

RELICT LEOPARD FROG
(*Rana onca*)

STATUS: Candidate (67 FR 40657; June 13, 2002).

SPECIES DESCRIPTION: A medium-sized leopard frog with a body length of 4.45 to 8.90 cm (1.75 to 3.5 inches). Coloration above is brown, gray, or greenish, with greenish brown “leopard” spots. A glandular fold runs down each side of the back, becoming indistinct half to three-quarters of the way towards the rear of the animal. The underside is whitish, with dark mottling on the throat and yellow or yellow-orange in the groin and on the underside of the hind limbs. The relict leopard frog is very similar and closely related to the lowland leopard frog (*Rana yavapaiensis*).

HABITAT: Adult frogs inhabit permanent streams, springs, and spring-fed wetlands below approximately 600 m (1,968 ft). Adults may prefer relatively open shorelines where dense vegetation does not dominate. Breeding habitat includes pools or slow moving side areas of streams, with or without emergent vegetation.

RANGE: Historical: The historical distribution of this species is not well documented. The distribution has historically been characterized as springs, streams, and wetlands within the Virgin River drainage from the vicinity of Hurricane, Utah to the Overton Arm of what is now Lake Mead, Nevada, and along the Muddy River in Nevada. The species may have once been present on the Colorado River mainstem. Populations in Utah appear to have been extinct since the 1950's.

Current: Recent surveys have revealed extant populations at seven sites in four general areas: Surprise Canyon in lower Grand Canyon, and Sycamore Spring, Arizona (Mohave County); springs near the Overton Arm of Lake Mead, Nevada; and springs in Black Canyon below Hoover Dam, Nevada. The population at the smallest known site, Corral Spring, went extinct in 1995. Frogs were last seen at a wetland near Littlefield, Arizona in 1998. The species was introduced to Sycamore Spring in 2003.

REASONS FOR DECLINE/VULNERABILITY: Threats to this species include elimination or dramatic alteration of aquatic habitat due to dams, agriculture, marsh draining, and water development and the spread of predator and nonnative bullfrogs, crayfish, and predaceous fishes. A fungal disease, chytridiomycosis, is an additional threat.

LAND MANAGEMENT/OWNERSHIP: Lake Mead National Recreation Area and Bureau of Land Management.

NOTES: The relict leopard frog has been petitioned for listing. Also, a multi-agency working group is developing a conservation agreement to maintain viable populations of this frog in the wild.