

THE VERGE

We just met this toad, and we're about to destroy its home

by Alessandra Potenza
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Scientists have discovered a new species of toad in the Great Basin of northern Nevada — just in time for its possible disappearance. A geothermal energy plant could be built in the valley where the toad lives, destroying its habitat and spelling doom on the species.

The new toad, called Bufo (Anaxyrus) williamsi, has an olive-colored body “with small, diverse and irregular black flecks,” as well as rust-colored warts. It lives in wetlands fed by thermal springs on the western edge of the Dixie Valley Playa, in an area of less than 1,500 acres. Like other toads in the area, it relies on groundwater to survive. The toads can usually be found in still, shallow water, the study says; it’s here that the animal’s eggs and tadpoles develop. The animal is described in a study published this week in Zootaxa.

Toad populations have dropped due to habitat loss, and the newly discovered Dixie Valley toad might be in trouble as well, the authors warn.



The newly-discovered toad. [Photo by Patrick Donnelly / Center for Biological Diversity]

Energy production from Earth’s underground reservoirs of steam and hot water — called geothermal energy — to produce electricity has expanded. A geothermal energy plant has been in operation in the area for over 20 years — the largest in Nevada, the study says. New geothermal energy facilities are being proposed. If those are approved and built, they could have devastating effects on the toad’s habitat.

The proposed Dixie Meadows Geothermal Utilization Project, which is currently under review by the Bureau of Land Management, would pump almost 46,000 acre-feet of water per year from the underground reservoir, according to the Center for Biological Diversity. (The Center provided funding for the research.)

That could slash the water resources the toad needs to survive, and since its habitat is so tiny, it has nowhere else to go.

“It’s horrible to think that we may lose this new species just as we’re beginning to learn about it,” said Jenny Loda, an attorney and scientist with the Center for Biological Diversity, in a statement.

The Center for Biological Diversity will submit a petition with the US Fish and Wildlife Service to list the toad under the Endangered Species Act. The animal’s habitat must be protected if the listing is successful.