400-Plus Quakes Strike San Ramon in 2 Weeks: USGS

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NBC Bay Area's quake map shows all earthquakes recorded near the San Francisco Bay Area over the past 24 hours.

San Ramon, California, appears to have broken a new earthquake record over the last two weeks: A total of 408 small quakes have shaken the East Bay city, almost four times the record set in 2003 in half the amount of time.

"I've not felt so many tremors in decades," Mark Stone said outside a San Ramon Starbucks on Tuesday morning. "My dog, Gimmel, she's the first one to know a couple of seconds before."

And his dog has been extra alert lately.

The U.S. Geological Survey reports that as of Oct. 13, the Northern California Seismic Network had detected 408 earthquakes and counting.

At least a dozen temblors since 10 p.m. on Monday, with other quakes spilling into the early hours of Tuesday. The USGS on Tuesday also reported a magnitude-3.2 quake striking the area at 5:07 p.m.

Most quakes have clocked in with magnitudes ranging from 2.0 to 3.0. San Ramon is about 45 miles east of San Francisco.

In an Oct. 14 interview, Senior U.S. Geological Survey research geologist David Schwartz said the swarm is not all that unusual, noting that San Ramon Valley is at the "center of earthquake swarm activity" in the Bay Area. He recalled a 2003 swarm of 120 earthquakes over 31 days in San Ramon, with the largest clocking in at a magnitude of 4.2.

The biggest swarm on record in the same general area, Schwartz noted, was in 1990 in neighboring Alamo, about 30 miles east of San Francisco. That's when 351 earthquakes struck over 42 days, with the largest recorded at a magnitude of 4.4.

The current swarm of 408 - and counting - tops both those numbers.

Most of the earthquakes are occurring at a depth of about five miles underground and are too small to be felt, the USGS explained. One of the largest earthquakes in the current swarm activity was a 3.6-magnitude quake on Oct. 19.

San Ramon, Danville and Alamo all have a history of earthquake swarms, as they sit on the Calaveras Fault. Based on other swarms, the USGS predicts this swarm may continue for several more weeks and is unlikely to be a foreshock to a larger quake.

The northern Calaveras Fault has not ruptured with a significant earthquake since the 1860s, the USGS reported, and the likelihood of a large earthquake of 6.7-magnitude or larger is just 8 percent.

As for why the swarms occur?

"We just don't understand the structural geology of the swarms, why they turn on and shut off quickly," Schwartz said in a previous interview. "We just don't understand."

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