

First earthquake zone maps released for Lake Tahoe Basin

Adam Jensen, Record Courier News, 12-29-15

A pair of maps released by the California Geological Survey in December detail where earthquake faults are located in the Lake Tahoe Basin and have the potential to impact where new development can take place.

If new construction, or an extensive remodel, is planned within an earthquake zone designated by the Alquist-Priolo Earthquake Fault Zone maps, a site-specific study is required to determine the specific location of the underlying fault and guide mitigation measures to help prevent earthquake damage.

“These maps are a planning tool for a specific earthquake hazard,” said California’s State Geologist John Parrish in a statement announcing the release of the maps. “We create zones in areas where earthquake faults have ruptured the ground in the past. The zones define where site-specific investigations must be undertaken to ensure that new construction for human occupancy does not take place atop the surface trace of an active earthquake fault.

“Buildings can be engineered to withstand earthquake ground shaking. But if fault movement causes a rupture directly under a building, the foundation’s integrity will almost certainly be compromised.”

One of the fault zones identified in the maps runs from the southwest corner of Emerald Bay to Fallen Leaf Lake. Another can be found in the Emerald Point area, and a third runs south from Lake Tahoe midway between Eagle Point and Baldwin Beach. There is another earthquake fault zone that runs southeast of Fallen Leaf Lake. A sixth zone runs by Angora Lakes, west and south of Celio Ranch and east of Lower Echo Lake.

The maps can be viewed online at www.conservation.ca.gov/cgs/pages/index.aspx.

Disclosure that a property is within an earthquake zone must be made in real estate transactions, and one of the most common concerns from residents and developers in areas with Alquist-Priolo maps is the maps’ effects on property values, said California Geological Survey spokesman Don Drysdale.

“It hasn’t borne out in our experience that this effects anyone’s property value,” he said.

The Lake Tahoe region has the potential for significant earthquakes and has seen several large earthquakes in the last 150 years, according to the release. A magnitude 6.0 earthquake in December 1948 west of Reno caused damage in Lake Tahoe communities, and quakes estimated at magnitude 6.5 and 6.3 happened in 1887 and 1857.

The preliminary maps have been forwarded to local agencies and are available for public review. The review period, which includes a hearing in front of the State Mining and Geology Board,

lasts until March 10. California Geological Survey will publish final maps after it considers comments from the lead agencies, the public and the State Mining and Geology Board.