



October 21, 2011

Public Comments Processing

Attn: Docket No. FWS-R2-ES-2010-0085

Re: Designation of Critical Habitat for the Chiricahua Leopard Frog

To Whom It May Concern:

The Center for Biological Diversity submits these supplemental comments to the U.S. Fish and Wildlife Service on the re-opening of the comment period for the Proposed Rule for Listing and Designation of Critical Habitat for the Chiricahua leopard frog; 76 Fed. Reg. 58441 (September 21, 2011). As we stated in our comments of May 12, 2011 on the original proposed rule, we support designating over 11,000 acres of critical habitat for this imperiled amphibian, but oppose the omission of occupied habitat in and near the footprint of the proposed Rosemont mine in the Santa Rita Mountains of Arizona. We reiterate that grave concern, below, with an additional supporting reason for designating the Rosemont-area sites as critical habitat, and we also support designation of critical habitat for the additional three populations identified in the latest proposed rule.

On March 15, 2011, the U.S. Fish and Wildlife Service (FWS) issued a proposed rule for the listing and designation of 11,136 acres of critical habitat for the Chiricahua leopard frog (*Lithobates chiricahuaensis*), a threatened species. 76 Fed. Reg. 14126 (March 15, 2011). In the latest proposed rule, FWS proposes to designate an additional 331 acres in New Mexico for three populations of the frog that were previously overlooked. 76 Fed. Reg. 58441.

Additional proposed habitat is appropriate.

We support the designation of the entire proposed 11,467 acres as critical habitat for the Chiricahua leopard frog, including the three newly identified populations: Kerr Canyon, South Fork Palomas Creek, and West Fork Gila River. Critical habitat along the West Fork Gila River should also be extended to approximately half a mile up White Creek from its confluence with the West Fork. Like the West Fork, White Creek also has primary constituent elements needed by Chiricahua leopard frogs, including standing bodies of water, undercut banks, root masses, and emergent vegetation. With beaver dams now re-established on the West Fork just upstream of the confluence, after a period of several years in which the extensive beaver dams of the past had been washed out, it is likely beaver ponds will again extend up White Creek in the future, enhancing the habitat there even more.

Rosemont Area Chiricahua Leopard Frogs Habitat Must be Protected.

Several Chiricahua leopard frog populations near the proposed Rosemont mine in the Santa Rita Mountains were excluded from the proposed critical habitat designation. As explained in detail in our previous comments, they should be designated as critical habitat to protect these frogs from destruction by a proposed open-pit copper mine.

As described and mapped in our previous comments, several sites near and within the footprint of the proposed mine have been recently occupied by Chiricahua leopard frogs. The Box Canyon area has been repeatedly found occupied by the Chiricahua leopard frog over many decades. A 2008 survey of the Rosemont holdings and vicinity confirmed Chiricahua leopard frog presence in Box Canyon and nearby South Sycamore Canyon with a total of nine observed frogs in about 1.2 miles of stream channel. The Lower Stock tank that is within the footprint of the proposed mine also contained Chiricahua leopard frogs during the 2008 survey, as well as three areas just east of the proposed mine, namely, East Dam, “Oak Tree Canyon” tank, and Highway Tank.

In addition to the reasons to designate these areas as critical habitat that we explained in our previous comments, we draw your attention to a newly published study, by Savage, A. E. and K. R. Zamudio, “MHC genotypes associate with resistance to a frog-killing fungus,” attached to these comments. Savage and Zamudio found that some lowland leopard frogs have genes that protect them from chytrid fungus. Given this finding, it is possible that some Chiricahua leopard frogs also may have a genetic basis for persisting in greater numbers despite exposure to chytrid fungus

Two areas of Cienega Creek are rightly proposed for habitat protection. The Chiricahua Leopard Frog Recovery Plan states, “Chytridiomycosis is also present in Chiricahua leopard frogs at Cienega Creek, where the population is persisting at low levels with the disease” (B-18). Chiricahua leopard frogs in nearby creeks and stock tanks within or near the footprint of the proposed Rosemont mine likely emanate from Cienega Creek, and thus they are likely to have also been exposed to the disease. It is possible that there is a genetic basis for the Cienega Creek frogs surviving despite exposure to chytrid fungus. If such genetic resistance is a factor in their survival, the Rosemont-area frogs would also likely have that genetic advantage. Conserving any possible genetic basis, as yet unexplored in Chiricahua leopard frogs, for persistence in the face of chytrid fungus, should be a conservation priority. That possibility, though merely conjectural at present given that the emerging research only discusses lowland leopard frogs, provides an additional reasons – an abundance of caution – on top of the reasons we discussed in detail in our previous comments, for designating critical habitat in and near the areas targeted for the proposed Rosemont Mine.

Global warming is a threat to Chiricahua leopard frogs.

The Chiricahua Leopard Frog Recovery Plan repeatedly cites drought as a threat to frog populations, because of its role in drying up the riparian areas that the frogs live in. Global warming has been projected to greatly increase occurrence of droughts in the Southwest, and the

region is currently undergoing a multi-year drought. The final rule should acknowledge this connection between drought and global warming, and the cause of global warming in the emissions of greenhouse gasses. Greenhouse gas emissions may adversely affect the critical habitat of the Chiricahua leopard frog, and final notice should not gloss over this fact.

Thank you for consideration of these comments.

Sincerely,

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