecosystem in which it occurs resulting from an altered wildfire regime, and associated activities to control wildfires and rehabilitate burned-over areas. Other factors that also appear to threaten *A. anserinus* include livestock use, invasive nonnative species, and the inadequacy of regulatory mechanisms. Climate change effects to Goose Creek drainage habitats are possible, but we are unable to predict the specific impacts of this change to *A. anserinus* at this time. Threats are high in

magnitude, as these threats have the potential to destroy whole populations. The threats are nonimminent because they are not currently ongoing. Thus, we have assigned *A. anserinus* an LPN of 5.

Astragalus microcymbus (Skiff milkvetch)—The following summary is based on information contained in our files and in the petition we received on July 30, 2007. *Astragalus microcymbus* is a perennial forb that dies back to the ground every year. It has a very limited range and a spotty distribution within Gunnison and Saguache Counties in Colorado, where it is found in open, park-like landscapes in the sagebrush steppe ecosystem on rocky or cobbly, moderate to steep slopes of hills and draws. The most significant threats to *A. microcymbus* are recreation, roads, trails, the overall inadequacy of existing regulatory mechanisms, and habitat fragmentation and degradation. Recreational impacts are likely to increase given the close proximity of *A. microcymbus* to the town of Gunnison and the increasing popularity of mountain biking, motorcycling, and all-terrain vehicles. Furthermore, the Hartman Rocks Recreation Area draws users and contains over 40 percent of the *A. microcymbus* units. Other threats to the species include residential and urban development; livestock, deer, and elk use; climate change; and increasing periodic drought, nonnative invasive cheatgrass, and wildfire. We consider the threats to *A. microcymbus* to be moderate in magnitude because while serious and occurring rangewide, they do not collectively result in having a greater likelihood of bringing about extinction on a short time scale. The threats are imminent because the species is currently facing them in many portions of its range. Therefore we have assigned *A. microcymbus* an LPN of 8.

Astragalus schmolliae (Schmoll milkvetch)—The following summary is based on information contained in our files and in the petition we received on July 30, 2007. *Astragalus schmolliae* is a narrow endemic perennial plant that grows in the mature pinyon-juniper woodland of mesa tops in the Mesa Verde National Park area and in the Ute Mountain Ute Tribal Park in Colorado. The most significant threats to the species are degradation of habitat by fire, followed by invasion by nonnative cheatgrass and subsequent increase in fire frequency. These threats currently affect about 40 percent of the species' entire known range, and cheatgrass is likely to increase given its rapid spread and persistence in habitat disturbed by wildfires, fire and fuels management and development of infrastructure, and the inability of land managers to control it on a landscape scale. Other threats to *A. schmolliae* include fires, fire break clearings, drought, and inadequate regulatory mechanisms. The threats to the species overall are imminent and moderate in magnitude, because the species is currently facing them in many portions of its range, but the threats do not collectively result in having a greater likelihood of bringing about extinction on a short time scale. Therefore we have assigned *A. schmolliae* an LPN of 8.

Astragalus tortipes (Sleeping Ute milkvetch)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. *Astragalus tortipes* is a perennial plant that grows only on the Smokey Hills layer of the Mancos Shale Formation on the Ute Mountain Ute Indian Reservation in Montezuma County, Colorado. In 2000, 3,744 plants were recorded at 24 locations covering 500 acres within an overall range of 6,400 acres. Available information from 2000 indicates that the species remains stable.

Previous and ongoing threats from borrow pit excavation, off-highway vehicles, irrigation canal construction, and a prairie dog colony have had minor impacts that reduced the range and number of plants by small amounts. Off-highway vehicle use of the habitat has reportedly been controlled by fencing. Oil and gas development is active in the general area, but the Service has received no information to indicate that there is development within plant habitat. The Tribe reported that the status of the species remains unchanged, the population is healthy, and a management plan for the species is currently in draft form. Despite these positive indications, we have no documentation concerning the current status of the plants, condition of habitat, and terms of the species management plan being drafted by the Tribe. Thus, at this time, we cannot accurately assess whether populations are being adequately protected from previously existing threats. The threats are moderate in magnitude, because they have had minor impacts. Based on information we have, the population appears to be stable. Until the management plan is completed and made available, there are no regulatory mechanisms in place to protect the species. Overall, we conclude threats are nonimminent. Therefore, we assigned an LPN of 11 to this species.

Bidens campylotheca ssp. *pentamera* (Kookoolau)—We continue to find that listing this species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted 12-month petition finding.

Bidens campylotheca ssp. *waihoiensis* (Kookoolau)—We continue to find that listing this species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted 12-month petition finding.

Bidens conjuncta (Kookoolau)—We continue to find that listing this species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted 12-month petition finding.

Bidens micrantha ssp. *ctenophylla* (Kookoolau)—We continue to find that listing this species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted petition 12-month finding.

Brickellia mosieri (Florida brickell-bush)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. This species is restricted to pine rocklands of Miami-Dade County, Florida. This habitat requires periodic prescribed fires to maintain the low understory and prevent encroachment by native tropical hardwoods and exotic plants, such as Brazilian pepper. Only one large occurrence is known to exist; 15 other occurrences contain less than 100 individuals. Eleven occurrences are on conservation lands, while the rest of the extant populations are on private land and are currently vulnerable to habitat loss and degradation.

Climatic changes, including sea-level rise, are long-term threats that will reduce the extent of habitat. This species is threatened by habitat loss, which is exacerbated by habitat degradation due to fire suppression, the difficulty of applying prescribed fire to pine rocklands, and threats from exotic plants. Remaining habitats are fragmented. The species is vulnerable to natural disturbances, such as hurricanes, tropical storms, and storm surges. Due to its restricted range and the small sizes of most isolated occurrences, this species is vulnerable to environmental (catastrophic hurricanes), demographic (potential episodes of poor reproduction), and genetic (potential inbreeding

depression) threats. Ongoing conservation efforts include projects aimed at facilitating restoration and management of public and private lands in Miami-Dade County and projects to reintroduce and establish new populations at suitable sites within the species' historical range. The Service is also pursuing additional habitat restoration projects, which could help further improve the status of the species. Because of these efforts, the overall magnitude of threats is moderate. The threats are ongoing and thus imminent. We assigned this species an LPN of 8.

Calamagrostis expansa (Maui reedgrass)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. *Calamagrostis expansa* is a perennial grass found in wet forest and bogs, and in bog margins, on the islands of Maui and Hawaii, Hawaii. This species is known from 13 populations totaling fewer than 750 individuals.

Calamagrostis expansa is threatened by habitat degradation and loss by feral pigs, and by competition with nonnative plants. Predation by feral pigs is a potential threat to this species. All of the known populations of *C. expansa* on Maui occur in managed areas. Pig exclusion fences have been constructed and control of nonnative plants is ongoing within the exclosures. On the island of Hawaii, fencing is planned for the population in the Upper Waiakea Forest Reserve. This species is represented in an ex situ collection. Predation is a nonimminent threat. However, threats to this species from feral pigs and nonnative plants are ongoing, or imminent, and of high magnitude because they significantly affect the species throughout its range, leading to a relatively high likelihood of extinction. Therefore, we retained an LPN of 2 for this species.

Calamagrostis hillebrandii (Hillebrand's reedgrass)—We continue to find that listing this species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted 12-month petition finding.

Calochortus persistens (Siskiyou mariposa lily)—The following summary is based on information contained in our files and the petition we received on September 10, 2001. The Siskiyou mariposa lily is a narrow endemic that is restricted to three disjunct ridge tops in the Klamath-Siskiyou Range on the California-Oregon border. The southernmost occurrence of this species is composed of nine separate sites on approximately 10 hectares (ha) (24.7 acres (ac)) of Klamath National Forest and privately owned lands that stretch for 6 kilometers (km) (3.7 miles (mi)) along the Gunsight-Humbug Ridge, Siskiyou County, California. In 2007, a new occurrence was confirmed in the locality of Cottonwood Peak and Little Cottonwood Peak, Siskiyou County, where several populations are distributed over 164 ha (405 ac) on three individual mountain peaks in the Klamath National Forest and on private lands. The northernmost occurrence consists of not more than five Siskiyou mariposa lily plants that were discovered in 1998, on Bald Mountain, west of Ashland, Jackson County, Oregon.

Major threats include competition and shading by native and nonnative species fostered by suppression of wildfire; increased fuel loading and subsequent risk of wildfire; fragmentation by roads, fire breaks, tree plantations, and radio-tower facilities; maintenance and construction around radio towers and telephone relay stations located on Gunsight Peak and Mahogany Point; and soil disturbance, direct damage, and exotic weed and grass species introduction as a result of heavy recreational use and construction of fire breaks. Dyer's woad (*Isatis tinctoria*), an invasive, nonnative plant that may prevent germination of Siskiyou mariposa lily seedlings, is now found throughout the southernmost California occurrence, affecting 75 percent of the known lily habitat on Gunsight-Humbug Ridge. Forest Service staff and the Klamath-Siskiyou Wildlands Center cite competition with dyer's woad as a significant and chronic threat to the survival of Siskiyou mariposa lily.

The combination of restricted range, extremely low numbers (five plants) in one of three disjunct populations, poor competitive ability, short seed dispersal distance, slow growth rates, low seed production, apparently poor survival rates in some years, herbivory, habitat disturbance, and competition from exotic plants threaten the continued existence of this species. These threats are of high magnitude because of their potential to affect the overall survival of the species negatively. Because the threats of competition from exotic plants are being addressed, they are not anticipated to overwhelm a large portion of the species' range in the immediate future; in additions the threats from low seed production and survival are longer-term threats. Thus, overall the threats are nonimminent. As such, we assigned an LPN of 5 to this species.

Canavalia pubescens (Awikiwiki)—We continue to find that listing this species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted 12-month petition finding.

Castilleja christii (Christ's paintbrush)—The following summary is based on information contained in our files and the petition we received on January 2, 2001. *Castilleja christii* is found in one population covering approximately 85 ha (220 ac) on the summit of Mount Harrison in Cassia County, Idaho. This endemic species is considered a hemiparasite (dependent on the health of their surrounding native plant community), and it grows in association with subalpine-meadow and sagebrush habitats. The population may be large (greater than 10,000 individual plants); however, the species is considered to be subject to large variations in annual abundance and an accurate current population estimate is not available. Monitoring indicates that reproductive stems per plant and plant density declined between 1995 and 2007. Fluctuations have occurred since 2007, with slight increases in reproductive output and density in 2008 and decreases in 2009. Population monitoring did not occur in 2010.

The primary threat to the species is the nonnative, invasive plant smooth brome (*Bromus inermis*). Despite cooperative Forest Service and Service efforts to control smooth brome in 2007, 2008, 2009, and 2010, it still persists in *C. christii* habitats. Other threats to *C. christii* from recreational use and livestock trespass appear to be mostly seasonal and affect only a small portion of the population, and may not occur every year. The magnitude of the threats to this species is moderate at this time because, although the smooth brome control efforts have not eliminated the invasive plant, the Service and Forest Service are continuing their efforts in order to conserve this species. The threat from smooth brome is imminent because the threat still persists at a level that affects the native plant communities that provide habitat for *C. christii*. Thus, we assign an LPN of 8 to this species.

Chamaecrista lineata var. *keyensis* (Big Pine partridge pea)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. This pea is endemic to the lower Florida Keys, and restricted to pine rocklands, hardwood hammock edges, and roadsides and firebreaks within these

ecosystems. Historically, it was known from Big Pine, Cudjoe, No Name, Ramrod, and Little Pine Keys (Monroe County, Florida). In 2005, a small population was detected on lower Sugarloaf Key, but this population was not located after Hurricane Wilma; plants were likely killed by the tidal surge from this storm. It presently occurs on Big Pine Key, with a very small population on Cudjoe Key. It is fairly well distributed in Big Pine Key pine rocklands, which encompass approximately 580 hectares (1,433 acres), approximately 360 hectares (890 acres) of which are within the Service's National Key Deer Refuge (NKDR). Over 80 percent of the population probably exists on NKDR, with the remainder distributed among State, County, and private properties. Hurricane Wilma (October 2005) resulted in a storm surge that covered most of Big Pine Key with sea water. The surge reduced the population by as much as 95 percent in some areas.

Pine rockland communities are maintained by relatively frequent fires. In the absence of fire, shrubs and trees encroach on pine rockland, and this subspecies is eventually shaded out. NKDR has a prescribed fire program, although with many constraints on implementation. Habitat loss due to development was historically the greatest threat to the pea. Much of the remaining habitat is now protected on public lands. Absence of fire now appears to be the greatest of the deterministic threats. Given the recent increase in hurricane activity, storm surges are the greatest of the stochastic threats. The small range and patchy distribution of the subspecies increase risk from stochastic events. Climatic changes, including sea-level rise, are serious long-term threats. Models indicate that even under the best of circumstances, a significant proportion of upland habitat will be lost on Big Pine Key by 2100. Additional threats include restricted range, invasive exotic plants, roadside dumping, loss of pollinators, seed predators, and development.

We maintain the previous assessment that hurricanes, storm surges, lack of fire, and limited distribution result in a moderate magnitude of threat because a large part of the range is on conservation lands where threats are being addressed, although fire management is at much slower rate than is required. The immediacy of hurricane threats is difficult to characterize, but imminence is considered high given that hurricanes (and storm surges) of various magnitudes are frequent and recurrent events in the area. Sea-level rise remains uncontrolled but, overall, is nonimminent. Overall, the threats from limited distribution and inadequate fire management are imminent because they are ongoing. In addition, the most consequential threats (hurricanes, storm surges) are frequent, recurrent, and imminent. Therefore, we retained an LPN of 9 for Big Pine partridge pea.

Chamaesyce deltoidea ssp. *pinetorum* (Pineland sandmat)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. The pineland sandmat is only known from Miami-Dade County, Florida. The largest occurrence, estimated at more than 10,000 plants, is located on Long Pine Key within Everglades National Park. All other occurrences are smaller and are in isolated pine rockland fragments in heavily urbanized Miami-Dade County.

Occurrences on private (non-conservation) lands and on one County-owned parcel are at risk from development and habitat degradation and fragmentation. Conditions related to climate change, particularly sea-level rise, will be a factor over the long term. All occurrences of the species are threatened by habitat loss and degradation due to fire suppression, the difficulty of applying prescribed fire, and exotic plants. These threats are severe within small and unmanaged fragments in urban areas. However, the threats of fire suppression and exotics are reduced on lands managed by the National Park Service. Hydrologic changes are considered to be another threat. Hydrology has been altered within Long Pine Key due to artificial drainage, which lowered ground water, and by the construction of roads, which either impounded or diverted water. Regional water management intended to restore the Everglades could negatively affect the pinelands of Long Pine Key in the future. At this time, we do not know whether the proposed restoration and associated hydrological modifications will have a positive or negative effect on pineland sandmat. This narrow endemic may be vulnerable to catastrophic events and natural disturbances, such as hurricanes. Overall, the magnitude of threats to this species is moderate; by applying regular prescribed fire, the National Park Service has kept Long Pine Key's pineland vegetation intact and relatively free of exotic plants, and partnerships are in place to help address the continuing threat of exotics on other pine rockland fragments. Overall, the threats are nonimminent because fire management at the largest occurrence is regularly conducted and sea-level rise and hurricanes are more long-term threats. Therefore, we assigned an LPN of 12 to this subspecies. We will continue to monitor any changes in hydrological management that may affect the magnitude of threats to the species.

Chamaesyce deltoidea ssp. *serpyllum* (Wedge spurge)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. Systematic surveys of publicly owned pine rockland throughout this plant's range were conducted during 2005–2006 and 2007–2008 to determine population size and distribution. Wedge spurge is a small prostrate herb. It was historically, and remains, restricted to pine rocklands on Big Pine Key in Monroe County, Florida. Pine rocklands encompass approximately 580 hectares (1,433 acres) on Big Pine Key, approximately 360 hectares (890 acres) of which are within the Service's National Key Deer Refuge (NKDR). Most of the species' range falls within the NKDR, with the remainder on State, County, and private properties. It is not widely dispersed within the limited range. Occurrences are sparser in the southern portion of Big Pine Key, which contains smaller areas of NKDR lands than does the northern portion. Wedge spurge inhabits sites with low woody cover (e.g., low palm and hardwood densities) and usually with exposed rock or gravel.

Pine rockland communities are maintained by relatively frequent fires. In the absence of fire, shrubs and trees encroach on pine rockland, and the subspecies is eventually shaded out. NKDR has a prescribed fire program, although with many constraints on implementation. Habitat loss due to development was historically the greatest threat to the wedge spurge. Much of the remaining habitat is now protected on public lands. Absence of fire now appears to be the greatest of the deterministic threats. Given the recent increase in hurricane activity, storm surges are the greatest of the stochastic threats. The small range and patchy distribution of the subspecies increases risk from stochastic events. Climatic changes, including sea-level rise, are serious long-term threats. Models indicate that even under the best of circumstances, a significant proportion of upland habitat will be lost on Big Pine Key by 2100. Additional threats include restricted range, invasive exotic plants, roadside dumping, loss of pollinators, seed predators, and development.

We maintain the previous assessment that low fire-return intervals plus hurricane-related storm surges, in combination with a limited, fragmented distribution and threats from sea-level rise, result in a moderate magnitude of threat, in part, because a large part of the range is on conservation lands, where some threats can be substantially controlled. The immediacy of hurricane threats is difficult to categorize, but in this case threats are imminent given that hurricanes (and storm surges) of various magnitudes are frequent and recurrent events in the area. Sea-level rise remains uncontrolled, but over much of the range is nonimminent compared to other prominent threats. Threats resulting from limited fire occurrences are imminent. As some of the major threats are ongoing, overall, the threats are imminent. Therefore, we retained an LPN of 9 for this subspecies.

