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Jeff Miller: Saving Sierra frogs — and the rest of us

By Jeff Miller
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Since the first indigenous people settled here, generations of Californians finding their way up to the magical lakes of the High Sierra in summer have been greeted by hundreds of 3-inch-long leopard-splotched yellow-legged frogs lining the lakeshores.

For thousands of years these were the most abundant amphibians in the Sierra Nevada and the Transverse Ranges of Southern California.

Not any more.

Sierra Nevada yellow-legged frogs and the Sierra population of mountain yellow-legged frogs have been reduced by more than 93% and are gone from many high altitude lakes.

And in recent years the Yosemite toad has also declined drastically — to the point where it's difficult to even find them in the national park they share a name with.

So it was great news — but long overdue — that these frogs and toads were protected under the Endangered Species Act last month.

That we've nearly wiped out the animals at the center of High Sierra ecosystems should be a wake-up call for us all. How did we get to this point? And how do we enjoy and inhabit the Sierra in a responsible way moving forward, a way that does a better job of balancing short-term economic interests with our long-term ecological and economic needs?

Until recent decades Sierra frogs were remarkably hardy survivors, evolving to over-winter in glaciated lakes and streams and able to hibernate under ice-bound lakes for up to nine months. Tadpoles were able to survive the four years needed to mature into frogs in remote fish-less lakes that provided the perfect safe-haven.

But in the last four decades, the once-remote lakes above 6,000 feet that have long served as frog refugia have been drastically altered by unchecked human activities, such as introduction of massive numbers of non-native frog-eating fish, increased livestock grazing, and expanded use of off-road vehicles.

There are also invisible killers — climate change which dries streams and lakes, pesticides that drift up from the Central Valley, and diseases that are amplified by climate change and pesticide exposure.

These problems have not sneaked up on us. For decades scientists have warned that Sierra frogs were in trouble and High Sierra habitats are under stress. That should concern all of us, because the health of amphibians is an excellent barometer of how well we're caring for the irreplaceable Sierra watersheds we all depend on.

Because the Endangered Species Act has prevented the extinction of 99% of the species it protects, there's every reason to believe we can reverse course and take actions to save and recover these important keystone species. But first, federal land managers must do a better job of protecting the 2 million acres of critical habitat that the Fish and

Wildlife Service proposed to designate for the frogs across the Sierra. Despite unsubstantiated claims from tea party politicians claiming the designation will have huge economic impacts on the state, the truth is that the great majority of the proposed critical habitat is on federal land. Most private landowners will have zero impact from the critical habitat designation.

And the payoff is clear: Protecting these amphibians will help preserve the fragile High Sierra for all of us and for generations of Americans to come.