

## USGS report: Record number of earthquakes recorded in Oklahoma

The U.S. Geological Survey (USGS) reports that the rate of earthquakes in Oklahoma has increased by about 50 percent since October 2013, indicating increased probability that a damaging quake will strike central Oklahoma. USGS and the Oklahoma Geological Survey (OGS) found that 183 earthquakes of magnitude-3.0 or greater struck Oklahoma between October 2013 and April 14, 2014.

The report indicates that “a likely contributing factor to the increase in earthquakes is wastewater disposal by injection into deep geologic formations.” This injection-induced seismicity occurs when wastewater is injected underground, which increases pressure, lubricates faults, and can lead to earthquakes. Wastewater injection is most commonly associated with oil and gas production, including hydraulic fracturing.

The report states that the recent increase in earthquake frequency is not due to natural fluctuations in seismicity rates. USGS and OGS have recently increased the number of monitoring stations to track tremors, determine underlying causes of the earthquakes, and assess impacts of the seismic activity.

Source: U.S. Geological Survey

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