Chorizanthe parryi var. *fernandina* (San Fernando Valley spineflower)—The following summary is based on information contained in our files and the petition we received on December 14, 1999. *Chorizanthe parryi* var. *fernandina* is a low-growing herbaceous, annual plant in the buckwheat family. Germination occurs following the onset of late-fall and winter rains and typically represents different cohorts from the seed bank. Flowering occurs in the spring, generally between April and June. *Chorizanthe parryi* var. *fernandina* grows up to 30 centimeters in height and 5 to 40 centimeters across. The plant currently is known from two disjunct localities: the first is in the southeastern portion of Ventura County on a site within the Upper Las Virgenes Canyon Open Space Preserve, formerly known as Ahmanson Ranch, and the second is in an area of southwestern Los Angeles County known as Newhall Ranch. Investigations of historical locations and seemingly suitable habitat within the range of the species have not revealed any other occurrences.

The threats currently facing *Chorizanthe parryi* var. *fernandina* include threatened destruction, modification, or curtailment of its habitat or range, inadequacy of existing regulatory mechanisms, and other natural or manmade factors. The threats to *Chorizanthe parryi* var. *fernandina* from habitat destruction or modification are slightly less than they were 7 years ago. One of the two populations (Upper Las Virgenes Canyon Open Space Preserve) is in permanent, public ownership and is being managed by an agency that is working to conserve the plant; however, the use of adjacent habitat for Hollywood film productions was brought to our attention 2 years ago, and the potential impacts to *Chorizanthe parryi* var. *fernandina* have not yet been evaluated. We will be working with the landowners to manage the site for the benefit of *Chorizanthe parryi* var. *fernandina*. The other population (Newhall Ranch) is under the threat of development; however, a candidate conservation agreement (CCA) is being developed with the landowner, and it is possible that the remaining plants can also be conserved. Until such an agreement is finalized, the threat of development and the potential damage to the Newhall Ranch population still exists, as shown by the destruction of some plants during installation of an agave farm. Furthermore, cattle grazing on Newhall Ranch may be a threat. Cattle grazing may harm *Chorizanthe parryi* var. *fernandina* by trampling and soil compaction. Grazing activity could also alter the nutrient (e.g., elevated organic material levels) content of the soils for *Chorizanthe parryi* var. *fernandina* habitat through fecal inputs, which in turn may favor the growth of other plant species that would otherwise not grow so readily on the mineral-based soils. Over time, changes in species composition may render the sites less favorable for the persistence of *Chorizanthe parryi* var. *fernandina*. *Chorizanthe parryi* var. *fernandina* may be threatened by invasive, nonnative plants, including grasses, which could potentially displace it from available habitat; compete for light, water, and nutrients; and reduce survival and establishment.

Chorizanthe parryi var. *fernandina* is particularly vulnerable to extinction due to its concentration in two isolated areas. The existence of only two areas of occurrence, and a relatively small range, makes the variety highly susceptible to extinction or extirpation from a significant portion of its range due to random events such as fire, drought, and erosion. We retained an LPN of 6 for *Chorizanthe parryi* var. *fernandina* due to high-magnitude, nonimminent threats.

Chromolaena frustrata (Cape Sable thoroughwort)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. This species is found most commonly in open sun to partial shade at the edges of rockland tropical hammock and in coastal rock barrens. There are nine extant occurrences located on five islands in the Florida Keys and one small area in Everglades National Park (ENP). In the Keys, the plant has been extirpated from half of the islands where it occurred. Prior to Hurricane Wilma in 2005, the population was estimated at roughly 5,000 individuals, with all but 500 occurring on one privately owned island. An estimated 1,500 plants occur on the mainland within ENP.

This species is threatened by habitat loss and modification, even on public lands, and habitat loss and degradation due to threats from exotic plants at almost all sites. The species is vulnerable to natural disturbances, such as hurricanes, tropical storms, and storm surges. While these factors may also work to maintain coastal rock barren habitat in the long term, Hurricane Wilma affected occurrences and habitat, at least in the short term. Occurrences probably initially declined due to inundation of its coastal barren and rockland hammock habitats; long-term effects on this species are unknown. Cape Sable thoroughwort appears to be vulnerable to cold temperatures. It is not known to what extent cold temperatures in January and December 2010 affected the species at most locations, or what, if any, long-term effect this may have on the population. Sea-level rise is considered a major threat over the long term. Potential effects from other changes in freshwater deliveries and the construction of the Buttonwood Canal are unknown. Problems associated with small population size and isolation are likely major factors, as occurrences may not be large enough to be viable; this narrowly endemic plant has uncertain viability at most locations. Thus, these factors constitute a high magnitude of threat. The threats of small population size, isolation, and uncertain viability are imminent because they are ongoing. As a result, we assigned an LPN of 2 to this species.

Consolea corallicola (Florida semaphore cactus)—The following summary is based on information in our files. No new information was provided in the petition we received on May 11, 2004. The Florida semaphore cactus is endemic to the Florida Keys, and was discovered on Big Pine Key in 1919, but that population was extirpated as a result of road building and poaching. This cactus grows close to salt water on bare rock with a minimum of humus soil cover in or along the edges of hammocks near sea level. The species is known to occur naturally only in two areas, Swan Key within Biscayne National Park and Little Torch Key. Outplantings have been attempted in several locations in the upper and lower Keys; however, success has been low. Few plants remain in the population at The Nature Conservancy's Torchwood

Hammock Preserve on Little Torch Key. During monitoring work conducted in 2005, a total of 655 plants were documented at the Swan Key population. In 2008–2010, the population was estimated by Biscayne National Park staff to consist of approximately 600 individuals. Asexual reproduction is the main life-history strategy of this species. Recent genetic studies have shown no variation within populations and very limited variation between populations. Findings support the conclusion that the Swan Key (upper Keys) and Little Torch Key (lower Keys) populations and an individual plant from Big Pine Key (single plant in *ex situ* collection; lower Keys) are clonally derived. Studies examining the reproductive biology of the species indicate that all extant wild and cultivated plants are male.

The causes for the population decline of this species include destruction or modification of habitat, predation from nonnative *Cactoblastis cactorum* moths and disease, poaching and vandalism, hurricanes, and climatic changes, including sea-level rise. Sea-level rise is considered a serious threat to the species and its habitat; all extant populations are located in low-lying areas. All remaining populations are under threat of predation from the exotic moth, and are susceptible to root-rot disease. Competition from invasive exotic plants is a threat at Swan Key; however, efforts by Biscayne National Park are underway to address this threat. This species is inherently vulnerable to stochastic losses, especially at its smaller populations. A lack of variation and limited sexual reproduction makes the remaining small population even more susceptible to natural or manmade factors. Overall, the magnitude of threats is high. The numerous threats are ongoing and, therefore, are imminent. Thus, we assigned this species an LPN of 2.

Cordia rupicola (no common name)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. *Cordia rupicola* is a small shrub that has been described from southwestern Puerto Rico, Vieques Island, and Anegada Island (British Virgin Islands). All these sites lay within the subtropical dry forest life zone overlying a limestone substrate. *Cordia rupicola* has a restricted distribution. Currently, approximately 227 individuals are known from 4 locations: Peñuelas, Yauco, Guánica Commonwealth Forests, and Vieques National Wildlife Refuge. Additionally, the species is reported as common in Anegada.

This species is threatened by maintenance of trails and power line rights-of-way in the Guánica Commonwealth Forest, and residential and commercial development in Peñuelas, Yauco, and Anegada Island. *Cordia rupicola* is also vulnerable to natural (*e.g.,* hurricanes) or manmade (*e.g.,* human-induced fires) threats. Furthermore, the population on Anegada Island, which is considered the healthiest population, is expected to be affected sea-level rise as most of the suitable habitat for the species is below 3 meters above sea level. For these reasons, we believe that the magnitude of the current threats should be considered high. About 60 percent of known adult plants are located in protected lands managed for conservation by the Puerto Rico Department of Natural and Environmental Resources or the Service. For these reasons, threats to *Cordia rupicola* on the whole are high magnitude and nonimminent, and therefore we have assigned a listing priority number of 5. However, the threats faced by the species are expected to increase in the future, and therefore may become imminent, if conservation measures are not implemented and long-term impacts are not averted.

Cyanea asplenifolia (Haha)—We continue to find that listing this species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted 12-month petition finding.

Cyanea kunthiana (Haha)—We continue to find that listing this species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted 12-month petition finding.

Cyanea obtusa (Haha)—We continue to find that listing this species is warranted but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted 12-month petition finding.

Cyanea tritomantha (‘Aku)—We continue to find that listing this species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted 12-month petition finding.

Cyrtandra filipes (Haiwale)—We continue to find that listing this species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted 12-month petition finding.

Cyrtandra oxybapha (Haiwale)—We continue to find that listing this species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted 12-month petition finding.

Dalea carthagenensis ssp. *floridana* (Florida prairie-clover)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. *Dalea carthagenensis* var. *floridana* occurs in Big Cypress National Preserve (BCNP) in Monroe and Collier Counties and at six locations within Miami-Dade County, Florida, albeit mostly in limited numbers. There are a total of nine extant occurrences, seven of which are on conservation lands. In addition, plants were reintroduced to a park in Miami-Dade County in 2006, but only four remained after 8 months.

Existing occurrences are extremely small and may not be viable, especially some of the occurrences in Miami-Dade County. Remaining habitats are fragmented. Climatic changes, including sea-level rise, are long-term threats that are expected to reduce the extent of habitat. This plant is threatened by habitat loss and degradation due to fire suppression, the difficulty of applying prescribed fire to pine rocklands, and competition from exotic plants. Damage to plants by off-road vehicles is a serious threat within the BCNP; damage attributed to illegal mountain biking at the R. Hardy Matheson Preserve has been reduced. One location within BCNP is threatened by changes in mowing practices; this threat is low in magnitude. This species is being parasitized by the introduced insect lobate lac scale (*Paratachardina pseudolobata*) at some localities (*e.g.,* R. Hardy Matheson Preserve), but we do not know the extent of this threat. This plant is vulnerable to natural disturbances, such as hurricanes, tropical storms, and storm surges. Due to its restricted range and the small sizes of most isolated occurrences, this species is vulnerable to environmental (catastrophic hurricanes), demographic (potential episodes of poor reproduction), and genetic (potential inbreeding depression) threats. The magnitude of threats is high because of the limited number of occurrences and the small number of individual plants at each occurrence. The threats are imminent; even though many sites are

on conservation lands, these plants still face significant ongoing threats. Therefore, we have assigned an LPN of 3 to Florida prairie-clover.

Dichanthelium hirstii (Hirst Brothers' panic grass)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. *Dichanthelium hirstii* is a perennial grass that produces erect, leafy, flowering stems from May to October. *Dichanthelium hirstii* occurs in coastal plain intermittent ponds, usually in wet savanna or pine barren habitats, and is found at only two sites in New Jersey, one site in Delaware, and one site in North Carolina. While all four extant *D. hirstii* populations are located on public land or privately owned conservation lands, natural threats to the species from encroaching vegetation and fluctuations in climatic conditions remain of concern, and may be exacerbated by anthropogenic factors occurring adjacent to the species' wetland habitat. Given the low number of plants found at each site, even minor changes in the species' habitat could result in local extirpation. Loss of any known sites could result in a serious contraction of the species' range. However, the most immediate and severe threats to this species (*i.e.,* ditching of the Labounsky Pond site and encroachment of aggressive vegetative competitors) have been curtailed or are being actively managed by The Nature Conservancy at one New Jersey site and by the Delaware Division of Fish and Wildlife and Delaware Natural Heritage Program at the Assawoman Pond, Delaware site. Based on nonimminent threats of a high magnitude, we retain an LPN of 5 for this species.

Digitaria pauciflora (Florida pineland crabgrass)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. Pine rocklands in Miami-Dade County have largely been destroyed by residential, commercial, and urban development and by agriculture. With most remaining habitat having been negatively altered, this species has been extirpated from much of its historical range, including extirpation from all areas outside of National Parks. Two large occurrences remain within Everglades National Park and Big Cypress National Preserve; plants on Federal lands are protected from the threat of habitat loss due to development. However, any unknown plants, indefinite occurrences, and suitable habitat remaining on private or non-conservation land are threatened by development. Continued development of suitable habitat diminishes the potential for reintroduction into its historical range. Extant occurrences are in low-lying areas and will be affected by climate change and rising sea level.

Fire suppression, the difficulty of applying prescribed fire to pine rocklands, and threats from exotic plants are ongoing threats. As the only known remaining occurrences are on lands managed by the National Park Service, the threats of fire suppression and exotics are somewhat reduced. The presence of the exotic Old World climbing fern is of particular concern due to its ability to spread rapidly. In Big Cypress National Preserve, plants are threatened by off-road vehicle use. Changes to hydrology are a potential threat. Hydrology has been altered within Long Pine Key due to artificial drainage, which lowered ground water, and construction of roads, which either impounded or diverted water. Regional water management intended to restore the Everglades has the potential to affect the pinelands of Long Pine Key, where a large population occurs. At this time, it is not known whether Everglades restoration will have a positive or negative effect. This narrow endemic may be vulnerable to catastrophic events and natural disturbances, such as hurricanes. Overall, the magnitude of threats is high. Only two known occurrences remain and the likelihood of establishing a sizable population on other lands is diminished due to continuing habitat loss. Impacts from climate change and sea-level rise are currently low, but expected to be severe in the future. The majority of threats are nonimminent, as they are long-term in nature (water management, hurricanes, and sea-level rise). Therefore, we assigned an LPN of 5 for this species.

Echinomastus erectocentrus var. *acunensis* (Acuna cactus)—We continue to find that listing this species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted petition 12-month finding.

Erigeron lemmonii (Lemmon fleabane)—We continue to find that listing this species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted petition 12-month finding.

Eriogonum codium (Umtanum Desert buckwheat)—We continue to find that listing this species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted petition 12-month finding.

Eriogonum corymbosum var. *nilesii* (Las Vegas buckwheat)—The following summary is based on information contained in our files and the petition we received on April 23, 2008. *Eriogonum corymbosum* var. *nilesii* is a woody perennial shrub up to 4 feet high with a mounding shape. The flowers of this plant are numerous, small, and yellow with small, bract-like leaves at the base of each flower. *Eriogonum corymbosum* var. *nilesii* is very conspicuous when flowering in late September and early October. It is restricted to sparsely vegetated, gypsum soil outcroppings and is found historically only in Clark County, Nevada. In 2004, morphometrics were used to classify this plant as the unique variety *nilesii,* and its unique taxonomy was verified using molecular genetic analyses in 2007. Recent surveys have expanded *E. corymbosum* var. *nilesii'*s range to Lincoln County, Nevada, and Washington County, Utah.

Eriogonum corymbosum var. *nilesii* was added to the candidate list in December 2007 due to continued loss of habitat from development of over 95 percent of its core historical range and potential habitat. In addition, off-highway vehicle activity and other public land uses (casual public use, mining, and illegal dumping) directly threaten over 95 percent of the remaining habitat. It was petitioned for listing in April 2008 and a warranted-but-precluded determination was made in December 2008 (73 FR 75176; December 10, 2008). To date, regulatory mechanisms to protect *E. corymbosum* var. *nilesii* are inadequate. Its designation as a Bureau of Land Management (BLM) special status species has not provided adequate protection on lands managed by BLM. *Eriogonum corymbosum* var. *nilesii* is not protected by the State of Nevada or Utah or by any other regulatory mechanisms on other Federal lands. We have determined that candidate status is warranted for this variety as a result of threats to the remaining habitat and inadequate regulatory mechanisms.

Conservation measures are being developed that could reduce the risks to occupied habitat, but these measures are not sufficiently complete as to remove these threats. The magnitude of threats is high because the more significant threats (urban development and surface mining) would result in direct mortality of the plants in over half of the known habitat. While both development and mining are very likely to occur in the

future, they are not expected to happen in the immediate future due to economic decline, and thus, the threats are nonimminent. Accordingly, we assigned *E. corymbosum* var. *nilesii* an LPN of 6.

Eriogonum kelloggii (Red Mountain buckwheat)—The following summary is based on information contained in our files and information provided by the California Department of Fish and Game. No new information was provided in the petition we received on May 11, 2004. Red Mountain buckwheat is a perennial herb endemic to serpentine habitat of lower montane forests found between 1,900 and 4,100 feet. Its distribution is limited to the Red Mountain and Little Red Mountain areas of Mendocino County, California, where it occupies in excess of 81 acres, and 900 square feet, respectively. The known species distribution by ownership is described as follows: Federal (Bureau of Land Management), 83 percent; private, 17 percent; State of California, less than 1 percent. Occupied habitat at Red Mountain is scattered over 4 square miles. Total population size has not been determined, but a preliminary estimate suggests the population may be in excess of 63,000 plants, occupying more than 44 discrete habitat polygons. Intensive monitoring of permanent plots on three study sites in Red Mountain suggests considerable annual variation in plant density and reproduction, but no discernable population trend was evident in two of three study sites. One study site showed a 65 percent decline in plant density over 11 years.

The primary threat to this species is the potential for surface mining for chromium and nickel. Virtually the entire distribution of Red Mountain buckwheat is either owned by mining interests, or is covered by existing mining claims, none of which are currently active. Surface mining would destroy habitat suitability for this species. The species is also believed threatened by tree and shrub encroachment into its habitat, in absence of fire. Some 42 percent of its known distribution occurred within the boundary of the Red Mountain Fire of June 2008. However, the extent and manner in which *Eriogonum kelloggii* and its habitat were affected by that fire is not yet known. The single population located at Little Red Mountain appears to have been affected, and perhaps eliminated by fire-control efforts. Given the magnitude (high) and immediacy (nonimminent) of the threat to the small, scattered populations, and given its taxonomy (species), we assigned an LPN of 5 to this species.

Festuca hawaiiensis (no common name)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. This species is a cespitose (growing in dense, low tufts) annual found in dry forest on the island of Hawaii, Hawaii. *Festuca hawaiiensis* is known from 4 populations totaling approximately 1,000 individuals in and around the Pohakuloa Training Area. Historically, this species was also found on Hualalai and Puu Huluhulu, but it no longer occurs at these sites. *Festuca hawaiiensis* possibly occurred on Maui.

This species is threatened by pigs, goats, mouflon, and sheep that degrade and destroy habitat; fire; military training activities; and nonnative plants that outcompete and displace it. Feral pigs, goats, mouflon, and sheep have been fenced out of a portion of the populations of *F. hawaiiensis,* and nonnative plants have been reduced in the fenced area, but the majority of the populations are still affected by threats from ungulates. The threats are imminent because they are not controlled and are ongoing in the remaining, unfenced populations. Firebreaks have been established at two populations, but fire is an imminent threat to the remaining populations that have no firebreaks. The threats are of a high magnitude because they could adversely affect the majority of *F. hawaiiensis* populations resulting in direct mortality or reduced reproductive capacity. Therefore, we retained an LPN of 2 for this species.

