

Baja quake more powerful, but caused less damage than Haiti temblor

Alicia Chang, Associated Press, 4-6-10

LOS ANGELES — Twenty million people in three U.S. states and Mexico felt Sunday's Baja California earthquake — a more powerful temblor than the Haiti quake yet the death toll and devastation were far less.

Why? Scientists say part of the answer is location, location, location.

Only about 500 people in the agricultural communities south of the growing city of Mexicali were exposed to the most violent shaking.

"If you had to place a large earthquake, this was a good location," said seismologist Susan Hough of the U.S. Geological Survey.

The magnitude-7.2 Baja quake is believed to have begun in the southeast section of the Laguna Salada fault and moved toward the northwest, focusing much of its energy on a vast, largely vacant desert region.

Scientists say the seismic punch would have been a lot worse had the quake ruptured north toward the Mexicali metropolitan region with about 900,000 people.

"Call it a near-miss," said geophysicist David Wald of the USGS National Earthquake Information Center in Golden, Colo.

A similar thing happened during the 1999 magnitude-7.1 Hector Mine quake. Though buildings in downtown Los Angeles swayed, the quake hurled most of its energy toward the desert.

Japan was not as lucky. In 1995, a quake the same size as the Baja temblor hit the bustling port city of Kobe and killed 6,400 people.

In January, a less powerful magnitude-7.0 quake struck Haiti, killing a government-estimated 230,000 people and shattering Port-au-Prince. A month later, a magnitude-8.8 hit Chile and spawned a tsunami. Several hundred people died.

Scientists said there is no connection between the Haiti, Chile and Baja quakes since they occurred on different fault systems.

The Baja quake so far has claimed two lives in Mexico. One man died in a house collapse, and another was killed when he was struck by a car as he ran into the street. At least 100 people were injured.

Despite the low human toll, the twin border towns of Calexico, Calif., and Mexicali, Mexico, suffered damage to buildings and service disruption.

Calexico authorities red-tagged the majority of the city's historic downtown buildings because of smashed windows or buckled roofs. Residents were also told to limit their water use because three tanks that hold the city's water supply were damaged.

Across the border in Mexico, a parking garage at Mexicali's city hall caved in, but there were no injuries. Several homes were destroyed in farming communities ringing Mexicali.

Structural engineer Jose Restrepo at the University of California, San Diego, said he was not surprised to see older buildings damaged.

Modern construction standards likely prevented widespread destruction in fast-growing Mexicali, which underwent a boom of new housing in the past two decades, Restrepo said.

By contrast, there was no building code in Haiti.