Columbia spotted frog (*Rana luteiventris*)

"Not Warranted" 12-month Finding

Frequently Asked Questions

Q. What is the U.S. Fish and Wildlife Service (Service) announcing today?
A. The Service is announcing the results of a 12-month review of the status of Columbia spotted frog Great Basin Distinct Population Segment (DPS) (*Rana luteiventris*) found in Nevada, Idaho, and Oregon.

Q. Why did the Service conduct the 12-month status review of Columbia spotted frog?
A. The Service received a petition from the Center for Biological Diversity to list Columbia spotted frog and designate critical habitat for the species.

Q. What does Columbia spotted frog look like and where does it occur?
A. Columbia spotted frogs are typically characterized as slim-waisted, long-legged with webbed hind feet, and usually with a pair of dorsolateral folds (glandular folds) that extend from behind the eyes to the lower back. Adult Columbia spotted frogs measure between 2 and 4 inches with females being larger than males. Dorsal (back) colors and pattern include light brown, dark brown, or gray, with small spots (Figure 1). Ventral (belly) coloration can differ among geographic areas and may range from yellow to salmon color; however, very young individuals may have quite pale, almost white, ventral surfaces. Columbia spotted frogs are highly aquatic frogs endemic to the Great Basin, northern Rocky Mountains, British Columbia, and southeast Alaska. Columbia spotted frogs in southeastern Oregon, southwestern Idaho, and northeastern and central Nevada are considered part of the Great Basin DPS. Columbia spotted frogs in the Great Basin DPS have been a candidate for Endangered Species Act (ESA) protection since 1993.

Figure 1. Columbia spotted frog. Photo credit: K. Lohr, Service.

October 8, 2015

Columbia spotted frog (*Rana luteiventris*)

"Not Warranted" 12-month Finding

Q. What is the Service's determination regarding the status of Columbia spotted frog?
A. After evaluating the best available scientific information regarding Columbia spotted frogs, including an analysis of the threats to the species and their habitats, the Service has determined that protection under the Endangered Species Act of 1973, as amended (ESA) is not warranted. Additionally, in light of this finding, the Service will not designate critical habitat for this species. However, the Service asks the public to submit any new information that becomes available concerning the threats to this species or its habitats at any time.

Q. What threat analysis did the Service complete in making this determination?
A. Under the ESA, the Service can determine that a species is endangered or threatened based on any of five factors: (A) The present or threatened destruction, modification, or curtailment of its habitat or range; (B) Overutilization for commercial, recreational, scientific, or educational purposes; (C) Disease or predation; (D) The inadequacy of existing regulatory mechanisms; or (E) Other natural or manmade factors affecting its continued existence.

Extensive surveys and monitoring since 1993 have revealed that Columbia spotted frog populations are much more widespread than what was previously known (and at the time of Candidacy). While some sites and watersheds are no longer occupied, Columbia spotted frogs are well distributed as compared to the known historical distribution throughout southwestern Idaho and northeastern Nevada with isolated and disjunct populations in southeastern Oregon and central Nevada.

Columbia spotted frogs in the Great Basin have been impacted primarily by the effects of past habitat destruction and modification, which caused increased habitat fragmentation and isolation. Heavy use by livestock has been shown to be detrimental to Columbia spotted frog habitat. Nonnative fish and amphibian predators occur within the range of Columbia spotted frogs. Nonnative fish and amphibian predators can eliminate or reduce populations or restrict movement of individuals, thus, increasing fragmentation and inhibiting metapopulation dynamics. While amphibian diseases (i.e., chytrid fungus) and parasites occur in some areas, population-level effects of both pathogens and parasites have yet to be documented within the Great Basin. The current state of small fragmented populations of Columbia spotted frogs in the Great Basin DPS indicates populations are more vulnerable to extirpation due to loss of habitat from predicted climate related impacts. Beaver are important in the creation of small pools with slow-moving water that function as habitat for frog reproduction and create wet meadows that provide foraging habitat and protective vegetation cover. Beaver will be important in the long-term survival of Columbia spotted frogs. We found that climate change research forecasts a drying pattern and a subsequent reduction in suitable habitat with additional isolation of populations; however, there is uncertainty about how these changes will play out at the population level and the future timeframe under which this will happen. While research has shown that current weather patterns are not influencing Columbia spotted frogs similarly across the Great Basin DPS, this pattern could change if these climate influences become more

synchronous, or the frequency, duration, and severity of extreme events such as drought increases across the Great Basin

The Service found that these factors currently may be impacting Columbia spotted frog populations in some locations, but they are not impacting the species as a whole currently or into the future. The full analyses of these possible threats are documented in the Species Status Assessment and are summarized in the 12-month review. Based on the analysis contained in the Species Status Assessment, the best available scientific and commercial information does not indicate that these threats are causing a decline in the species or its habitat, either now into the future.

Q. What is being done to conserve Columbia spotted frogs?
A. In Nevada, a 10-year conservation agreement (known as a Conservation Agreement and Strategy, or CAS) was signed in September 2003 for the Toiyabe Mountains and Northeast populations. Federal, State, and local agencies signed the CAS and all signatories have participated in conservation of Columbia spotted frogs. The purpose of the CAS is to coordinate monitoring and expedite implementation of conservation measures to address stressors to the species through collaborative efforts among numerous agencies to ensure long-term survival of Columbia spotted frogs in Nevada. Due to the success of the CAS in managing and conserving Columbia spotted frogs in Nevada, a revised 10-year agreement (2015–2024) was signed in February 2015.

Promising management options have and continue to occur to maintain or improve Columbia spotted frog resiliency throughout the Great Basin. Improved grazing management (*e.g.*, reduced stocking rates, reduced utilization levels, rest rotation practices), particularly within riparian habitats, have lead to improved riparian and stream habitat conditions where implemented. Creating ponded habitat has also improved numerous occupied sites throughout the Great Basin as well as other parts of the species range. For example, in 2004, a habitat enhancement project was completed which included the construction or augmentation of 22 ponds in Indian Valley Creek, Nye County, Nevada. An additional 14 ponds were constructed near Indian Valley Creek in 2009. All ponds created in 2004 and 2009 have documented occupancy and 77 percent have documented breeding activity (either egg masses or tadpoles observed). On private lands within Owyhee County, Idaho, 41 ponds were constructed or enhanced in 2010 and 2011, to increase breeding habitat and connectivity between existing populations. Since construction, breeding and/or Columbia spotted frog presence has been documented at 37 percent of the ponds with limited surveys. Beaver are important in the creation of small pools with slow-moving water that function as habitat for frog reproduction and create wet meadows that provide foraging habitat and protective vegetation cover. There is a growing body of evidence linking the positive habitat influence of beaver to the presence of Columbia spotted frogs in the Great Basin DPS.

Columbia spotted frog (*Rana luteiventris*)

"Not Warranted" 12-month Finding

Q. How can I find out more information about the determination?
A. The Species Status Report (including all references) and other materials relating to this finding are available on the Reno Fish and Wildlife Office website at *www.fws.gov/nevada/* and at *www.regulations.gov* , or by calling the U.S. Fish and Wildlife Service at 775-861-6300.

October 8, 2015