Festuca ligulata (Guadalupe fescue)—The following summary is based on information obtained from the original species petition, received in 1975, and from our files, on-line herbarium databases, and scientific publications. Six small populations of Guadalupe fescue, a member of the Poaceae (grass family), have been documented in mountains of the Chihuahuan desert in Texas and in Coahuila, Mexico. Only two extant populations have been confirmed in the last 5 years, in the Chisos Mountains, Big Bend National Park, Texas, and in the privately owned Area de Protección de Flora y Fauna (Protected Area for Flora and Fauna—APFF) Maderas del Carmen in northern Coahuila. Despite intensive searches, a population known from Guadalupe Mountains National Park, Texas, has not been found since 1952 and is presumed extirpated. In 2009, Mexican botanists confirmed Guadalupe fescue at one site in APFF Maderas del Carmen, but could not find the species at the original site, known as Sierra El Jardín, which was first reported in 1973. Two additional Mexican populations, near Fraile in southern Coahuila, and the Sierra de la Madera in central Coahuila, have not been monitored since 1941 and 1977, respectively. A great amount of potentially suitable habitat in Coahuila has never been surveyed.

The potential threats to Guadalupe fescue include changes in the wildfire cycle and vegetation structure, trampling from humans and pack animals, grazing, trail runoff, fungal infection of seeds, small sizes and isolation of populations, and limited genetic diversity. The Service and the National Park Service established a candidate conservation agreement (CCA) in 2008 to provide additional protection for the Chisos Mountains population, and to promote cooperative conservation efforts with U.S. and Mexican partners. The threats to Guadalupe fescue are of moderate magnitude, and are nonimminent, due to the provisions of the CCA and other conservation efforts, as well as the likelihood that other populations exist in mountains of Coahuila that have not been surveyed. Thus, we maintained the LPN of 11 for this species.

Gardenia remyi (Nanu)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. *Gardenia remyi* is a tree found in mesic to wet forest on the islands of Kauai, Molokai, Maui, and Hawaii, Hawaii. *Gardenia remyi* is known from 19 populations totaling between 85 and 87 individuals.

This species is threatened by pigs, goats, and deer that degrade and destroy habitat and possibly prey upon the species, and by nonnative plants that outcompete and displace it. *Gardenia remyi* is also threatened by landslides and reduced reproductive vigor on the island of Hawaii. This species is represented in ex situ collections. On Kauai, *G. remyi* individuals have been outplanted within ungulate-proof exclosures in two locations. Feral pigs have been fenced out of the west Maui populations of *G. remyi,* and nonnative plants have been reduced in those areas. However, these threats are not controlled and are ongoing in the remaining, unfenced populations, and are, therefore, imminent. In addition, the threat from goats and deer is ongoing and imminent throughout the range of the species, because no goat or deer control measures have been undertaken for any of the populations of *G. remyi.* All of the threats are of a high magnitude because habitat destruction, predation, and landslides could significantly affect the entire species,

resulting in direct mortality or reduced reproductive capacity, leading to a relatively high likelihood of extinction. Therefore, we retained an LPN of 2 for this species.

Geranium hanaense (Nohoanu)—We continue to find that listing this species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted 12-month petition finding.

Geranium hillebrandii (Nohoanu)—We continue to find that listing this species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted 12-month petition finding.

Gonocalyx concolor (no common name)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. *Gonocalyx concolor* is a small, evergreen, epiphytic or terrestrial shrub. This species is currently known from two populations: one at Cerro La Santa and the other at Charco Azul, both in the Carite Commonwealth Forest. This forest is located in the Sierra de Cayey and extends through the municipalities of Guayama, Cayey, Caguas, San Lorenzo, and Patillas in southeastern Puerto Rico. The population previously reported in the Caribbean National Forest apparently no longer exists. In 1996, approximately 172 plants were reported at Cerro La Santa. However, in 2006, only 25 individuals were reported at this site, and four were located in Charco Azul. At Cerro La Santa, the species is found growing on trees located close to communication towers, roads, plantations, and trails.

The *Gonocalyx concolor* population found at Cerro La Santa is threatened by habitat destruction and modification caused by vegetation clearing around telecommunication towers. Although the species is located within a Commonwealth forest, which is protected by Law No. 133 (''Ley de Bosques de Puerto Rico'' or The Puerto Rico Forest Law), unauthorized maintenance of existing communication facilities continue to result in loss of individuals. *Gonocalyx concolor* is not currently listed in the Commonwealth Regulation No. 6766 (''Reglamento para Regir las Especies Vulnerables y en Peligro de Extinción en el Estado Libre Asociado de Puerto Rico''), which provides protection for endangered and threatened species. However, the Natural Heritage Program of the Puerto Rico Department of Natural and Environmental Resources recognizes *Gonocalyx concolor* as a critical element. In addition, the Carite Commonwealth Forest is designated as a Critical Wildlife Area by the Commonwealth of Puerto Rico. Despite these conservation efforts, damages to the species still occur due to its restricted distribution and location near telecommunication facilities, which renders the species vulnerable to both natural (e.g., hurricanes, landslides) and manmade impacts. Thus, we consider that existing laws and regulations have not been effectively enforced to protect these populations. Moreover, we believe that inadequacy of regulatory mechanisms is a current threat to the species. Overall, we consider current threats to *Gonocalyx concolor* to be high in magnitude but nonimminent, as there are no known projects within the Commonwealth protected area. Habitat modification of this species has been only observed in one site at Cerro La Santa area. Therefore, we have assigned an LPN of 5 to *Gonocalyx concolor.*

Hazardia orcuttii (Orcutt's hazardia)—The following summary is based on information contained in our files and the petition we received on March 8, 2001. *Hazardia orcuttii* is an evergreen shrubby species in the Asteraceae (sunflower) family. The erect shrubs are 50 to 100 centimeters (20 to 40 inches) high. The only known extant native occurrence of this species in the United States occupies 2 ha (5 ac) in the Manchester Conservation Area in northwestern San Diego County, California. This site is managed by Center for Natural Lands Management (CNLM). Using material derived from the native population, the CNLM facilitated the establishment of test populations at four additional sites in northwest San Diego County, California, including a second site in the Manchester Conservation Area, Kelly Ranch Habitat Conservation Area, Rancho La Costa Habitat Conservation Area, and San Elijo Lagoon. *Hazardia orcuttii* also occurs at a few coastal sites in Mexico, where it recently became listed as endangered under Mexican environmental law. The total number of plants at the only native site in the United States is approximately 669 adults, and it is unknown if reproduction is occurring. The five additional test populations collectively support approximately 483 adults, 17 juveniles, and 322 seedlings, and reproduction is occurring in three test populations. The population in Mexico is estimated to be 1,100 plants. The occurrences in Mexico are threatened by coastal development from Tijuana to Ensenada.

The native population in the United States is within an area that receives public use; however, management at this site has minimized impacts associated with habitat degradation. This species has a very low reproductive output, although the causes are as yet unknown. Competition from invasive, nonnative plants may pose a threat to the reproductive potential of this species. In one study, 95 percent of the flowers examined were damaged by insects or fungal agents or aborted prematurely, and insects or fungal agents damaged 50 percent of the seeds produced. All of the populations in the United States are small and one test population is declining. Small populations are considered subject to random events and reductions in fitness due to low genetic variability. Threats associated with small population size are further exacerbated by the limited range and low reproductive output of this species. However, if low seed production is because of ecosystem disruptions, such as loss of effective pollinators, there could be additional threats that need to be addressed. Due to low abundance and a very small area of occupancy, any regional fire would be a rangewide threat. Furthermore, because the soil seed bank is poor and seed viability is low, recovery from a fire may be especially challenging. The response mechanism of this species to fire is unknown. Overall, the threats to *H. orcuttii* are of a high magnitude because they have the potential to significantly reduce the reproductive potential of this species. The threats are nonimminent overall because the most significant threats (invasive, nonnative plants and low reproductive output) are long-term in nature. This species faces high-magnitude nonimminent threats; therefore, we assigned this species an LPN of 5.

Hedyotis fluviatilis (Kamapuaa)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. *Hedyotis fluviatilis* is a scandent shrub found in mixed shrubland to wet lowland forest on the islands of Oahu and Kauai, Hawaii. This species is known from 11 populations totaling between 400 and 900 individuals. *Hedyotis fluviatilis* is threatened by pigs and goats that degrade and destroy habitat, and by nonnative plants that outcompete and displace it. Landslides and hurricanes are a potential threat to populations on Kauai. Predation by pigs and goats is a likely threat. This species is represented in an ex situ collection;

however, there are no other conservation actions implemented for this species. We retained an LPN of 2 because the severity of the threats to the species is high and the threats are ongoing and, therefore, imminent.

Helianthus verticillatus (Whorled sunflower)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. The whorled sunflower is found in moist, prairie-like openings in woodlands and along adjacent creeks. Despite extensive surveys throughout its range, only five populations are known for this species; two populations in Cherokee County, Alabama; one population in Floyd County, Georgia; and one population each in Madison and McNairy Counties, Tennessee. This species appears to have restricted ecological requirements and is dependent upon the maintenance of prairie-like openings for its survival. Active management of habitat is needed to keep competition and shading under control. Much of its habitat has been degraded or destroyed for agricultural, silvicultural, and residential purposes. Populations near roadsides or powerlines are threatened by herbicide usage in association with right-of-way maintenance. The majority of the Georgia population is protected due to its location within a conservation easement; however, only 15 to 20 plants are estimated to occur at this site. The remaining four sites are not formally protected, but efforts have been taken to abate threats associated with highway right-of-way maintenance at one Alabama population. In addition, despite past concerns about threats from timber removal degrading *H. verticillatus* habitat, the other Alabama population has responded favorably to canopy removal that took place circa 2001. Therefore, threats are of moderate magnitude, although imminent because they are ongoing. Thus, we assigned this species an LPN of 8.

Hibiscus dasycalyx (Neches River rose-mallow)—We continue to find that listing this species is warranted but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted petition 12-month finding.

Ivesia webberi (Webber ivesia)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. *Ivesia webberi* is a low, spreading, perennial herb with grayish-green foliage; dark red, wiry stems; and yellow flowers arranged in capitate cymes. *Ivesia webberi* occurs very infrequently in Lassen, Plumas, and Sierra Counties in California, and in Douglas and Washoe Counties, Nevada. The species is restricted to sites with sparse vegetation and shallow, rocky soils composed of volcanic ash or derived from andesitic rock. Occupied sites generally occur on mid-elevation flats, benches, or terraces on mountain slopes above large valleys along the transition zone between the eastern edge of the northern Sierra Nevada and the northwestern edge of the Great Basin. Currently, the global population is estimated at approximately 5 million individuals at 16 known sites. The Nevada sites support nearly 98 percent of the total number of individuals (4.9 million) on about 25 acres (10 hectares) of occupied habitat. The California sites are larger in area, totaling about 157 acres (63 hectares), but support fewer individuals (approximately 120,000).

The primary threats to *I. webberi* include urban and commercial development, authorized and unauthorized roads, off-highway vehicle (OHV) activities, livestock grazing and trampling, wildfire and fire suppression activities, and displacement by invasive species. Despite the high numbers of individuals, direct and indirect impacts to the species and its habitat, specifically from urban development and OHV activity, remain high and are likely to increase. In addition, these threats have a significant likelihood of bringing about extinction on a relative short time scale, and we therefore conclude that the threats are of high magnitude. However, the U.S. Forest Service has developed a conservation strategy that commits to management, monitoring, and research to protect this species on National Forest lands where most populations are found, and the State of Nevada has listed the species as critically endangered, which provides a mechanism to track future impacts on private lands. In addition, both the U.S. Forest Service and State of Nevada have agreed to coordinate closely with the Fish and Wildlife Service on all activities that may affect this species. For these reasons, we have determined that the threats to *I. webberi* are nonimminent and we are maintaining an LPN of 5.

Joinvillea ascendens ssp. *ascendens* (Ohe)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. *Joinvillea ascendens* ssp. *ascendens* is an erect herb found in wet to mesic *Metrosideros polymorpha-Acacia koa* (ohia-koa) lowland and montane forest on the islands of Kauai, Oahu, Molokai, Maui, and Hawaii, Hawaii. This subspecies is known from 44 widely scattered populations totaling approximately 200 individuals. Plants are typically found as only one or two individuals, with miles between populations.

This subspecies is threatened by destruction or modification of habitat by pigs, goats, and deer, and by nonnative plants that outcompete and displace native plants. Predation by pigs, goats, deer, and rats is a likely threat to this species. Landslides are a potential threat to populations on Kauai and Molokai. Seedlings have rarely been observed in the wild. Seeds germinate in cultivation, but most die soon thereafter. It is uncertain if this rarity of reproduction is typical of this subspecies, or if it is related to habitat disturbance. Feral pigs have been fenced out of a few of the populations of this subspecies, and nonnative plants have been reduced in those populations that are fenced. However, these threats are not controlled and are ongoing in the remaining, unfenced populations. This species is represented in ex situ collections. The threats are of high magnitude because habitat degradation, nonnative plants, and predation result in mortality or severely affect the reproductive capacity of the majority of populations of this species, leading to a relatively high probability of extinction. The threats are ongoing, and thus are imminent. Therefore, we retained an LPN of 3 for this subspecies.

Leavenworthia crassa (Gladecress)—The following information is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. This species of gladecress is a component of glade flora, occurring in association with limestone outcroppings. *Leavenworthia crassa* is endemic to a 13-mile radius area in north central Alabama in Lawrence and Morgan Counties, where only six populations of this species are documented. Glade habitats today have been reduced to remnants fragmented by agriculture and development. Populations of this species are now located in glade-like areas exhibiting various degrees of disturbance including pastureland, roadside rights-of-way, and cultivated or plowed fields. The most vigorous populations of this species are located in areas which receive full, or near full, sunlight with limited herbaceous competition. The magnitude of threat is high for this species, because with the limited number of populations, the threats could result in direct mortality or reduced reproductive

capacity of the species. This species appears to be able to adjust to periodic disturbances and the potential impacts to populations from competition, exotics, and herbicide use are nonimminent. Thus, we assigned an LPN of 5 to this species.

Leavenworthia texana (Texas golden gladecress)—We continue to find that listing this species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted petition 12-month finding.

Linum arenicola (Sand flax)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. Sand flax is found in pine rockland and marl prairie habitats which require periodic wildfires in order to maintain an open, shrub free subcanopy and reduce leaf litter levels. Based upon available data, there are 11 extant occurrences of sand flax; 11 others have been extirpated or destroyed. For the most part, only small and isolated occurrences remain in low-lying areas in a restricted range of southern Florida and the Florida Keys.

Habitat loss and degradation due to development is a major threat and most of the remaining occurrences are on private land or non-conservation public land. However, a survey conducted in 2009 showed approximately 74,000 plants on a non-conservation, public site in Miami-Dade County; this is far more plants than was previously known. Although a portion of the plants will be affected by development, approximately 60,000 are anticipated to be protected and managed through a conservation easement. Consequently, the majority of the largest occurrence in Miami-Dade County is expected to be conserved and managed. In addition, much of the pine rockland on Big Pine Key, the location of the largest occurrence in the Keys, is protected from development. Climatic changes and sea-level rise are long-term threats that are expected to affect the species and ultimately substantially reduce the extent of available habitat. Nearly all remaining populations are threatened by fire suppression, difficulty in applying prescribed fire, road maintenance activities, exotic species, or illegal dumping. However, some efforts are underway to use prescribed fire to control exotics on conservation lands where this species occurs. In general, viability is uncertain for 9 of 11 occurrences. Sand flax is vulnerable to natural disturbances, such as hurricanes, tropical storms, and storm surges. Hurricane Wilma inundated most of its habitat on Big Pine Key in 2005, and plants were not found 8 to 9 weeks post-storm; the density of sand flax declined to zero in all management units at The Nature Conservancy's preserve in 2006. In a 2007 post-hurricane assessment, sand flax was found in northern plots, but not in any of the southern plots on Big Pine Key. More current data are not available. Due to the small and fragmented nature of the current population, stochastic events, disease, or genetic bottlenecks may strongly affect this species in the Florida Keys. Reduced pollinator activity and suppression of pollinator populations from pesticides used in mosquito control and decreased seed production due to increased seed predation in a fragmented wildland urban interface may also affect sand flax; however, not enough information is known on this species' reproductive biology or life history to assess these potential threats.

Overall, the magnitude of threats is high. Because development is not immediate for the majority of the largest population in Miami-Dade County, the threat of habitat loss at this location is nonimminent. In addition, the finding of a larger population than previously known, combined with its location on the mainland, tempers the immediacy of threats of hurricanes and other natural disturbances and catastrophic events. The new sizable, presumably viable population on the mainland provides some assurance that the species could withstand such threats due to the number of individuals and presence at a different geographic location (i.e., mainland versus Keys). Therefore, based on threats that are overall nonimminent but high in magnitude, we assigned this species an LPN of 5.

Linum carteri var. *carteri* (Carter's small-flowered flax)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. This plant occupies open and disturbed sites in pinelands of Miami-Dade County, Florida. Currently, there are nine known occurrences. Occurrences with fewer than 100 individuals are located on three county-owned preserves. A site with more than 100 plants is owned by the U.S. Department of Agriculture, but the site is not managed for conservation.

Climatic changes, including sea-level rise, are long-term threats that will likely reduce the extent of habitat. The nine existing occurrences are small and vulnerable to habitat loss, which is exacerbated by habitat degradation due to fire suppression, the difficulty of applying prescribed fire to pine rocklands, and threats from exotic plants. Remaining habitats are fragmented. Non-compatible management practices are also a threat at most protected sites; several sites are mowed during the flowering and fruiting season. In the absence of fire, periodic mowing can, in some cases, help maintain open, shrub-free understory and provide benefits to this plant. However, mowing can also eliminate reproduction entirely in very young plants, delay reproductive maturation, and kill adult plants. With flexibility in timing and proper management, threats from mowing practices can be reduced or negated. Carter's small-flowered flax is vulnerable to natural disturbances, such as hurricanes, tropical storms, and storm surges. This species exists in such small numbers at so few sites, that it may be difficult to develop and maintain viable occurrences on the available conservation lands. Although no population viability analysis has been conducted for this plant, indications are that existing occurrences are at best marginal, and it is possible that none are truly viable. As a result, the magnitude of threats is high. The threats are ongoing, and thus are imminent. Therefore, we assigned an LPN of 3 to this plant variety.

