### Finding

### Louisville Cave Beetle

Based our review of the best available scientific and commercial information pertaining to the Act's five threat factors and our review of the species' status, we conclude that the Louisville cave beetle is not subject to the degree of threats sufficient to indicate that it is in danger of extinction (an endangered species), or likely to become endangered within the foreseeable future (a threatened species), throughout all of its range.

We evaluated the current range of the Louisville cave beetle to determine if there is any apparent geographic concentration of potential threats for this species. It has a relatively small range that is limited to four caves. We examined potential stressors including human visitation and disturbance, commercial and residential development, sources of water quality impairment, and small population size. We found no concentration of stressors that suggests that the species may be in danger of extinction in any portion of its range. Therefore, we find that listing the Louisville cave beetle as an endangered species or a threatened species under the Act throughout all or a significant portion of its range is not warranted at this time, and consequently we are removing it from candidate status.

# Tatum Cave Beetle

A review of the best available scientific and commercial information, leads us to believe that the Tatum Cave beetle is extinct, and, as such, it is not eligible for listing as an endangered species or a threatened species under the Act. Therefore, we did not further evaluate whether the Tatum Cave beetle is in danger of extinction throughout its range (an endangered species), likely to become in danger of extinction throughout its range in the foreseeable future (a threatened species), or whether the species is an endangered or threatened species in a significant portion of its range.

Therefore, we find that listing the Louisville cave beetle and Tatum Cave beetle as endangered or threatened species under the Act throughout all or a significant portion of their respective ranges is not warranted at this time, and consequently we are removing both species from candidate status.

As a result of the Service's 2011 multidistrict litigation settlement with the Center for Biological Diversity and WildEarth Guardians, the Service is required to submit a proposed listing rule or a not-warranted 12-month finding to the **Federal Register** by September 30, 2016 (In re: Endangered

Species Act Section 4 Deadline Litigation, No. 10-377 (EGS), MDL Docket No. 2165 (D.D.C. May 10, 2011)), for all 251 species that were included as candidate species in the Service's November 10, 2010, CNOR. This document satisfies the requirements of that settlement agreement for the Louisville cave beetle and Tatum Cave beetle, and constitutes the Service's 12month finding on the May 11, 2004, petition to list the Louisville cave beetle and Tatum Cave beetles as endangered or threatened species under the Act. A detailed discussion of the basis for this finding can be found in the Louisville cave beetle's and Tatum Cave beetle's species-specific assessment form and other supporting documents (see ADDRESSES, above).

## Relict Leopard Frog (Lithobates onca)

#### Previous Federal Actions

On May 9, 2002, the Service received a petition from the Center for Biological Diversity and Southern Utah Wilderness Alliance (SUWA) seeking to list the relict leopard frog and designate critical habitat, under the authority of the Act. The petition identified information regarding the species' ecology, historical and current distribution, present status, and actual and potential causes of decline.

Prior to receipt of the May 2002 petition, the Service was involved in coordinated conservation efforts for the relict leopard frog among multiple partners and was aware of the species' status. On June 13, 2002, the Service's CNOR determined the species (as *Rana onca*) warranted listing but that listing was precluded by higher priorities; therefore, it became a candidate species with an LPN of 5 (67 FR 40657).

In 2006, the species' LPN was lowered to 11, and remained at that LPN through the 2010 CNOR (see September 12, 2006 (71 FR 53756), December 6, 2007 (72 FR 69034), December 10, 2008 (73 FR 75176), November 9, 2009 (74 FR 57804), and November 10, 2010 (75 FR 69222)). The lower priority ranking resulted from the development of the 2005 Relict Leopard Frog Conservation Agreement and Strategy (Conservation Agreement) and implementation of conservation actions by the relict leopard frog Conservation Team (Conservation Team), which led to an overall reduction in most threats and an overall improvement in the species' status. On October 26, 2011 (76 FR 66370), we changed the species' LPN to 8, due in part to the discovery of chytrid fungus (Batrachochytrium dendrobatidis (Bd)) in relict leopard frogs in 2010, and we maintained an

LPN of 8 for the species through the 2015 CNOR (see November 21, 2012 (77 FR 69994), November 22, 2013 (78 FR 70104), December 5, 2014 (79 FR 72450), and December 24, 2015 (80 FR 80584)). In 2010, we recognized the scientific name of the relict leopard frog as *Lithobates onca* (see November 10, 2010 (75 FR 69222)).

## Background

Relict leopard frogs are endemic to the Colorado, Virgin, Santa Clara, and Muddy Rivers and associated springs in Nevada, Arizona, and Utah. Relict leopard frogs appear to require habitat heterogeneity (consisting of diverse habitat types) in the aquatic and terrestrial environments. Relict leopard frogs historically occupied a variety of habitats including springs, streams, and wetlands characterized by clean, clear water with various depths, and cover such as submerged, emergent, and perimeter vegetation. Nonnative predators such as Louisiana red swamp crayfish (*Procambarus clarki*), American bullfrogs (Lithobates catesbeiana), and nonnative fish are associated with extirpation of relict leopard frogs.

The relict leopard frog currently occurs at 8 natural sites—three in the Northshore Springs Complex (along the base of the Muddy Mountains near the Overton Arm area of Lake Mead) and five in the Black Canyon (below Lake Mead). Natural sites are those sites that support wild populations of relict leopard frogs that were not established through translocation effort.

The Northshore Springs Complex and Black Canyon populations represent distinct relict leopard frog metapopulations, wherein each metapopulation consists of smaller, spatially separated populations that occasionally interact through the movement of individuals between them, but do not interact with the other metapopuation. Within the Northshore Springs Complex, dispersal of relict leopard frogs may be possible between Blue Point and Rogers Springs. Migration and dispersal among sites also appears likely in Black Canyon but not between the two metapopulations.

In addition to natural sites, relict leopard frogs were introduced to 15 sites, 11 of which are extant. Introduction sites are those estimated by deliberately translocating relict leopard frogs to suitable habitat within the assumed historical range. All extant natural and introduction sites occur on lands managed by the National Park Service (NPS), Bureau of Land Management (BLM), Bureau of Reclamation (BR), and the Service. There is low genetic variation within