Report: Climate change will drastically alter Lake Tahoe

In 90 years, the snowpack in the Lake Tahoe Basin is expected to be about 50 percent less than it is today.

This and other facts are detailed in a report released Nov. 15 by UC Davis scientists.

It is being called the most detailed forecast to date of likely climate-change effects at Lake Tahoe.



Lake Tahoe's shoreline may increase more with climate change.
Photo/Kathryn Reed

Flooding is expected to increase by mid-century, prolonged droughts will become more common at the end of the century, and "a new threat to the lake's unique ecology, one that will come from the very bottom of the lake, will become important by the second half of the century."

The U.S. Forest Service and Bureau of Land Management paid for the study with Southern Nevada Public Lands Management Act funds. The lead authors are Robert Coats, a UC Davis researcher and consulting hydrologist; John Reuter, associate director of the UC Davis Tahoe Environmental Research Center; and Geoff Schladow, the center's director.

The report combines findings drawn from 100 years of data and computer models to produce detailed local projections out to 2100.

The scientists considered two possible future carbon emission scenarios — one "business as usual" — in which population growth and national and international policies affecting global climate change remain unchanged — and the other "optimistic," assuming slower growth and aggressive climate action.

- Kathryn Reed