Myrsine fosbergii (Kolea)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. *Myrsine fosbergii* is a branched shrub or small tree found in lowland mesic and wet forest, on watercourses or stream banks, on the islands of Kauai and Oahu, Hawaii. This species is currently known from 14 populations totaling a little more than 100 individuals. *Myrsine fosbergii* is threatened by feral pigs and goats that degrade and destroy habitat and may prey upon the plant, and by nonnative plants that compete for light and nutrients. This species is represented in an ex situ collection. Although there are plans to fence and remove ungulates from the Helemano area of Oahu, which may benefit this species, no conservation measures have been taken to date to alleviate these threats for this species. Feral pigs and goats are found throughout the known range of *M. fosbergii,* as are nonnative plants. The threats from feral pigs, goats, and nonnative plants are of a high magnitude because they pose a severe threat throughout the limited range of this species, and they are ongoing and

therefore imminent. We retained an LPN of 2 for this species.

Myrsine vaccinioides (Kolea)—We continue to find that listing this species is warranted but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted 12-month petition finding.

Narthecium americanum (Bog asphodel)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. Bog asphodel is a perennial herb that is found in savanna areas, usually with water moving through the substrate, as well as in sandy bogs along streams and rivers. The historical range of bog asphodel included New Jersey, Delaware, North Carolina, and South Carolina, although the taxonomic identity of the historic North Carolina specimens is now in question. Previous reports of bog asphodel from New York are now believed erroneous. Extant populations of bog asphodel are now found only within the Pine Barrens region of New Jersey.

Bog asphodel has experienced a clear and apparently ongoing curtailment of its geographic range, which leaves it vulnerable to localized and population-level threats. The Pine Barrens savannas that support bog asphodel provide a scarce, specialized habitat that has declined from several thousand acres around 1900 to only a thousand acres in recent decades. This species has been lost from at least 2 States, and now occurs on less than 80 acres of land confined to an area only about 30 miles in diameter. Eight of 26 delineated bog asphodel Element Occurrences in New Jersey are extirpated. The extirpated occurrences are distributed around the periphery of the range, representing a contraction. Many of the remaining occurrences around the periphery of the range are very small and subject to identified threats, making the species vulnerable to further range contractions.

Significant threats include unauthorized use of off-road vehicles, deer, beaver, natural succession, and the risk of lowered water tables. Lesser threats include localized indirect effects of upland development, impacts from non-motorized recreational activities, collection, and herbivores other than deer. Because the range of bog asphodel is currently limited to New Jersey's Pinelands Area and Coastal Zone, regulatory protections are generally adequate. More than 95 percent of bog asphodel occurs on protected lands, although enforcement of illegal activity can be lacking, and little active habitat management is taking place. Outright habitat destruction from wetland filling, draining, flooding, and conversion to commercial cranberry bogs likely contributed to the curtailment of this species' range, but these are generally historic not current threats to bog asphodel.

Current threats to bog asphodel are low to moderate in magnitude because regulatory protections appear to be adequate so that the threats are not expected to bring about extinction on a relatively short time scale. Several threats are imminent because they are ongoing and expected to continue. Overall, based on these imminent, moderate threats, we retain an LPN of 8 for this species.

Nothocestrum latifolium ('Aiea)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. *Nothocestrum latifolium* is a small tree found in dry to mesic forest on the islands of Kauai, Oahu, Maui, Molokai, and Lanai, Hawaii. *Nothocestrum latifolium* is known from 17 steadily declining populations totaling fewer than 1,200 individuals.

This species is threatened by feral pigs, goats, and axis deer that degrade and destroy habitat and may prey upon it; by nonnative plants that compete for light and nutrients; and by the loss of pollinators that negatively affect the reproductive viability of the species. This species is represented in an ex situ collection. Ungulates have been fenced out of four areas where *N. latifolium* currently occurs, hundreds of *N. latifolium* individuals have been outplanted in fenced areas, and nonnative plants have been reduced in some populations that are fenced. However, these ongoing conservation efforts for this species benefit only a few of the known populations. The threats are not controlled and are ongoing in the remaining unfenced populations. In addition, little regeneration is observed in this species. The threats are of a high magnitude, because they are severe enough to affect the continued existence of the species, leading to a relatively high likelihood of extinction. The threats are imminent, as they are ongoing. Therefore, we retained an LPN of 2 for this species.

Ochrosia haleakalae (Holei)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. *Ochrosia haleakalae* is a tree found in dry to mesic forest, often on lava, on the islands of Hawaii and Maui, Hawaii. This species is currently known from 8 populations totaling between 64 and 76 individuals.

Ochrosia haleakalae is threatened by fire; by feral pigs, goats, and cattle that degrade and destroy habitat and may directly prey upon it; and by nonnative plants that compete for light and nutrients. This species is represented in ex situ collections. Feral pigs, goats, and cattle have been fenced out of one wild and one outplanted population on private lands on the island of Maui and out of one outplanted population in Hawaii Volcanoes National Park on the island of Hawaii. Nonnative plants have been reduced in the fenced areas. The threat from fire is of a high magnitude and imminent because no control measures have been undertaken to address this threat that could adversely affect *O. haleakalae* as a whole. The threats from feral pigs, goats, and cattle are ongoing to the unfenced populations of *O. haleakalae.* The threat from nonnative plants is ongoing and imminent and of a high magnitude to the wild populations on both islands as this threat adversely affects the survival and reproductive capacity of the majority of the species, leading to a relatively high likelihood of extinction. Therefore, we retained an LPN of 2 for this species.

Pediocactus peeblesianus var. *fickeiseniae* (Fickeisen plains cactus)—We continue to find that listing this species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted petition 12-month finding.

Penstemon scariosus var. *albifluvis* (White River beardtongue)—The following summary is based on information contained in our files and the petition we received on October 27, 1983. This species is restricted to calcareous soils derived from oil shale barrens of the Green River Formation in the Uinta Basin of northeastern Utah and adjacent Colorado. There are 20 occurrences known in Utah and 1 in Colorado. Most of the occupied habitat of the White River beardtongue is within developed and expanding oil and gas fields. The location of the species' habitat exposes it to destruction from road, pipeline, and well site construction in connection with oil and gas development. Grazing by wildlife and livestock is an additional threat. A future threat (and potentially the greatest threat) to the species is oil shale development. Traditional oil and gas energy development is currently occurring and expected to increase within habitat areas for this species, and therefore the threat is imminent.

However, the BLM has adopted a Special Status Species policy and has included in its current Resource Management Plan commitments to protect this species. These protections lessen the extent of traditional oil and gas development impacts to this species, so that although oil and gas development will continue to increase within this species' range, the threat is of moderate magnitude. The threats are ongoing and therefore imminent. Thus, we assigned an LPN of 9 to this plant variety.

Peperomia subpetiolata ('Ala 'ala wai nui)—We continue to find that listing this species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted 12-month petition finding.

Phyllostegia bracteata (no common name)—We continue to find that listing this species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted 12-month petition finding.

Phyllostegia floribunda (no common name)—We continue to find that listing this species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted 12-month petition finding.

Physaria douglasii ssp. *tuplashensis* (White Bluffs bladder-pod)—We continue to find that listing this species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted petition 12-month finding.

Physaria globosa (Desvaux) O'Kane & Al-Shehbaz (Short's bladderpod)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. With this publication of this document, we recognize the proposed reunion of the genus *Lesquerella* with *Physaria* (O'Kane and Al-Shehbaz 2002 entire) and now refer to Short's bladderpod by the scientific name *Physaria globosa.* Short's bladderpod is a perennial member of the mustard family that occurs in Indiana (1 location), Kentucky (6 locations), and Tennessee (22 locations). It grows on steep, rocky, wooded slopes; on talus areas; along cliff tops and bases; and on cliff ledges. It is usually associated with south-to west-facing calcareous outcrops adjacent to rivers or streams.

Road construction and road maintenance have played a significant role in the decline of *P. globosa.* Specific activities that have affected the species in the past and may continue to threaten it include bank stabilization, herbicide use, mowing during the growing season, grading of road shoulders, and road widening or repaving. Sediment deposition during road maintenance or from other activities also potentially threatens the species. Because the natural processes that maintained habitat suitability and competition from invasive, nonnative vegetation have been interrupted at many locations, active habitat management is necessary at those sites. While threats associated with roadside maintenance activities and habitat alterations by invasive plant encroachment are imminent because they are ongoing, these threats are of moderate magnitude as they are not affecting all locations of this species at this time. Therefore, we assigned an LPN of 8 to this species.

Platanthera integrilabia (Correll) Leur (White fringeless orchid)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. *Platanthera integrilabia* is a perennial herb that grows in partially, but not fully, shaded, wet, boggy areas at the head of streams and on seepage slopes in Alabama, Georgia, Kentucky, Mississippi, South Carolina, and Tennessee. Historically, there were at least 90 populations of *P. integrilabia.* It is presumed extirpated from North Carolina and Virginia. Currently there are about 60 extant sites supporting the species.

Several populations have been destroyed due to road, residential, and commercial construction, and to projects that altered soil and site hydrology such that suitability for the species was reduced. Several of the known populations are in or adjacent to powerline rights-of-way. Mechanical clearing of these areas may benefit the species by maintaining adequate light levels, but can promote development of dense, shrubby vegetation due to extensive suckering of woody species; however, the indiscriminant use of herbicides in these areas could pose a significant threat to the species. All-terrain vehicles have damaged several sites and pose a threat at most sites. Some of the known sites for the species occur in areas that are managed specifically for timber production. Timber management is not necessarily incompatible with the protection and management of the species, but care must be taken during timber management to ensure the hydrology of bogs supporting the species is not altered. Natural succession can result in decreased light levels. Because of the species dependence upon moderate-to-high light levels, some type of active management to prevent complete canopy closure is required at most locations. Collecting for commercial and other purposes is a potential threat. Herbivory (primarily deer) threatens the species at several sites. Due to the alteration of habitat and changes in natural conditions, protection and recovery of this species is dependent upon active management rather than just preservation of habitat. Invasive, nonnative plants such as Japanese honeysuckle and kudzu also threaten several sites. The threats are widespread; however, the impact of those threats on the survival of the species is moderate in magnitude. Several of the sites are protected to some degree from the threats by being within State parks, national forests, wildlife management areas, or other protected land. The threats are, however, imminent because they are ongoing, and we have therefore assigned an LPN of 8 to this species.

Platydesma remyi (no common name)—We continue to find that listing this species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted 12-month petition finding.

Potentilla basaltica (Soldier Meadow cinquefoil or basalt cinquefoil)—The following summary is based on information contained in our files; the petition we received on May 11, 2004, provided no additional information on the species. *Potentilla basaltica* is a low-growing, rhizomatous, herbaceous perennial that forms a basal rosette and has bright yellow flowers. *Potentilla basaltica* is associated with alkali meadows, seeps, and occasionally marsh habitats bordering perennial thermal springs, outflows, and meadow depressions. In Nevada, the species is known only from Soldier Meadow in Humboldt County. In northeastern California, a single population occurs in Lassen County. At Soldier Meadow, there are 11 discrete known occurrences (10 on public and 1 on private land) within an area of about 24 acres (9.6 hectares) that support about 130,000 individuals. The California population occurs on private and public land and supports fewer than 1,000 plants. The public land in both California and Nevada has been designated as an Area

of Critical Environmental Concern by the Bureau of Land Management (BLM).

The species and its habitat are threatened by recreational use in the areas where it occurs as well as the ongoing impacts of past water diversions, livestock grazing, and off-road vehicle (OHV) travel. Conservation measures implemented recently by the BLM in Nevada include the installation of fencing to exclude livestock, wild horses, and other large mammals; the closure of access roads to spring, riparian, and wetland areas and the restriction of vehicles to designated routes; the establishment of a designated campground away from the habitats of sensitive species; the installation of educational signage; and, an increased staff presence, including law enforcement, a volunteer site steward during the 6-month period of peak visitor use, and noxious weed control. In California, BLM management actions include a proposed long-term monitoring plot, limiting OHV travel to designated routes, and excluding livestock grazing by fencing. These conservation measures have reduced the magnitude of threat to the species to moderate; all remaining threats are nonimminent and involve long-term changes to the habitat for the species resulting from past impacts. Until we can put in place a monitoring program that allows us to assess the long-term trend of the species, we have assigned an LPN of 11.

Pseudognaphalium (*Gnaphalium*) *sandwicensium* var. *molokaiense* (Enaena)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. *Pseudognaphalium sandwicensium* var. *molokaiense* is a perennial herb found in strand vegetation in dry consolidated dunes on the islands of Molokai and Maui, Hawaii. Historically, this variety was also found on Oahu and Lanai. This variety is known from 5 populations totaling approximately 200 to 20,000 individuals (depending upon rainfall) in the Moomomi area on the island of Molokai, and from 2 populations of a few individuals at Waiehu dunes and at Puu Kahulianapa on west Maui.

Pseudognaphalium sandwicensium var. *molokaiense* is threatened by feral goats and axis deer that degrade and destroy habitat and possibly prey upon it, and by nonnative plants that compete for light and nutrients. Potential threats also include collection for lei-making, and off-road vehicles that directly damage plants and degrade habitat. Weed control protects one population on Molokai; however, no conservation efforts have been initiated to date for the other populations on Molokai or for the individuals on Maui. This species is represented in an ex situ collection. The ongoing (and therefore imminent) threats from feral goats, axis deer, nonnative plants, collection, and off-road vehicles are of a high magnitude because no control measures have been undertaken for the Maui population or for the Molokai populations, and the threats result in direct mortality or significantly reduce reproductive capacity for the majority of the populations, leading to a relatively high likelihood of extinction. Therefore, we retained an LPN of 3 for this plant variety.

Ranunculus hawaiensis (Makou)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. *Ranunculus hawaiensis* is an erect or ascending perennial herb found in mesic to wet forest dominated by *Metrosideros polymorpha* (ohia) and *Acacia koa* (koa) with scree substrate (loose stones or rocky debris on a slope) on the islands of Maui and Hawaii, Hawaii. This species is currently known from 14 individuals in 6 populations on the island of Hawaii. One population on Maui (Kukui planeze) was not relocated on a survey conducted in 2006. In addition, one wild population at Waikamoi (also on Maui) has not been observed since 1995. *Ranunculus hawaiensis* is threatened by direct predation by slugs, feral pigs, goats, cattle, mouflon, and sheep; by pigs, goats, cattle, mouflon, and sheep that degrade and destroy habitat; and by nonnative plants that compete for light and nutrients. Three populations have been outplanted into protected exclosures; however, feral ungulates and nonnative plants are not controlled in the remaining, unfenced populations. In addition, the threat from introduced slugs is of a high magnitude because slugs occur throughout the limited range of this species and no effective measures have been undertaken to control them or prevent them from causing significant adverse impacts to this species. Overall, the threats from pigs, goats, cattle, mouflon, sheep, slugs, and nonnative plants are of a high magnitude, and ongoing (imminent) for *R. hawaiensis.* We retained an LPN of 2 for this species.

Ranunculus mauiensis (Makou)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. *Ranunculus mauiensis* is an erect to weakly ascending perennial herb found in open sites in mesic to wet forest and along streams on the islands of Maui, Kauai, and Molokai, Hawaii. This species is currently known from 14 populations totaling 198 individuals. *Ranunculus mauiensis* is threatened by feral pigs, goats, mule deer, axis deer, and slugs that consume it; by habitat degradation and destruction by feral pigs, goats, and deer; and by nonnative plants that compete for light and nutrients. This species is represented in ex situ collections. Feral pigs have been fenced out of one Maui population of *R. mauiensis,* and nonnative plants have been reduced in the fenced area. One individual occurs in the Kamakou Preserve on Molokai, managed by The Nature Conservancy. However, ongoing conservation efforts benefit only two populations. As a result, the threats have the potential of bringing about extinction in a relatively short time scale, and are therefore are of high magnitude. They are also imminent because they are ongoing in the Kauai and the majority of the Maui populations. Therefore, we retained an LPN of 2 for this species.

Rorippa subumbellata (Tahoe yellow cress)—The following summary is based on information contained in our files and the petition we received on December 27, 2000. *Rorippa subumbellata* is a small, branching, perennial herb with umbel-like inflorescences and yellow flowers. *Rorippa subumbellata* is known only from the shores of Lake Tahoe in California and Nevada. Data collected over the last 25 years generally indicate that occurrence of the species fluctuates yearly as a function of both lake level and the amount of exposed habitat. Records kept since 1900 show a preponderance of years with high lake levels that would isolate and reduce *R. subumbellata* occurrences at higher beach elevations. From the standpoint of the species, less favorable peak years have occurred almost twice as often as more favorable low-level years. Annual surveys are conducted to determine population numbers, site occupancy, and general disturbance regime. During the 2003 and 2004 annual survey periods, the lake level was approximately 6,224 feet (ft) (1,897.08 meters (m)); 2004 was the fourth consecutive year of low water. *Rorippa subumbellata* was present at 46 of the 60 sites surveyed, up from 31 occupied sites in 2001 when the lake level was higher at 6,225 ft (1,897.38 m). Approximately 25,200 stems were present in 2003, whereas during the 2001 annual survey, the estimated number of stems was 6,136. Lake levels rose again in 2006, and less habitat was

available. Lake levels dropped again in 2008 through 2010, leading to an increase in both occupied sites and estimated stem counts. During very low lake levels in 2009, an estimated 27,522 stems were observed at 46 sites, equal to the highest number of occupied sites previously recorded.

