

Two Bay Area Faults Do Not Exist

Katharine Mieszkowski, New York Times, 5-1-10

Like Pluto, the planet-that-wasn't, the poor Antioch and San Bruno faults have become the latest casualties of advancing science. State geologists have determined these two faults to be the geologic equivalent of false alarms. They've scrubbed the faults off the official state seismic map.

The California Geological Survey, which is celebrating its 150th anniversary, released the new map on Tuesday night at the Tech Museum in San Jose. The 2010 Fault Activity Map of California includes 50 additional surface fault lines, which did not appear on the previous version of the map, which was last updated in 1994.

Incorporating more than fifteen years of new geologic study of the state, the map shows that the Bay Area is a bit less faulty than was previously believed. "Two entire faults, the Antioch and San Bruno faults, which turned out not to be faults, are off the map, and the Silver Creek fault is truncated," said Chris Wills, the supervising engineering geologist, in a telephone interview.

The Silver Creek fault runs through central San Jose. "The fault had been projected up into the Fremont area. It turns out it doesn't get that far," said Mr. Wills.

The new map doesn't reveal every local seismic hazard. It only shows faults that touch the earth's surface. So, some, like the Mt. Diablo fault which is hidden several kilometers underground, do not appear.

For reasons all too well known, this region has long been the subject of intensive geologic study. "In the Bay Area, the major faults have been pretty well-known for a long time," said Mr. Wills, mentioning the San Andreas, Hayward and Calaveras faults. "The Bay Area is where earthquake science started in this country with all the studies of the 1906 earthquake."