Overview

The Great 1906 San Francisco Earthquake caused long-period ground shaking that was recorded in western and central Nevada and triggered a significant number of smaller earthquakes within Nevada, resulting in larger social and political response in Nevada to San Francisco's plight.

The Effects of the 1906 Earthquake in Nevada

In towns along the east base of the Sierra Nevada and within 25 or 30 miles of the base, the shock was distinctly felt, movable objects were seen to swing and knock, boxes to rattle, and a very small number of persons were awakened. (Lundback, 1906)

These effects occurred from Sierra Valley to Lone Pine.

Perhaps the most important of the physical signs reported is the disturbance of steam water surfaces. In five instances at three different localities, steam water surfaces were raised and lowered and the water lightly splashed against the sides as if from vibration, or fell in a stream of water when it is slightly tilted. (Lundback, 1906)

Further east into Nevada, suspended objects were noticed to swing, but the earth waves were not felt by people. The furthest east these effects were noticed was Winnemucca, Nevada, about 340 miles (544 km) from the San Andreas fault system.

Hot Springs near the Sierra Nevada increased in temperature and springs so far east as Ely County were ignited and ran a different color.

The map to the right shows locations in Nevada and eastern California that reported whether or not they noticed the earthquake, and if so what the effects were. The original Rose-Forrest intensively observational areas from Lawson (1906) are also indicated.

Carson City Seismoscope Record

This record was made on a Disney-DeLong seismoscope located in a room adjacent to the first floor of the new post office. The second floor is about 181 miles (290 km) from the earthquake. The instrument had an equivalent unamplified period of 3.7 to 3.9 seconds and effective dampening of 0.15 to 0.2 when engaged on a wooden plate (seeings and displacement were about 0.17 inches (4.3 mm)). The record shows many long-period oscillations consistent with the larger waves called "long but slow" motion felt by people near the Sierra Nevada.

The April 18th 1906 San Francisco Earthquake East of the Sierra Nevada

Nevada Earthquakes Triggered by the 1906 Event

A few small- to moderate-sized earthquakes in Nevada were likely triggered by the passage of waves from the 1906 San Francisco Earthquake. Shaking began at 9:05 p.m. (PST) on April 18th. 23 hours following the great event, and were located to the east of Reno, in the Walker Lake area. Shaking was most intense at 9:27 p.m. (PST) and rumbled windows, set lamps and dishes to jiggling, stopped a clock, and scared people at Olchinghouse and Brown Street, causing them to run outside. Three aftershocks were also felt over the next two hours. These accounts come from Lundback (1906) and Trautwein and Allen (1906). It is suggested that this earthquake is part of the long-period motion back to the North Range. This is the area where the north-striking, right-lateral Pymytich fault system is located. Overall, the area of strong shaking was limited, constraining the earthquake size to about magnitude 5 or less.

Financial Impact to Nevada

Nevada's financial health was threatened by the 1906 earthquake with the loss of company offices, bank crossings, and the loss of potential investments. Lieutenant Governor Lomeal Allen issued an official proclamation declaring a "public holiday" for five days starting on April 24th to close banks and prevent a run on bank deposits. Upon returning to Nevada, Governor Sparks allowed the banks to open for a couple of days before extending the "holiday".

Although there was a distinct impact on the Comstock mines in Virginia City, the overall financial effect on Nevada was limited to a few months because the boom areas, Tonopah, Goldfield, and Pioche, had headquarters and interests outside of San Francisco. An example of a Comstock mine was where the Comstock-Reno Company (shutting down construction in 1905), was the C & C Shaft. San Francisco bank closings affected the Comstock-Carson and Virginia Mines, and the Requa and Glenwood mines, and though these mines were in the San Francisco Mining Company, they were not affected. Things were back to normal in the Comstock in about three to four months. The mining camps of Wendover and Fairview were in the early phases of mine development, which was affected several months because of the San Francisco catastrophe.