Many *Rorippa subumbellata* sites are intensively used for commercial and public purposes and are subject to various activities such as erosion control, marina developments, pier construction, and recreation. The U.S. Forest Service, California Tahoe Conservancy, and California Department of Parks and Recreation have management programs for *R. subumbellata* which include monitoring, fenced enclosures, and transplanting efforts when funds and staff are available. Public agencies (including the Service), private landowners, and environmental groups collaborated to develop a conservation strategy coupled with a memorandum of understanding-conservation agreement. The conservation strategy, completed in 2003, contains goals and objectives for recovery and survival, a research and monitoring agenda, and serves as the foundation for an adaptive management program. Because of the continued commitments to conservation demonstrated by regulatory and land management agencies participating in the conservation strategy, we have determined the threats to *R. subumbellata* from various land uses have been reduced to a moderate magnitude. In high lake-level years such as 2005, however, recreational use is concentrated within *R. subumbellata* habitat, and we consider this threat in particular to be ongoing and imminent. Therefore, we are maintaining an LPN of 8 for this species.

Schiedea pubescens (Maolioli)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. *Schiedea pubescens* is a reclining or weakly climbing vine found in diverse mesic to wet forest on the islands of Maui, Molokai, and Hawaii, Hawaii. It is presumed extirpated from Lanai. Currently, this species is known from 8 populations totaling between 30 and 32 individuals on Maui, from 4 populations totaling between 21 and 22 individuals on Molokai, and from 1 population of 4 to 6 individuals on the island of Hawaii.

Schiedea pubescens is threatened by feral pigs and goats that consume it and degrade and destroy habitat, and by nonnative plants that compete for light and nutrients. Feral ungulates have been fenced out of the population of *S. pubescens* on the island of Hawaii. Feral goats have been fenced out of a few of the west Maui populations of *S. pubescens.* Nonnative plants have been reduced in the populations that are fenced on Maui. However, the threats are not controlled and are ongoing in the remaining unfenced populations on Maui and the four populations on Molokai. Additional fenced areas are planned at Pohakuloa Training Area on the island of Hawaii. Nonnative feral ungulates and nonnative plants will be controlled within these fenced areas. Fire is a potential threat to the Hawaii Island population. In light of the extremely low number of individuals of this species, the threats from goats and nonnative plants are of a high magnitude because they result in mortality and reduced reproductive capacity for the majority of the populations, leading to a relatively high likelihood of extinction. The threats are imminent because they are ongoing with respect to most of the populations. Therefore, we retained an LPN of 2 for this species.

Schiedea salicaria (no common name)—We continue to find that listing this species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted 12-month petition finding.

Sedum eastwoodiae (Red Mountain stonecrop)—The following summary is based on information contained in our files and information provided by the California Department of Fish and Game. The petition we received on May 11, 2004, provided no new information on the species. Red Mountain stonecrop is a perennial succulent which occupies relatively barren, rocky openings and cliffs in lower montane coniferous forests, between 1,900 and 4,000 feet elevation. Its distribution is limited to Red Mountain, Mendocino County, California, where it occupies in excess of 54 acres scattered over 4 square miles. The species' distribution by ownership is described as follows: Federal (Bureau of Land Management), 95 percent; private, 5 percent. Total population size has not been determined, but a preliminary estimate suggests the population may be in excess of 29,000 plants, occupying more than 27 discrete habitat polygons. Intensive monitoring suggests considerable annual variation in plant seedling success and inflorescence production. The primary threat to the species is the potential for surface mining for chromium and nickel. The entire distribution of Red Mountain stonecrop is either owned by mining interests, or is covered by mining claims, none of which are currently active. Surface mining would destroy habitat suitability for this species. The species is also believed threatened by tree and shrub encroachment into its habitat, in absence of fire. Approximately 25 percent of its known distribution occurred within the boundary of the Red Mountain Fire of June 2008. However, the extent and manner in which Red Mountain stonecrop and its habitat were affected by that fire is not yet known. Given the magnitude (high) and immediacy (nonimminent) of the threat to the small, scattered populations, and its taxonomy (species), we assigned an LPN of 5 to this species.

Sicyos macrophyllus ('Anunu)—We continue to find that listing this species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted 12-month petition finding.

Solanum conocarpum (marron bacora)—The following summary is based on information in our files and in the petition we received on November 21, 1996. *Solanum conocarpum* is a dry-forest shrub in the island of St. John, U.S. Virgin Islands. Its current distribution includes eight localities in the island of St. John, each ranging from 1 to 144 individuals. The species has been reported to occur on dry, poor soils. It can be locally abundant in exposed topography on sites disturbed by erosion, areas that have received moderate grazing, and around ridgelines as an understory component in diverse woodland communities. A habitat suitability model suggests that the vast majority of *Solanum conocarpum* habitat is found in the lower elevation coastal scrub forest. Efforts have been conducted to propagate the species to enhance natural populations, and planting of seedlings has been conducted in the island of St. John.

Solanum conocarpum is threatened by the lack of natural recruitment, absence of dispersers, fragmented distribution, lack of genetic variation, climate change, and habitat destruction or modification by exotic mammal species. These threats are evidenced by the reduced number of individuals, low number of populations, and lack of connectivity between populations. Overall, we determined the magnitude of the threats to be high as shown by the poor quality of the populations. The majority of threats are ongoing and, therefore, imminent. We assigned an LPN of 2 to this species.

Solanum nelsonii (popolo)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. *Solanum nelsonii* is a sprawling or trailing shrub found in coral rubble or sand in coastal sites. This species is known from populations on Molokai (approximately 300 plants), the island of Hawaii (5 plants), and the northwestern Hawaiian Islands (NWHI), Hawaii. The current populations in the NWHI are found on Kure (unknown number of individuals), Midway (approximately 260 plants), Laysan (approximately 490 plants), Pearl and Hermes (unknown number of individuals), and Nihoa (8,000 to 15,000 adult plants). On Molokai, *S. nelsonii* is moderately threatened by ungulates that degrade and destroy habitat, and may eat *S. nelsonii.* On Molokai and the NWHI, this species is threatened by nonnative plants that outcompete and displace it. *Solanum nelsonii* is threatened by predation by a nonnative grasshopper in the NWHI. On Kure, Midway, Laysan, and Pearl and Hermes in the NWHI, tsunamis are also a potential threat to *S. nelsonii.* This species is represented in ex situ collections. Ungulate exclusion fences, routine fence monitoring and maintenance, and weed control protect the population of *S. nelsonii* on Molokai. Limited weed control is conducted in the NWHI. These threats are of moderate magnitude because of the relatively large number of plants, and the fact that this species is found on more than one island. The threats are imminent for the majority of the populations because they are ongoing and are not being controlled. We therefore retained an LPN of 8 for this species.

Solidago plumosa (Yadkin River goldenrod)—The following information is based on information in our files. No new information was provided in the petition we received on April 20, 2010. The global distribution of *Solidago plumosa* consists of a single population that occurs in two discrete locations along a 2.5-mile stretch of the Yadkin River in North Carolina. The availability of suitable habitat and the fate of the single known population of this species are primarily determined by the manner in which two hydroelectric projects (the Yadkin River and Yadkin-Pee Dee River Hydroelectric Projects) are operated. Any detrimental effects to *S. plumosa* resulting from the construction of these reservoirs occurred decades ago when these projects were built (during the years of 1917 to 1928), and the Service is not aware of any plans to construct additional reservoirs within the current range of this species. However, *S. plumosa* continues to be subject to threats from the continued operation of these reservoirs (which has reduced the frequency and severity of scouring floods that help to prevent the establishment of other species within the species' limited habitat) and the encroachment of nonnative, invasive species. Because the species' global distribution consists of a single population, its entire range is affected by these threats. However, because scouring floods (prior to reservoir construction) likely only occurred episodically, and in light of the relatively slow progression of nonnative species into areas of occupied habitat, the magnitude of these threats is moderate to low. However, because these threats (especially those presented by nonnative, invasive plant species) are currently occurring, they are imminent. Thus, we assigned this species an LPN of 8.

Sphaeralcea gierischii (Gierisch mallow)—We continue to find that listing this species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted petition 12-month finding.

Stenogyne cranwelliae (no common name)—We continue to find that listing this species is warranted, but precluded as of the date of publication of this notice. However, we are working on a proposed listing rule that we expect to publish prior to making the next annual resubmitted 12-month petition finding.

Symphyotrichum georgianum (Georgia aster)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. Georgia aster is a relict species of post oak savanna/prairie communities that existed in the Southeast prior to widespread fire suppression and extirpation of large native grazing animals. Georgia aster currently occurs in the States of Alabama, Georgia, North Carolina, and South Carolina. The species is presumed extant in 8 counties in Alabama, 22 counties in Georgia, 9 counties in North Carolina, and 15 counties in South Carolina. The species appears to have been eliminated from Florida.

Most remaining populations survive adjacent to roads, utility rights-of-way, and other openings where current land management mimics natural disturbance regimes. Most populations are small (10 to 100 stems), and because the species' main mode of reproduction is vegetative, each isolated population may represent only a few genotypes. Many populations are currently threatened by one or more of the following factors: woody succession due to fire suppression, development, highway expansion or improvement, and herbicide application. However, the species is still relatively widely distributed, and recent information indicates the species is more abundant than when we initially identified it as a candidate for listing. Taking into account its distribution and abundance, the magnitude of threats is moderate. The threats are currently occurring and therefore are imminent. Thus we assigned an LPN of 8 for this species.

Ferns and Allies

Cyclosorus boydiae (no common name)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. This species is a small- to medium-sized fern found in mesic to wet forest along stream banks on the islands of Oahu and Maui, Hawaii. Historically, this species was also found on the island of Hawaii, but it has been extirpated there. Currently, this species is known from 7 populations totaling approximately 400 individuals. This species is threatened by feral pigs that degrade and destroy habitat and may eat this plant, and by nonnative plants that compete for light and nutrients. Feral pigs have been fenced out of the largest population on Maui, and nonnative plants have been reduced in the fenced area. No conservation efforts are under way to alleviate threats to the other two populations on Maui, or for the two populations on Oahu. This species is represented in an ex situ collection. The magnitude of the threats acting upon the currently extant populations is moderate because the largest population is protected from pigs, and nonnative plants have been reduced in this area. The threats are ongoing and therefore imminent. Therefore, we retained an LPN of 8 for this species.

Huperzia stemmermanniae (Waewaeiole)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. This species is an epiphytic pendant clubmoss found in mesic-to-wet *Metrosideros polymorpha-Acacia koa* (ohia-koa) forests on the islands of Maui and Hawaii, Hawaii. Only 3 populations are known, on Maui and Hawaii, totaling approximately 30 individuals. The Maui population has not been relocated since 1995. *Huperzia*

stemmermanniae is threatened by feral pigs, goats, cattle, and axis deer that degrade and destroy habitat, and by nonnative plants that compete for light, space, and nutrients. *Huperzia stemmermanniae* is also threatened by randomly occurring natural events due to its small population size. One individual at Waikamoi Preserve may benefit from fencing for axis deer and pigs. This species is represented in ex situ collections. The threats from pigs, goats, cattle, axis deer, and nonnative plants are of a high magnitude because they are sufficiently severe to adversely affect the species throughout its limited range, resulting in direct mortality or significantly reducing reproductive capacity, leading to a relatively high likelihood of extinction. The threats are imminent because they are ongoing. Therefore, we retained an LPN of 2 for this species.

Microlepia strigosa var. *mauiensis* (Palapalai)—The following summary is based on information contained in our files. No new information was provided in the petition we received on May 11, 2004. *Microlepia strigosa* var. *mauiensis* is a terrestrial fern found in mesic-to-wet forests. It is currently found in Hawaii on the islands of Maui, Oahu, and Hawaii, from at least 9 populations totaling at least 50 individuals. There is a possibility that the range of this plant variety could be larger and include the other main Hawaiian Islands. *Microlepia strigosa* var. *mauiensis* is threatened by feral pigs that degrade and destroy habitat, and by nonnative plants that compete for light and nutrients. Pigs have been fenced out of some areas on east and west Maui, Oahu, and on Hawaii, where *M. strigosa* var. *mauiensis* currently occurs, and nonnative plants have been reduced in the fenced areas. However, the threats are not controlled and are ongoing in the remaining unfenced populations on Maui, Oahu, and Hawaii. Therefore, the threats from feral pigs and nonnative plants are imminent. The threats are of a high magnitude because they are sufficiently severe to adversely affect the species throughout its range, resulting in direct mortality or significantly reducing reproductive capacity, leading to a relatively high likelihood of extinction. We therefore retained an LPN of 3 for *M. strigosa* var. *mauiensis.*

Petitions To Reclassify Species Already Listed or To Add to the Listed Range

We previously made warranted-but-precluded findings on five petitions seeking to reclassify threatened species to endangered status. The taxa involved in the reclassification petitions are three populations of the grizzly bear (*Ursus arctos horribilis*), delta smelt (*Hypomesus transpacificus*), and *Sclerocactus brevispinus* (Pariette cactus). Because these species are already listed under the ESA, they are not candidates for listing and are not included in Table 1. However, this notice and associated species assessment forms or 5-year review documents also constitute the resubmitted petition findings for these species. For delta smelt, we have not updated the information included in the 12-month finding (published April 7, 2010, at 75 FR 17667), which serves as our assessment; we are currently conducting a 5-year review, which will provide updated information when we complete it later this year. For the three grizzly bear populations, our recently completed 5-year review serves as our assessment. For *Sclerocactus brevispinus,* our updated assessment is provided below. We find that reclassification to endangered status for the three grizzly bear populations, delta smelt, and *Sclerocactus brevispinus* are all currently warranted but precluded by work identified above (see ''Petition Findings for Candidate Species''). One of the primary reasons that the work identified above is considered higher priority is that the grizzly bear populations, delta smelt, and *Sclerocactus brevispinus* are currently listed as threatened, and therefore already receive certain protections under the ESA. We promulgated regulations extending take prohibitions for wildlife and plants under section 9 to threatened species (50 CFR 17.31 and 50 CFR 17.71, respectively). Prohibited actions under section 9 for wildlife include, but are not limited to, take (i.e., to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in such activity). For plants, prohibited actions under section 9 include removing or reducing to possession any listed plant from an area under Federal jurisdiction (50 CFR 17.61). Other protections include those under section 7(a)(2) of the ESA whereby Federal agencies must insure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of any endangered or threatened species.

Grizzly bear (*Ursus arctos horribilis*) North Cascades ecosystem, Cabinet-Yaak, and Selkirk populations (Region 6)—Between 1986 and 2007, we have received and reviewed 10 petitions requesting a change in status for individual grizzly bear populations (51 FR 16363, May 2, 1986; 55 FR 32103, August 7, 1990; 56 FR 33892, July 24, 1991; 57 FR 14372, April 20, 1992; 58 FR 8250, February 12, 1993; 58 FR 38552, July 19, 1993; 58 FR 43856, August 18, 1993; 58 FR 43857, August 18, 1993; 59 FR 46611, September 9, 1994; 64 FR 26725, May 17, 1999; 72 FR 14866, March 29, 2007). Through this process, we determined the Cabinet-Yaak, Selkirk, and North Cascade ecosystems warrant endangered status. On April 18, 2007, the Service initiated a 5-year review to evaluate the current status of grizzly bears in the lower 48 States (72 FR 19549–19551). This status review, completed on August 29, 2011, and available online at: *http://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=A001,* recommended that the Cabinet-Yaak, Selkirk, and North Cascades Ecosystems remain warranted but precluded for endangered status.

Delta smelt (*Hypomesus transpacificus*) (Region 8) (see 75 FR 17667; April 7, 2010, for additional information on why reclassification to endangered is warranted but precluded)—In March 2004, we completed a 5-year review for delta smelt in which we determined a change in status from threatened to endangered was not recommended. While none of the threats, other than apparent abundance, show significant differences from 2004, we now have strong evidence, not available at the time of our 5-year review, that at least some of those factors are endangering the species. The primary evidence is the continuing downward trend in delta smelt abundance indices since a significant decline that occurred in 2002. The most recent fall midwater trawl abundance index is the lowest ever recorded—less than one-tenth the level it was in 2003. In addition, a 2005 population viability analysis calculated a 50-percent likelihood that the species could reach effective extinction (8,000 individuals) within 20 years.

There are many primary threats to the species including: Direct entrainments by State and Federal water export facilities; summer and fall increases in salinity and water clarity; and effects from introduced species. Additional threats are predation by striped and largemouth bass and inland silversides, entrainment into power plants, contaminants, and small population size. Existing regulatory mechanisms have not proven adequate to halt the decline of delta smelt since the time of listing as a threatened species.

As a result of our analysis of the best available scientific and commercial information, we have assigned uplisting the delta smelt an LPN of 2, based on high-magnitude, imminent threats. The

magnitude of the threats is high, because they occur rangewide and result in mortality or significantly reduce the reproductive capacity of the species, leading to a relatively high likelihood of extinction. They are imminent because these threats are ongoing and, in some cases (e.g., nonnative species), considered irreversible.

Sclerocactus brevispinus (Pariette cactus) (Region 6) (see 72 FR 53211, September 18, 2007, and the species assessment form (see **ADDRESSES**) for additional information on why reclassification to endangered is warranted but precluded)—*Sclerocactus brevispinus* is restricted to clay badlands of the Wagon Hound member of the Uinta Formation in the Uinta Basin of northeastern Utah. The species is restricted to one population with an overall range of approximately 10 miles by 5 miles in extent. The species' entire population is within a developed and expanding oil and gas field. The location of the species' habitat exposes it to destruction from road, pipeline, and well-site construction in connection with oil and gas development. The species may be collected as a specimen plant for horticultural use. Recreational off-road vehicle use and livestock trampling are additional potential threats. The species is currently federally listed as threatened by its previous inclusion within the species *Sclerocactus glaucus.* Based on current information, we are recommending an LPN of 2 for reclassifying this species as endangered, to reflect that: (1) The threats are of a high magnitude because any one of the threats has the potential to severely affect this species, a narrow endemic with a highly limited range and distribution; and (2) threats are ongoing and, therefore, are imminent.

Current Notice of Review

We gather data on plants and animals native to the United States that appear to merit consideration for addition to the Lists of Endangered and Threatened Wildlife and Plants (Lists). This notice identifies those species that we currently regard as candidates for addition to the Lists. These candidates include species and subspecies of fish, wildlife, or plants and DPSes of vertebrate animals. This compilation relies on information from status surveys conducted for candidate assessment and on information from State Natural Heritage Programs, other State and Federal agencies, knowledgeable scientists, public and private natural resource interests, and comments received in response to previous notices of review.

