



AMERICAN SOCIETY OF CIVIL ENGINEERS
TECHNICAL COUNCIL ON LIFELINE EARTHQUAKE ENGINEERING

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Date: June 6, 1980
To: File
From: L. Lund
Subject: Mammoth Lakes Earthquakes, May 25 and 27, 1980

A series of earthquakes occurred in the Mammoth Lakes region of east Central California during the period of May 25 to May 27, 1980. Two Richter magnitude 6.0 earthquakes occurred at 9:33 a.m. (PDT) and 12:44 p.m. (PDT) on Sunday, May 25, and a Richter magnitude of 6.1 earthquake occurred at 7:51 a.m. (PDT) on May 27. The earthquakes epicenter location was approximately five miles (8 kilometres) southeast of Mammoth Village on the Hilton Creek fault. Approximately 80 small earthquakes occurred during this period of a magnitude of 4.0 or greater.

Generally, lifelines facilities performed satisfactorily, however, major damage occurred to an elementary school and a fish hatchery in the area. There was an electric service interruption due to earthquake-damaged lightning arrestors at an electric substation on Sunday at 9:33 a.m. (PDT). However, full power was restored by 12 noon (PDT) when the damage was repaired. Pole-mounted transformers in the vicinity of Mammoth Village were displaced causing some minor interruptions to service. In addition, there was some loss of structural glass insulators and cracking and movement of underground electric vaults. The damage was not serious and minimized interruption of service.

Telephone service in the area was not interrupted, but citizens were advised to keep personal calls to a minimum to avoid overloading of the telephone system.

The local water agency reported eight (8) small distribution water main leaks which were repaired. In the Convict Creek Recreational Area, severe damage occurred due to settlement ruptures to the water and sewage system.

Highways and roads suffered minor surface cracking and settlement occurred at overcrossings; however, no repairs or weight restrictions are planned for the traffic. Several roads were blocked temporarily by rock slides.

Several reservoirs and hydroelectric generating facilities located in the area were undamaged and performed continuously after the earthquake. However, there was cracking of the ground and asphaltic concrete paving in the vicinity of the reservoirs which created no problem.