Tables 1 and 2 list animals arranged alphabetically by common names under the major group headings, and list plants alphabetically by names of genera, species, and relevant subspecies and varieties. Animals are grouped by class or order. Plants are subdivided into two groups: (1) Flowering plants and (2) ferns and their allies. Useful synonyms and subgeneric scientific names appear in parentheses with the synonyms preceded by an ''equals'' sign. Several species that have not yet been formally described in the scientific literature are included; such species are identified by a generic or specific name (in italics), followed by ''sp.'' or ''ssp.'' We incorporate standardized common names in these notices as they become available. We sort plants by scientific name due to the inconsistencies in common names, the inclusion of vernacular and composite subspecific names, and the fact that many plants still lack a standardized common name.

Table 1 lists all candidate species, plus species currently proposed for listing under the ESA. We emphasize that in this notice we are not proposing to list any of the candidate species; rather, we will develop and publish proposed listing rules for these species in the future. We encourage State agencies, other Federal agencies, and other parties to give consideration to these species in environmental planning.

In Table 1, the ''category'' column on the left side of the table identifies the status of each species according to the following codes:

PE—Species proposed for listing as endangered. Proposed species are those species for which we have published a proposed rule to list as endangered or threatened in the **Federal Register**. This category does not include species for which we have withdrawn or finalized the proposed rule.

PT—Species proposed for listing as threatened.

PSAT—Species proposed for listing as threatened due to similarity of appearance.

C—Candidates: Species for which we have on file sufficient information on biological vulnerability and threats to support proposals to list them as endangered or threatened. Issuance of proposed rules for these species is precluded at present by other higher priority listing actions. This category includes species for which we made a 12-month warranted-but-precluded finding on a petition to list. We made new findings on all petitions for which we previously made ''warranted-but-precluded'' findings. We identify the species for which we made a continued warranted-but-precluded finding on a resubmitted petition by the code ''C*'' in the category column (see ''*Findings for Petitioned Candidate Species''* section for additional information).

The ''Priority'' column indicates the LPN for each candidate species, which we use to determine the most appropriate use of our available resources. The lowest numbers have the highest priority. We assign LPNs based on the immediacy and magnitude of threats, as well as on taxonomic status. We published a complete description of our listing priority system in the **Federal Register** (48 FR 43098, September 21, 1983).

The third column, ''Lead Region,'' identifies the Regional Office to which you should direct information, comments, or questions (see addresses under Request for Information at the end of the **SUPPLEMENTARY INFORMATION** section).

Following the scientific name (fourth column) and the family designation (fifth column) is the common name (sixth column). The seventh column provides the known historical range for the species or vertebrate population (for vertebrate populations, this is the historical range for the entire species or subspecies and not just the historical range for the distinct population segment), indicated by postal code abbreviations for States and U.S. territories. Many species no longer occur in all of the areas listed.

Species in Table 2 of this notice are those we included either as proposed species or as candidates in the previous CNOR (published November 10, 2010 at 75 FR 69222) that are no longer proposed species or candidates for listing. Since November 10, 2010, we listed nine species, emergency listed one species, withdrew a proposed rule for one species, and removed three species from candidate status for the reason indicated by the code. Also included in this table are three species that were not previously candidates or proposed species but we emergency listed due to similarity in appearance. The first column indicates the present status of each species, using the following codes (not all of these codes may have been used in this CNOR):

E—Species we listed as endangered.

T—Species we listed as threatened.

Rc—Species we removed from the candidate list because currently available information does not support a proposed listing.

Rp—Species we removed from because we have withdrawn the proposed listing.

The second column indicates why we no longer regard the species as a

candidate or proposed species using the following codes (not all of these codes may have been used in this CNOR):

A—Species that are more abundant or widespread than previously believed and species that are not subject to the degree of threats sufficient to warrant continuing candidate status, or issuing a proposed or final listing.

F—Species whose range no longer includes a U.S. territory.

I—Species for which we have insufficient information on biological vulnerability and threats to support issuance of a proposed rule to list.

L—Species we added to the Lists of Endangered and Threatened Wildlife and Plants.

M—Species we mistakenly included as candidates or proposed species in the last notice of review.

N—Species that are not listable entities based on the ESA's definition of ''species'' and current taxonomic understanding.

U—Species that are not subject to the degree of threats sufficient to warrant issuance of a proposed listing or continuance of candidate status due, in part or totally, to conservation efforts that remove or reduce the threats to the species.

X—Species we believe to be extinct.

The columns describing lead region, scientific name, family, common name, and historical range include information as previously described for Table 1.

Request for Information

We request you submit any further information on the species named in this notice as soon as possible or whenever it becomes available. We are particularly interested in any information:

(1) Indicating that we should add a species to the list of candidate species;

(2) Indicating that we should remove a species from candidate status;

(3) Recommending areas that we should designate as critical habitat for a species, or indicating that designation of critical habitat would not be prudent for a species;

(4) Documenting threats to any of the included species;

(5) Describing the immediacy or magnitude of threats facing candidate species;

(6) Pointing out taxonomic or nomenclature changes for any of the species;

(7) Suggesting appropriate common names; and

(8) Noting any mistakes, such as errors in the indicated historical ranges.

Submit information, materials, or comments regarding a particular species to the Regional Director of the Region identified as having the lead responsibility for that species. The regional addresses follow:

Region 1. Hawaii, Idaho, Oregon, Washington, American Samoa, Guam, and Commonwealth of the Northern Mariana Islands. Regional Director (TE), U.S. Fish and Wildlife Service, Eastside Federal Complex, 911 N.E. 11th Avenue, Portland, OR 97232–4181 (503/231–6158).

Region 2. Arizona, New Mexico, Oklahoma, and Texas. Regional Director (TE), U.S. Fish and Wildlife Service, 500 Gold Avenue SW., Room 4012, Albuquerque, NM 87102 (505/248–6920).

Region 3. Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio, and Wisconsin. Regional Director (TE), U.S. Fish and Wildlife Service, 5600 American Blvd. West, Suite 990, Bloomington, MN 55437–1458 (612/713–5334).

Region 4. Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Puerto Rico, and the U.S. Virgin Islands. Regional Director (TE), U.S. Fish and Wildlife Service, 1875 Century Boulevard, Suite 200, Atlanta, GA 30345 (404/679–4156).

Region 5. Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, Virginia, and West Virginia. Regional Director (TE), U.S. Fish and Wildlife Service, 300 Westgate Center Drive, Hadley, MA 01035–9589 (413/253–8615).

Region 6. Colorado, Kansas, Montana, Nebraska, North Dakota, South Dakota, Utah, and Wyoming. Regional Director (TE), U.S. Fish and Wildlife Service, P.O. Box 25486, Denver Federal Center, Denver, CO 80225–0486 (303/236–7400).

Region 7. Alaska. Regional Director (TE), U.S. Fish and Wildlife Service, 1011 East Tudor Road, Anchorage, AK 99503–6199 (907/786–3505).

Region 8. California and Nevada. Regional Director (TE), U.S. Fish and Wildlife Service, 2800 Cottage Way, Suite W2606, Sacramento, CA 95825 (916/414–6464).

We will provide information received in response to the previous CNOR to the Region having lead responsibility for each candidate species mentioned in the submission. We will likewise consider all information provided in response to this CNOR in deciding whether to propose species for listing and when to undertake necessary listing actions (including whether emergency listing under section 4(b)(7) of the ESA is appropriate). Information and comments we receive will become part of the administrative record for the species, which we maintain at the appropriate Regional Office.

Before including your address, phone number, e-mail address, or other personal identifying information in your submission, be advised that your entire submission—including your personal identifying information—may be made publicly available at any time. Although you can ask us in your submission to withhold from public review your personal indentifying information, we cannot guarantee that we will be able to do so.

Authority

This notice is published under the authority of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.).

Dated: October 7, 2011.

Signed:

Gregory E. Siekaniec,

Deputy Director, Fish and Wildlife Service.

TABLE 1—CANDIDATE NOTICE OF REVIEW (ANIMALS AND PLANTS)

[Note: See end of **SUPPLEMENTARY INFORMATION** for an explanation of symbols used in this table]

Status		Lead region	Scientific name	Family	Common name	Historical range
Category	Priority					
MAMMALS						
C*	2	R4	*Eumops floridanus*	Molossidae	Bat, Florida bonneted	U.S.A. (FL).
C*	3	R1	*Emballonura semicaudata rotensis*.	Emballonuridae	Bat, Pacific sheath-tailed (Mariana Islands subspecies).	U.S.A. (GU, CNMI).

TABLE 1—CANDIDATE NOTICE OF REVIEW (ANIMALS AND PLANTS)—Continued

[Note: See end of **SUPPLEMENTARY INFORMATION** for an explanation of symbols used in this table]

Status		Lead region	Scientific name	Family	Common name	Historical range
Category	Priority					
C*	3	R1	*Emballonura semicaudata semicaudata.*	Emballonuridae	Bat, Pacific sheath-tailed (American Samoa DPS).	U.S.A. (AS), Fiji, Independent Samoa, Tonga, Vanuatu.
C*	2	R5	*Sylvilagus transitionalis*	Leporidae	Cottontail, New England	U.S.A. (CT, MA, ME, NH, NY, RI, VT).
C*	6	R8	*Martes pennanti*	Mustelidae	Fisher (west coast DPS)	U.S.A. (CA, CT, IA, ID, IL, IN, KY, MA, MD, ME, MI, MN, MT, ND, NH, NJ, NY, OH, OR, PA, RI, TN, UT, VA, VT, WA, WI, WV, WY), Canada.
C*	3	R2	*Zapus hudsonius luteus*	Zapodidae	Mouse, New Mexico meadow jumping.	U.S.A. (AZ, CO, NM).
C*	3	R1	*Thomomys mazama couchi.*	Geomyidae	Pocket gopher, Shelton	U.S.A. (WA).
C*	3	R1	*Thomomys mazama douglasii.*	Geomyidae	Pocket gopher, Brush Prairie.	U.S.A. (WA).
C*	3	R1	*Thomomys mazama glacialis.*	Geomyidae	Pocket gopher, Roy Prairie.	U.S.A. (WA).
C*	3	R1	*Thomomys mazama louiei.*	Geomyidae	Pocket gopher, Cathlamet.	U.S.A. (WA).
C*	3	R1	*Thomomys mazama melanops.*	Geomyidae	Pocket gopher, Olympic	U.S.A. (WA).
C*	3	R1	*Thomomys mazama pugetensis.*	Geomyidae	Pocket gopher, Olympia	U.S.A. (WA).
C*	3	R1	*Thomomys mazama tacomensis.*	Geomyidae	Pocket gopher, Tacoma	U.S.A. (WA).
C*	3	R1	*Thomomys mazama tumuli.*	Geomyidae	Pocket gopher, Tenino	U.S.A. (WA).
C*	3	R1	*Thomomys mazama yelmensis.*	Geomyidae	Pocket gopher, Yelm	U.S.A. (WA).
C*	3	R6	*Cynomys gunnisoni*	Sciuridae	Prairie dog, Gunnison's (populations in central and south-central Colorado, north-central New Mexico).	U.S.A. (CO, NM).
C*	9	R1	*Spermophilus brunneus endemicus.*	Sciuridae	Squirrel, Southern Idaho ground.	U.S.A. (ID).
C*	5	R1	*Spermophilus washingtoni.*	Sciuridae	Squirrel, Washington ground.	U.S.A. (WA, OR).
C*	9	R7	*Odobenus rosmarus divergens.*	Odobenidae	Walrus, Pacific	U.S.A. (AK), Canada, Russia.
C*	6	R6	*Gulo gulo luscus*	Mustelidae	Wolverine, North American (Contiguous U.S. DPS).	U.S.A. (CA, CO, ID, MT, OR, UT, WA, WY).
			BIRDS			
C*	3	R1	*Porzana tabuensis*	Rallidae	Crake, spotless (American Samoa DPS).	U.S.A. (AS), Australia, Fiji, Independent Samoa, Marquesas, Philippines, Society Islands, Tonga.
C*	3	R8	*Coccyzus americanus*	Cuculidae	Cuckoo, yellow-billed (Western U.S. DPS).	U.S.A. (Lower 48 States), Canada, Mexico, Central and South America.
C*	9	R1	*Gallicolumba stairi*	Columbidae	Ground-dove, friendly (American Samoa DPS).	U.S.A. (AS), Independent Samoa.
C*	3	R1	*Eremophila alpestris strigata.*	Alaudidae	Horned lark, streaked	U.S.A. (OR, WA), Canada (BC).
C*	3	R5	*Calidris canutus rufa*	Scolopacidae	Knot, red	U.S.A. (Atlantic coast), Canada, South America.

TABLE 1—CANDIDATE NOTICE OF REVIEW (ANIMALS AND PLANTS)—Continued

[Note: See end of **SUPPLEMENTARY INFORMATION** for an explanation of symbols used in this table]

Status		Lead region	Scientific name	Family	Common name	Historical range
Category	Priority					
C*	8	R7	*Gavia adamsii*	Gaviidae	Loon, yellow-billed	U.S.A. (AK), Canada, Norway, Russia, coastal waters of southern Pacific and North Sea.
C*	8	R7	*Brachyramphus brevirostris*.	Alcidae	Murrelet, Kittlitz's	U.S.A. (AK), Russia.
C*	5	R8	*Synthliboramphus hypoleucus*.	Alcidae	Murrelet, Xantus's	U.S.A. (CA), Mexico.
C*	8	R6	*Anthus spragueii*	Motacillidae	Pipit, Sprauge's	U.S.A. (AL, AR, AZ, CA, GA, LA, MA, MI, MN, MS, MT, ND, OH, OK, SC, SD, TX), Canada, Mexico.
C*	2	R2	*Tympanuchus pallidicinctus*.	Phasianidae	Prairie-chicken, lesser	U.S.A. (CO, KA, NM, OK, TX).
C*	8	R6	*Centrocercus urophasianus*.	Phasianidae	Sage-grouse, greater	U.S.A. (AZ, CA, CO, ID, MT, ND, NE, NV, OR, SD, UT, WA, WY), Canada (AB, BC, SK).
C*	3	R8	*Centrocercus urophasianus*.	Phasianidae	Sage-grouse, greater (Bi-State DPS).	U.S.A. (AZ, CA, CO, ID, MT, ND, NE, NV, OR, SD, UT, WA, WY), Canada (AB, BC, SK).
C*	6	R1	*Centrocercus urophasianus*.	Phasianidae	Sage-grouse, greater (Columbia Basin DPS).	U.S.A. (AZ, CA, CO, ID, MT, ND, NE, NV, OR, SD, UT, WA, WY), Canada (AB, BC, SK).
C*	2	R6	*Centrocercus minimus*	Phasianidae	Sage-grouse, Gunnison	U.S.A. (AZ, CO, NM, UT).
C*	3	R1	*Oceanodroma castro*	Hydrobatidae	Storm-petrel, band-rumped (Hawaii DPS).	U.S.A. (HI), Atlantic Ocean, Ecuador (Galapagos Islands), Japan.
C*	11	R4	*Dendroica angelae*	Emberizidae	Warbler, elfin-woods	U.S.A. (PR).
			REPTILES			
C*	3	R2	*Thamnophis eques megalops*.	Colubridae	Gartersnake, northern Mexican.	U.S.A. (AZ, NM, NV), Mexico.
PE	2	R2	*Sceloporus arenicolus*	Iguanidae	Lizard, sand dune	U.S.A. (TX, NM).
C*	8	R3	*Sistrurus catenatus*	Viperidae	Massasauga (= rattlesnake), eastern.	U.S.A. (IA, IL, IN, MI, MN, MO, NY, OH, PA, WI), Canada.
C*	3	R4	*Pituophis melanoleucus lodingi*.	Colubridae	Snake, black pine	U.S.A. (AL, LA, MS).
C*	5	R4	*Pituophis ruthveni*	Colubridae	Snake, Louisiana pine	U.S.A. (LA, TX).
C*	3	R2	*Chionactis occipitalis klauberi*.	Colubridae	Snake, Tucson shovel-nosed.	U.S.A. (AZ).
C*	6	R2	*Gopherus agassizii*	Testudinidae	Tortoise, desert (Sonoran DPS).	U.S.A. (AZ, CA, NV, UT).
C*	8	R4	*Gopherus polyphemus*	Testudinidae	Tortoise, gopher (eastern population).	U.S.A. (AL, FL, GA, LA, MS, SC).
C*	3	R2	*Kinosternon sonoriense longifemorale*.	Kinosternidae	Turtle, Sonoyta mud	U.S.A. (AZ), Mexico.
			AMPHIBIANS			
C*	9	R8	*Rana luteiventris*	Ranidae	Frog, Columbia spotted (Great Basin DPS).	U.S.A. (AK, ID, MT, NV, OR, UT, WA, WY), Canada (BC).
C*	3	R8	*Rana muscosa*	Ranidae	Frog, mountain yellow-legged (Sierra Nevada DPS).	U.S.A (CA, NV).
C*	2	R1	*Rana pretiosa*	Ranidae	Frog, Oregon spotted	U.S.A. (CA, OR, WA), Canada (BC).
C*	8	R8	*Lithobates onca*	Ranidae	Frog, relict leopard	U.S.A. (AZ, NV, UT).
PE	3	R3	*Cryptobranchus alleganiensis bishopi*.	Crytobranchidae	Hellbender, Ozark	U.S.A. (AR, MO).

TABLE 1—CANDIDATE NOTICE OF REVIEW (ANIMALS AND PLANTS)—Continued

[Note: See end of **SUPPLEMENTARY INFORMATION** for an explanation of symbols used in this table]

Status		Lead region	Scientific name	Family	Common name	Historical range
Category	Priority					
C*	8	R4	*Notophthalmus perstriatus.*	Salamandridae	Newt, striped	U.S.A. (FL, GA).
C*	2	R2	*Eurycea waterlooensis*	Plethodontidae	Salamander, Austin blind	U.S.A. (TX).
C*	8	R4	*Gyrinophilus gulolineatus*	Plethodontidae	Salamander, Berry Cave	U.S.A. (TN).
C*	8	R2	*Eurycea naufragia*	Plethodontidae	Salamander, Georgetown.	U.S.A. (TX).
C*	2	R2	*Plethodon neomexicanus*	Plethodontidae	Salamander, Jemez Mountains.	U.S. A. (NM).
C*	8	R2	*Eurycea tonkawae*	Plethodontidae	Salamander, Jollyville Plateau.	U.S.A. (TX).
C*	2	R2	*Eurycea chisholmensis*	Plethodontidae	Salamander, Salado	U.S.A. (TX).
C*	11	R8	*Anaxyrus canorus*	Bufonidae	Toad, Yosemite	U.S.A. (CA).
C	3	R2	*Hyla wrightorum*	Hylidae	Treefrog, Arizona (Huachuca/Canelo DPS).	U.S.A. (AZ), Mexico (Sonora).
C*	8	R4	*Necturus alabamensis*	Proteidae	Waterdog, black warrior (=Sipsey Fork).	U.S.A. (AL).
			FISHES			
C*	8	R2	*Gila nigra*	Cyprinidae	Chub, headwater	U.S.A. (AZ, NM).
C*	7	R6	*Iotichthys phlegethontis*	Cyprinidae	Chub, least	U.S.A. (UT).
C*	9	R2	*Gila robusta*	Cyprinidae	Chub, roundtail (Lower Colorado River Basin DPS).	U.S.A. (AZ, CO, NM, UT, WY).
C*	11	R6	*Etheostoma cragini*	Percidae	Darter, Arkansas	U.S.A. (AR, CO, KS, MO, OK).
C	2	R5	*Crystallaria cincotta*	Percidae	Darter, diamond	U.S.A. (KY, OH, TN, WV).
C	3	R4	*Etheostoma sagitta spilotum.*	Percidae	Darter, Kentucky arrow	U.S.A. (KY).
C*	8	R4	*Percina aurora*	Percidae	Darter, Pearl	U.S.A. (LA, MS).
C*	3	R6	*Thymallus arcticus*	Salmonidae	Grayling, Arctic (upper Missouri River DPS).	U.S.A. (AK, MI, MT, WY), Canada, northern Asia, northern Europe.
C*	5	R4	*Moxostoma sp.*	Catostomidae	Redhorse, sicklefin	U.S.A. (GA, NC, TN).
C*	2	R3	*Cottus sp.*	Cottidae	Sculpin, grotto	U.S.A. (MO).
C*	5	R2	*Notropis oxyrhynchus*	Cyprinidae	Shiner, sharpnose	U.S.A. (TX).
C*	5	R2	*Notropis buccula*	Cyprinidae	Shiner, smalleye	U.S.A. (TX).
C*	3	R2	*Catostomus discobolus yarrowi.*	Catostomidae	Sucker, Zuni bluehead	U.S.A. (AZ, NM).
PSAT	N/A	R1	*Salvelinus malma*	Salmonidae	Trout, Dolly Varden	U.S.A. (AK, WA), Canada, East Asia.
C*	9	R2	*Oncorhynchus clarki virginalis.*	Salmonidae	Trout, Rio Grande cutthroat.	U.S.A. (CO, NM).
			CLAMS			
PE	5	R4	*Villosa choctawensis*	Unionidae	Bean, Choctaw	U.S.A. (AL, FL).
PE	2	R3	*Villosa fabalis*	Unionidae	Bean, rayed	U.S.A. (IL, IN, KY, MI, NY, OH, TN, PA, VA, WV), Canada (ON).
PE	2	R4	*Fusconaia rotulata*	Unionidae	Ebonyshell, round	U.S.A. (AL, FL).
C*	8	R2	*Popenaias popei*	Unionidae	Hornshell, Texas	U.S.A. (NM, TX), Mexico.
C*	2	R4	*Ptychobranchus subtentum.*	Unionidae	Kidneyshell, fluted	U.S.A. (AL, KY, TN, VA).
PE	2	R4	*Ptychobranchus jonesi*	Unionidae	Kidneyshell, southern	U.S.A. (AL, FL).
C*	2	R4	*Lampsilis rafinesqueana*	Unionidae	Mucket, Neosho	U.S.A. (AR, KS, MO, OK).
PE	2	R3	*Plethobasus cyphyus*	Unionidae	Mussel, sheepnose	U.S.A. (AL, IA, IL, IN, KY, MN, MO, MS, OH, PA, TN, VA, WI, WV).
PE	2	R4	*Margaritifera marrianae*	Margaritiferidae	Pearlshell, Alabama	U.S.A. (AL).
C*	2	R4	*Lexingtonia dolabelloides*	Unionidae	Pearlymussel, slabside	U.S.A. (AL, KY, TN, VA).
PT	5	R4	*Pleurobema strodeanum*	Unionidae	Pigtoe, fuzzy	U.S.A. (AL, FL).
PT	5	R4	*Fusconaia escambia*	Unionidae	Pigtoe, narrow	U.S.A. (AL, FL).

TABLE 1—CANDIDATE NOTICE OF REVIEW (ANIMALS AND PLANTS)—Continued

[Note: See end of **SUPPLEMENTARY INFORMATION** for an explanation of symbols used in this table]

Status		Lead region	Scientific name	Family	Common name	Historical range
Category	Priority					
PT	11	R4	*Fusconaia (=Quincuncina) burkei.*	Unionidae	Pigtoe, tapered	U.S.A. (AL, FL).
C*	9	R4	*Quadrula cylindrica cylindrica.*	Unionidae	Rabbitsfoot	U.S.A. (AL, AR, GA, IN, IL, KS, KY, LA, MS, MO, OK, OH, PA, TN, WV).
PE	5	R4	*Hamiota (=Lampsilis) australis.*	Unionidae	Sandshell, southern	U.S.A. (AL, FL).
PE		R3	*Epioblasma triquetra*	Unionidae	Snuffbox	U.S.A. (IN, MI, NY, OH, PA, WV), Canada (ON).
PE	4	R3	*Cumberlandia monodonta.*	Margaritiferidae	Spectaclecase	U.S.A. (AL, AR, IA, IN, IL, KS, KY, MO, MN, NE, OH, TN, VA, WI, WV).
PE	2	R4	*Elliptio spinosa*	Unionidae	Spinymussel, Altamaha	U.S.A. (GA).
			SNAILS			
C*	8	R4	*Elimia melanoides*	Pleuroceridae	Mudalia, black	U.S.A. (AL).
C*	2	R4	*Planorbella magnifica*	Planorbidae	Ramshorn, magnificent	U.S.A. (NC).
C*	2	R1	*Ostodes strigatus*	Potaridae	Sisi snail	U.S.A. (AS).
C*	2	R2	*Pseudotryonia adamantina.*	Hydrobiidae	Snail, Diamond Y Spring	U.S.A. (TX).
C*	2	R1	*Samoana fragilis*	Partulidae	Snail, fragile tree	U.S.A. (GU, MP).
C*	2	R1	*Partula radiolata*	Partulidae	Snail, Guam tree	U.S.A. (GU).
C*	2	R1	*Partula gibba*	Partulidae	Snail, Humped tree	U.S.A. (GU, MP).
C*	2	R1	*Partulina semicarinata*	Achatinellidae	Snail, Lanai tree	U.S.A. (HI).
C*	2	R1	*Partulina variabilis*	Achatinellidae	Snail, Lanai tree	U.S.A. (HI).
C*	2	R1	*Partula langfordi*	Partulidae	Snail, Langford's tree	U.S.A. (MP).
C*	2	R2	*Cochliopa texana*	Hydrobiidae	Snail, Phantom cave	U.S.A. (TX).
C*	2	R1	*Newcombia cumingi*	Achatinellidae	Snail, Newcomb's tree	U.S.A. (HI).
C*	2	R1	*Eua zebrina*	Partulidae	Snail, Tutuila tree	U.S.A. (AS).
PE	2	R2	*Pyrgulopsis chupaderae*	Hydrobiidae	Springsnail, Chupadera	U.S.A. (NM).
C*	11	R8	*Pyrgulopsis notidicola*	Hydrobiidae	Springsnail, elongate mud meadows.	U.S.A. (NV).
C*	2	R2	*Tryonia circumstriata (=stocktonensis).*	Hydrobiidae	Springsnail, Gonzales	U.S.A. (TX).
C*	11	R2	*Pyrgulopsis thompsoni*	Hydrobiidae	Springsnail, Huachuca	U.S.A. (AZ), Mexico.
C*	8	R2	*Pyrgulopsis morrisoni*	Hydrobiidae	Springsnail, Page	U.S.A. (AZ).
C*	2	R2	*Tryonia cheatumi*	Hydrobiidae	Springsnail (=Tryonia), Phantom.	U.S.A. (TX).
PE	2	R2	*Pyrgulopsis bernardina*	Hydrobiidae	Springsnail, San Bernardino.	U.S.A. (AZ), Mexico (Sonora).
PE	2	R2	*Pyrgulopsis trivialis*	Hydrobiidae	Springsnail, Three Forks	U.S.A. (AZ).
C*	5	R2	*Sonorella rosemontensis*	Helminthoglyptidae	Talussnail, Rosemont	U.S.A. (AZ).
			INSECTS			
C*	2	R1	*Hylaeus anthracinus*	Colletidae	Bee, Hawaiian yellow-faced.	U.S.A. (HI).
C*	2	R1	*Hylaeus assimulans*	Colletidae	Bee, Hawaiian yellow-faced.	U.S.A. (HI).
C*	2	R1	*Hylaeus facilis*	Colletidae	Bee, Hawaiian yellow-faced.	U.S.A. (HI).
C*	2	R1	*Hylaeus hilaris*	Colletidae	Bee, Hawaiian yellow-faced.	U.S.A. (HI).
C*	2	R1	*Hylaeus kuakea*	Colletidae	Bee, Hawaiian yellow-faced.	U.S.A. (HI).
C*	2	R1	*Hylaeus longiceps*	Colletidae	Bee, Hawaiian yellow-faced.	U.S.A. (HI).
C*	2	R1	*Hylaeus mana*	Colletidae	Bee, Hawaiian yellow-faced.	U.S.A. (HI).
C*	3	R8	*Plebejus shasta charlestonensis.*	Lycaenidae	Blue, Mt. Charleston	U.S.A. (NV).
C	3	R4	*Strymon acis bartrami*	Lycaenidae	Butterfly, Bartram's hairstreak.	U.S.A. (FL).

TABLE 1—CANDIDATE NOTICE OF REVIEW (ANIMALS AND PLANTS)—Continued

[Note: See end of **SUPPLEMENTARY INFORMATION** for an explanation of symbols used in this table]

Status		Lead region	Scientific name	Family	Common name	Historical range
Category	Priority					
PSAT		R4	*Leptotes cassius theonus*.	Lycaenidae	Butterfly, cassius blue	U.S.A. (FL), Bahamas, Greater Antilles, Cayman Islands.
PSAT		R4	*Hemiargus ceraunus antibubastus*.	Lycaenidae	Butterfly, ceraunus blue	U.S.A. (FL), Bahamas.
C	3	R4	*Anaea troglodyta floridalis*.	Nymphalidae	Butterfly, Florida leafwing.	U.S.A. (FL).
C*	3	R1	*Hypolimnas octucula mariannensis*.	Nymphalidae	Butterfly, Mariana eight-spot.	U.S.A. (GU, MP).
C*	2	R1	*Vagrans egistina*	Nymphalidae	Butterfly, Mariana wandering.	U.S.A. (GU, MP).
PE	3	R4	*Cyclargus thomasi bethunebakeri*.	Lycaenidae	Butterfly, Miami blue	U.S.A. (FL), Bahamas.
PSAT		R4	*Cyclargus ammon*	Lycaenidae	Butterfly, Nickerbean blue.	U.S.A. (FL), Bahamas, Cuba.
C*	2	R4	*Atlantea tulita*	Nymphalidae	Butterfly, Puerto Rican harlequin.	U.S.A. (PR).
C*	5	R4	*Glyphopsyche sequatchie*.	Limnephilidae	Caddisfly, Sequatchie	U.S.A. (TN).
C	5	R4	*Pseudanophthalmus insularis*.	Carabidae	Cave beetle, Baker Station (=insular).	U.S.A. (TN).
C*	5	R4	*Pseudanophthalmus caecus*.	Carabidae	Cave beetle, Clifton	U.S.A. (KY).
C*	11	R4	*Pseudanophthalmus colemanensis*.	Carabidae	Cave beetle, Coleman	U.S.A. (TN).
C	5	R4	*Pseudanophthalmus fowlerae*.	Carabidae	Cave beetle, Fowler's	U.S.A. (TN).
C*	5	R4	*Pseudanophthalmus frigidus*.	Carabidae	Cave beetle, icebox	U.S.A. (KY).
C	5	R4	*Pseudanophthalmus tiresias*.	Carabidae	Cave beetle, Indian Grave Point (=Soothsayer).	U.S.A. (TN).
C*	5	R4	*Pseudanophthalmus inquisitor*.	Carabidae	Cave beetle, inquirer	U.S.A. (TN).
C*	5	R4	*Pseudanophthalmus troglodytes*.	Carabidae	Cave beetle, Louisville	U.S.A. (KY).
C	5	R4	*Pseudanophthalmus paulus*.	Carabidae	Cave beetle, Noblett's	U.S.A. (TN).
C*	5	R4	*Pseudanophthalmus parvus*.	Carabidae	Cave beetle, Tatum	U.S.A. (KY).
C*	3	R1	*Euphydryas editha taylori*.	Nymphalidae	Checkerspot butterfly, Taylor's (=Whulge).	U.S.A. (OR, WA), Canada (BC).
C*	5	R8	*Hermelycaena [Lycaena] hermes*.	Lycaenidae	Copper, Hermes	U.S.A. (CA).
PE	9	R1	*Megalagrion nigrohamatum nigrolineatum*.	Coenagrionidae	Damselfly, blackline Hawaiian.	U.S.A. (HI).
PE	2	R1	*Megalagrion leptodemas*	Coenagrionidae	Damselfly, crimson Hawaiian.	U.S.A. (HI).
PE	2	R1	*Megalagrion oceanicum*	Coenagrionidae	Damselfly, oceanic Hawaiian.	U.S.A. (HI).
C*	8	R1	*Megalagrion xanthomelas*.	Coenagrionidae	Damselfly, orangeblack Hawaiian.	U.S.A. (HI).
C	5	R8	*Ambrysus funebris*	Naucoridae	Naucorid bug (=Furnace Creek), Nevares Spring.	U.S.A. (CA).
C*	2	R1	*Drosophila digressa*	Drosophilidae	fly, Hawaiian Picture-wing.	U.S.A. (HI).
C*	8	R2	*Heterelmis stephani*	Elmidae	Riffle beetle, Stephan's	U.S.A. (AZ).
C*	8	R3	*Hesperia dacotae*	Hesperiidae	Skipper, Dakota	U.S.A. (MN, IA, SD, ND, IL), Canada.
C*	8	R1	*Polites mardon*	Hesperiidae	Skipper, Mardon	U.S.A. (CA, OR, WA).
C	2	R3	*Oarisma poweshiek*	Hesperiidae	Skipperling, Poweshiek	U.S.A. (IA, IL, IN, MI, MN, ND, SD, WI), Canada (MB).
C*	5	R6	*Lednia tumana*	Nemouridae	Stonefly, melwater lednian.	U.S.A. (MT).
C*	2	R6	*Cicindela albissima*	Cicindelidae	Tiger beetle, Coral Pink Sand Dunes.	U.S.A. (UT).

TABLE 1—CANDIDATE NOTICE OF REVIEW (ANIMALS AND PLANTS)—Continued

[Note: See end of **SUPPLEMENTARY INFORMATION** for an explanation of symbols used in this table]

Status		Lead region	Scientific name	Family	Common name	Historical range
Category	Priority					
C*	5	R4	*Cicindela highlandensis*	Cicindelidae	Tiger beetle, highlands	U.S.A. (FL).
ARACHNIDS						
C*	8	R2	*Cicurina wartoni*	Dictynidae	Meshweaver, Warton's cave.	U.S.A. (TX).
CRUSTACEANS						
C	2	R2	*Gammarus hyalleloides*	Gammaridae	Amphipod, diminutive	U.S.A. (TX).
C	8	R5	*Stygobromus kenki*	Crangonyctidae	Amphipod, Kenk's	U.S.A. (DC).
C*	5	R1	*Metabetaeus lohena*	Alpheidae	Shrimp, anchialine pool	U.S.A. (HI).
C*	5	R1	*Palaemonella burnsi*	Palaemonidae	Shrimp, anchialine pool	U.S.A. (HI).
C*	5	R1	*Procaris hawaiana*	Procarididae	Shrimp, anchialine pool	U.S.A. (HI).
C*	4	R1	*Vetericaris chaceorum*	Procaridae	Shrimp, anchialine pool	U.S.A. (HI).
FLOWERING PLANTS						
C*	11	R8	*Abronia alpina*	Nyctaginaceae	Sand-verbena, Ramshaw Meadows.	U.S.A. (CA).
C*	8	R4	*Agave eggersiana*	Agavaceae	No common name	U.S.A. (VI).
C*	8	R4	*Arabis georgiana*	Brassicaceae	Rockcress, Georgia	U.S.A. (AL, GA).
PE		R8	*Arctostaphylos franciscana.*	Ericaceae	Manzanita, Franciscan	U.S.A. (CA).
C*	11	R4	*Argythamnia blodgettii*	Euphorbiaceae	Silverbush, Blodgett's	U.S.A. (FL).
C*	3	R1	*Artemisia borealis var. wormskioldii.*	Asteraceae	Wormwood, northern	U.S.A. (OR, WA).
C*	5	R1	*Astragalus anserinus*	Fabaceae	Milkvetch, Goose Creek	U.S.A. (ID, NV, UT).
C	3	R1	*Astragalus cusickii var. packardiae.*	Fabaceae	Milkvetch, Packard's	U.S.A. (ID).
C*	8	R6	*Astragalus microcymbus*	Fabaceae	Milkvetch, skiff	U.S.A. (CO).
C*	8	R6	*Astragalus schmolliae*	Fabaceae	Milkvetch, Schmoll	U.S.A. (CO).
C*	11	R6	*Astragalus tortipes*	Fabaceae	Milkvetch, Sleeping Ute	U.S.A. (CO).
PE	2	R1	*Bidens amplectens*	Asteraceae	Ko'oko'olau	U.S.A. (HI).
C*	3	R1	*Bidens campylotheca pentamera.*	Asteraceae	Ko'oko'olau	U.S.A. (HI).
C*	3	R1	*Bidens campylotheca waihoiensis.*	Asteraceae	Ko'oko'olau	U.S.A. (HI).
C*	8	R1	*Bidens conjuncta*	Asteraceae	Ko'oko'olau	U.S.A. (HI).
C*	3	R1	*Bidens micrantha ctenophylla.*	Asteraceae	Ko'oko'olau	U.S.A. (HI).
C*	8	R6	*Boechera (Arabis) pusilla*	Brassicaceae	Rockcress, Fremont County or small.	U.S.A. (WY).
C*	8	R4	*Brickellia mosieri*	Asteraceae	Brickell-bush, Florida	U.S.A. (FL).
C*	2	R1	*Calamagrostis expansa*	Poaceae	Reedgrass, Maui	U.S.A. (HI).
C*	2	R1	*Calamagrostis hillebrandii.*	Poaceae	Reedgrass, Hillebrand's	U.S.A. (HI).
C*	5	R8	*Calochortus persistens*	Liliaceae	Mariposa lily, Siskiyou	U.S.A. (CA, OR).
C*	2	R1	*Canavalia pubescens*	Fabaceae	'Awikiwiki	U.S.A. (HI).
C*	8	R1	*Castilleja christii*	Scrophulariaceae	Paintbrush, Christ's	U.S.A. (ID).
C*	9	R4	*Chamaecrista lineata var. keyensis.*	Fabaceae	Pea, Big Pine partridge	U.S.A. (FL).
C*	12	R4	*Chamaesyce deltoidea pinetorum.*	Euphorbiaceae	Sandmat, pineland	U.S.A. (FL).
C*	9	R4	*Chamaesyce deltoidea serpyllum.*	Euphorbiaceae	Spurge, wedge	U.S.A. (FL).
C*	6	R8	*Chorizanthe parryi var. fernandina.*	Polygonaceae	Spineflower, San Fernando Valley.	U.S.A. (CA).
C*	2	R4	*Chromolaena frustrata*	Asteraceae	Thoroughwort, Cape Sable.	U.S.A. (FL).
C*	8	R2	*Cirsium wrightii*	Asteraceae	Thistle, Wright's	U.S.A. (AZ, NM), Mexico.
C*	2	R4	*Consolea corallicola*	Cactaceae	Cactus, Florida semaphore.	U.S.A. (FL).
C*	5	R4	*Cordia rupicola*	Boraginaceae	No common name	U.S.A. (PR), Anegada.
C*	2	R1	*Cyanea asplenifolia*	Campanulaceae	Haha	U.S.A. (HI).
PE	2	R1	*Cyanea calycina*	Campanulaceae	Haha	U.S.A. (HI).
C*	2	R1	*Cyanea kunthiana*	Campanulaceae	Haha	U.S.A. (HI).
PE	2	R1	*Cyanea lanceolata*	Campanulaceae	Haha	U.S.A. (HI).

TABLE 1—CANDIDATE NOTICE OF REVIEW (ANIMALS AND PLANTS)—Continued

[Note: See end of **SUPPLEMENTARY INFORMATION** for an explanation of symbols used in this table]

Status		Lead region	Scientific name	Family	Common name	Historical range
Category	Priority					
C*	2	R1	*Cyanea obtusa*	Campanulaceae	Haha	U.S.A. (HI).
PE		R1	*Cyanea purpurellifolia*	Campanulaceae	Haha	U.S.A. (HI).
C*	2	R1	*Cyanea tritomantha*	Campanulaceae	ʻAku	U.S.A. (HI).
C*	2	R1	*Cyrtandra filipes*	Gesneriaceae	Haʻiwale	U.S.A. (HI).
PE		R1	*Cyrtandra gracilis*	Gesneriaceae	Haʻiwale	U.S.A. (HI).
PE	2	R1	*Cyrtandra kaulantha*	Gesneriaceae	Haʻiwale	U.S.A. (HI).
C*	2	R1	*Cyrtandra oxybapha*	Gesneriaceae	Haʻiwale	U.S.A. (HI).
PE	2	R1	*Cyrtandra sessilis*	Gesneriaceae	Haʻiwale	U.S.A. (HI).
PE		R1	*Cyrtandra waiolani*	Gesneriaceae	Haʻiwale	U.S.A. (HI).
C*	3	R4	*Dalea carthagenensis var. floridana.*	Fabaceae	Prairie-clover, Florida	U.S.A. (FL).
C*	5	R5	*Dichanthelium hirstii*	Poaceae	Panic grass, Hirst Brothers'.	U.S.A. (DE, GA, NC, NJ).
C*	5	R4	*Digitaria pauciflora*	Poaceae	Crabgrass, Florida pineland.	U.S.A. (FL).
C*	3	R2	*Echinomastus erectocentrus var. acunensis.*	Cactaceae	Cactus, Acuna	U.S.A. (AZ), Mexico.
C*	8	R2	*Erigeron lemmonii*	Asteraceae	Fleabane, Lemmon	U.S.A. (AZ).
C*	2	R1	*Eriogonum codium*	Polygonaceae	Buckwheat, Umtanum Desert.	U.S.A. (WA).
C*	6	R8	*Eriogonum corymbosum var. nilesii.*	Polygonaceae	Buckwheat, Las Vegas	U.S.A. (NV).
C	5	R8	*Eriogonum diatomaceum*	Polygonaceae	Buckwheat, Churchill Narrows.	U.S.A (NV).
C*	5	R8	*Eriogonum kelloggii*	Polygonaceae	Buckwheat, Red Mountain.	U.S.A. (CA).
C*	8	R6	*Eriogonum soredium*	Polygonaceae	Buckwheat, Frisco	U.S.A. (UT).
C*	2	R1	*Festuca hawaiiensis*	Poaceae	No common name	U.S.A. (HI).
C*	11	R2	*Festuca ligulata*	Poaceae	Fescue, Guadalupe	U.S.A. (TX), Mexico.
C*	2	R1	*Gardenia remyi*	Rubiaceae	Nanu	U.S.A. (HI).
C*	8	R1	*Geranium hanaense*	Geraniaceae	Nohoanu	U.S.A. (HI).
C*	8	R1	*Geranium hillebrandii*	Geraniaceae	Nohoanu	U.S.A. (HI).
C*	5	R4	*Gonocalyx concolor*	Ericaceae	No common name	U.S.A. (PR).
C	2	R4	*Harrisia aboriginum*	Cactaceae	Pricklyapple, aboriginal (shellmound applecactus).	U.S.A. (FL).
C*	5	R8	*Hazardia orcuttii*	Asteraceae	Orcutt's hazardia	U.S.A. (CA), Mexico.
C*	2	R1	*Hedyotis fluviatilis*	Rubiaceae	Kampuaʻa	U.S.A. (HI).
C*	8	R4	*Helianthus verticillatus*	Asteraceae	Sunflower, whorled	U.S.A. (AL, GA, TN).
C*	2	R2	*Hibiscus dasycalyx*	Malvaceae	Rose-mallow, Neches River.	U.S.A. (TX).
C*	5	R8	*Ivesia webberi*	Rosaceae	Ivesia, Webber	U.S.A. (CA, NV).
C*	3	R1	*Joinvillea ascendens ascendens.*	Joinvilleaceae	ʻOhe	U.S.A. (HI).
PE	2	R1	*Korthalsella degeneri*	Viscaceae	Hulumoa	U.S.A. (HI).
C*	5	R4	*Leavenworthia crassa*	Brassicaceae	Gladecress, unnamed	U.S.A. (AL).
C	3	R4	*Leavenworthia exigua var. laciniata.*	Brassicaceae	Gladecress, Kentucky	U.S.A. (KY).
C*	2	R2	*Leavenworthia texana*	Brassicaceae	Gladecress, Texas golden.	U.S.A. (TX).
C*	8	R6	*Lepidium ostleri*	Brassicaceae	Peppergrass, Ostler's	U.S.A. (UT).
C*	5	R4	*Linum arenicola*	Linaceae	Flax, sand	U.S.A. (FL).
C*	3	R4	*Linum carteri var. carteri*	Linaceae	Flax, Carter's small-flowered.	U.S.A. (FL).
PE	2	R1	*Melicope christophersenii.*	Rutaceae	Alani	U.S.A. (HI).
PE	2	R1	*Melicope hiiakae*	Rutaceae	Alani	U.S.A. (HI).
PE	2	R1	*Melicope makahae*	Rutaceae	Alani	U.S.A. (HI).
C	3	R8	*Mimulus fremontii var. vandenbergensis.*	Phrymaceae	Monkeyflower, Vandenberg.	U.S.A. (CA).
C*	2	R1	*Myrsine fosbergii*	Myrsinaceae	Kolea	U.S.A. (HI).
C*	2	R1	*Myrsine vaccinioides*	Myrsinaceae	Kolea	U.S.A. (HI).
C*	8	R5	*Narthecium americanum*	Liliaceae	Asphodel, bog	U.S.A. (DE, NC, NJ, NY, SC).
C*	2	R1	*Nothocestrum latifolium*	Solanaceae	ʻAiea	U.S.A. (HI).
C*	2	R1	*Ochrosia haleakalae*	Apocynaceae	Holei	U.S.A. (HI).

TABLE 1—CANDIDATE NOTICE OF REVIEW (ANIMALS AND PLANTS)—Continued

[Note: See end of **SUPPLEMENTARY INFORMATION** for an explanation of symbols used in this table]

Status		Lead region	Scientific name	Family	Common name	Historical range
Category	Priority					
C*	3	R2	*Pediocactus peeblesianus var. fickeiseniae.*	Cactaceae	Cactus, Fickeisen plains	U.S.A. (AZ).
PT	2	R6	*Penstemon grahamii*	Scrophulariaceae	Beardtongue, Graham's	U.S.A. (CO, UT).
C*	9	R6	*Penstemon scariosus var. albifluvis.*	Scrophulariaceae	Beardtongue, White River.	U.S.A. (CO, UT).
C*	2	R1	*Peperomia subpetiolata*	Piperaceae	'Ala 'ala wai nui	U.S.A. (HI).
C	5	R8	*Phacelia stellaris*	Hydrophyllaceae	Phacelia, Brand's	U.S.A. (CA), Mexico.
C*	2	R1	*Phyllostegia bracteata*	Lamiaceae	No common name	U.S.A. (HI).
C*	8	R1	*Phyllostegia floribunda*	Lamiaceae	No common name	U.S.A. (HI).
C*	9	R1	*Physaria douglasii tuplashensis.*	Brassicaceae	Bladderpod, White Bluffs	U.S.A. (WA).
C*	8	R4	*Physaria globosa*	Brassicaceae	Bladderpod, Short's	U.S.A. (IN, KY, TN).
C*	2	R6	*Pinus albicaulis*	Pinaceae	Pine, whitebark	U.S.A. (CA, ID, MT, NV, OR, WA, WY), Canada (AB, BC).
C*	8	R4	*Platanthera integrilabia*	Orchidaceae	Orchid, white fringeless	U.S.A. (AL, GA, KY, MS, NC, SC, TN, VA).
PE	3	R1	*Platydesma cornuta var. cornuta.*	Rutaceae	No common name	U.S.A. (HI).
PE	3	R1	*Platydesma cornuta var. decurrens.*	Rutaceae	No common name	U.S.A. (HI).
C*	2	R1	*Platydesma remyi*	Rutaceae	No common name	U.S.A. (HI).
C	2	R1	*Pleomele fernaldii*	Agavaceae	Hala pepe	U.S.A. (HI).
PE	2	R1	*Pleomele forbesii*	Agavaceae	Hala pepe	U.S.A. (HI).
C*	11	R8	*Potentilla basaltica*	Rosaceae	Cinquefoil, Soldier Meadow.	U.S.A. (NV).
C*	3	R1	*Pseudognaphalium (=Gnaphalium) sandwicensium var. molokaiense.*	Asteraceae	'Ena'ena	U.S.A. (HI).
PE	3	R1	*Psychotria hexandra oahuensis.*	Rubiaceae	Kopiko	U.S.A. (HI).
PE	2	R1	*Pteralyxia macrocarpa*	Apocynaceae	Kaulu	U.S.A. (HI).
C*	2	R1	*Ranunculus hawaiensis*	Ranunculaceae	Makou	U.S.A. (HI).
C*	2	R1	*Ranunculus mauiensis*	Ranunculaceae	Makou	U.S.A. (HI).
C*	8	R8	*Rorippa subumbellata*	Brassicaceae	Cress, Tahoe yellow	U.S.A. (CA, NV).
C*	2	R1	*Schiedea pubescens*	Caryophyllaceae	Ma'oli'oli	U.S.A. (HI).
C*	2	R1	*Schiedea salicaria*	Caryophyllaceae	No common name	U.S.A. (HI).
C*	5	R8	*Sedum eastwoodiae*	Crassulaceae	Stonecrop, Red Mountain.	U.S.A. (CA).
C*	2	R1	*Sicyos macrophyllus*	Cucurbitaceae	'Anunu	U.S.A. (HI).
C	12	R4	*Sideroxylon reclinatum austrofloridense.*	Sapotaceae	Bully, Everglades	U.S.A. (FL).
C*	2	R4	*Solanum conocarpum*	Solanaceae	Bacora, marron	U.S.A. (PR).
C*	8	R1	*Solanum nelsonii*	Solanaceae	Popolo	U.S.A. (HI).
C*	8	R4	*Solidago plumosa*	Asteraceae	Goldenrod, Yadkin River	U.S.A. (NC).
C*	2	R2	*Sphaeralcea gierischii*	Malvaceae	Mallow, Gierisch	U.S.A. (AZ, UT).
C*	2	R1	*Stenogyne cranwelliae*	Lamiaceae	No common name	U.S.A. (HI).
C	8	R2	*Streptanthus bracteatus*	Brassicaceae	Twistflower, bracted	U.S.A. (TX).
C*	8	R4	*Symphyotrichum georgianum.*	Asteraceae	Aster, Georgia	U.S.A. (AL, FL, GA, NC, SC).
PE		R1	*Tetraplasandra lydgatei*	Araliaceae	No common name	U.S.A. (HI).
C*	8	R6	*Trifolium friscanum*	Fabaceae	Clover, Frisco	U.S.A. (UT).
PE	2	R1	*Zanthoxylum oahuense*	Rutaceae	A'e	U.S.A. (HI).
FERNS AND ALLIES						
C*	8	R1	*Cyclosorus boydiae*	Thelypteridaceae	No common name	U.S.A. (HI).
PE	2	R1	*Doryopteris takeuchii*	Pteridaceae	No common name	U.S.A. (HI).
C*	2	R1	*Huperzia (= Phlegmariurus) stemmermanniae.*	Lycopodiaceae	Wawae'iole	U.S.A. (HI).
C*	3	R1	*Microlepia strigosa var. mauiensis (= Microlepia mauiensis).*	Dennstaedtiaceae	Palapalai	U.S.A. (HI).
C	3	R4	*Trichomanes punctatum floridanum.*	Hymenophyllaceae	Florida bristle fern	U.S.A. (FL)

TABLE 2—ANIMALS AND PLANTS FORMERLY CANDIDATES OR FORMERLY PROPOSED FOR LISTING

[Note: See end of **SUPPLEMENTARY INFORMATION** for an explanation of symbols used in this table]

Status		Lead region	Scientific name	Family	Common name	Historical range
Code	Expl.					
BIRDS						
Rp	A	R6	*Charadrius montanus*	Charadriidae	Plover, mountain	U.S.A. (AZ, CA, CO, KS, MT, ND, NE, NM, NV, OK, SD, TX, UT, WY), Canada (AB, SK), Mexico.
FISH						
E	L	R4	*Phoxinus saylori*	Cyprinidae	Dace, laurel	U.S.A. (TN).
E	L	R4	*Etheostoma susanae*	Percidae	Darter, Cumberland	U.S.A. (KY, TN).
E	L	R4	*Etheostoma phytophilum*	Percidae	Darter, rush	U.S.A. (AL).
E	L	R4	*Etheostoma moorei*	Percidae	Darter, yellowcheek	U.S.A (AR).
E	L	R4	*Noturus crypticus*	Ictaluridae	Madtom, chucky	U.S.A. (TN).
SNAILS						
Rc	A	R2	*Pyrgulopsis gilae*	Hydrobiidae	Springsnail, Gila	U.S.A. (NM).
Rc	A	R2	*Pyrgulopsis thermalis*	Hydrobiidae	Springsnail, New Mexico	U.S.A. (NM).
INSECTS						
T(S/A)	L	R4	*Leptotes cassius theonus*.	Lycaenidae	Butterfly, cassius blue	U.S.A. (FL), Bahamas, Greater Antilles, Cayman Islands.
T(S/A)	L	R4	*Hemiargus ceraunus antibubastus*.	Lycaenidae	Butterfly, ceraunus blue	U.S.A. (FL), Bahamas.
E	L[1]	R4	*Cyclargus thomasi bethunebakeri*.	Lycaenidae	Butterfly, Miami blue	U.S.A. (FL), Bahamas.
T(S/A)	L	R4	*Cyclargus ammon*	Lycaenidae	Butterfly, Nickerbean blue.	U.S.A. (FL), Bahamas, Cuba.
Rc	A	R1	*Nysius wekiuicola*	Lygaeidae	Bug, Wekiu	U.S.A. (HI).
E	L	R8	*Dinacoma caseyi*	Scarabidae	June beetle, Casey's	U.S.A. (CA).
FLOWERING PLANTS						
E	L	R6	*Ipomopsis polyantha*	Polemoniaceae	Skyrocket, Pagosa	U.S.A. (CO)
T	L	R6	*Penstemon debilis*	Scrophulariaceae	Beardtongue, Parachute	U.S.A. (CO)
T	L	R6	*Phacelia submutica*	Hydrophyllaceae	Phacelia, DeBeque	U.S.A. (CO)

[1] Emergency.

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BILLING CODE P