

Before the House Water and Environment Committee
Presented by Zack Pistora, Kansas Sierra Club
Proponent Testimony on HB 2641
February 15, 2018



Chairman Sloan and honorable members of the committee,

Thank you for the opportunity to provide testimony to your consideration of HB 2641, which would enact a statewide cap of 8000 barrels per day on wastewater disposal relating to Class II oil and gas injection wells.

Manmade earthquakes from the oil and gas industry's injection of wastewater fluids in both Kansas and Oklahoma are causing damages across our state, and unfairly costing Kansas property owners and taxpayers.

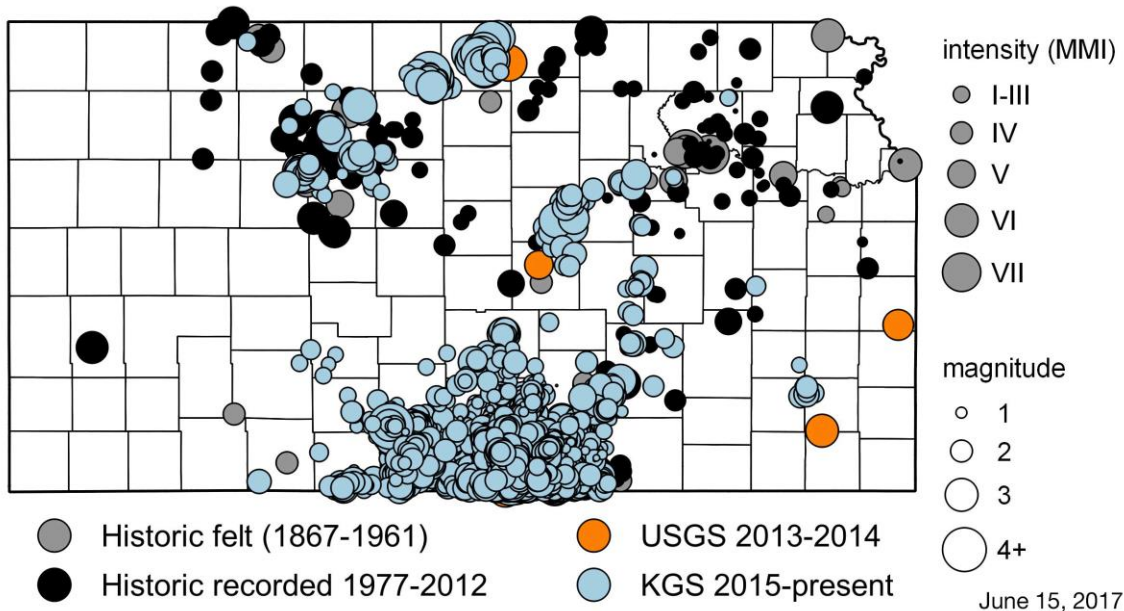
In a span of thirty years, from 1980-2010, Kansas experienced only 29 earthquakes of a 2.5 or greater magnitude, according to the U.S. Geological Survey's searchable earthquake catalog. However, since 2012, by my last count, Kansas has seen 550 earthquakes with 2.5 or greater magnitude. Thousands more earthquakes have originated in Oklahoma, including some big ones that we have felt here in Kansas. Nearly all of these earthquakes in recent years, are technically classified as "induced seismic events", a result of deeply-injected wastewater disposal from oil and gas activity, according to both the Kansas Geological Survey and the U.S. Geological Survey. It makes sense that new, vast quantities of deposited wastewater represent a massive amount of weight and pressure underground on geological fault lines, and therefore cause a cumulative stress for faults to slip and result in induced seismicity.

Induced seismicity, or manmade earthquakes, are causing damages to Kansans' property and public buildings, resulting in new financial burdens for families and property owners personally, as well as the local taxpayers for affected city buildings. While lacking significant studies or data regarding the sum of earthquake damages, we estimate that millions of dollars in damages have resulted from these recent manmade earthquakes.

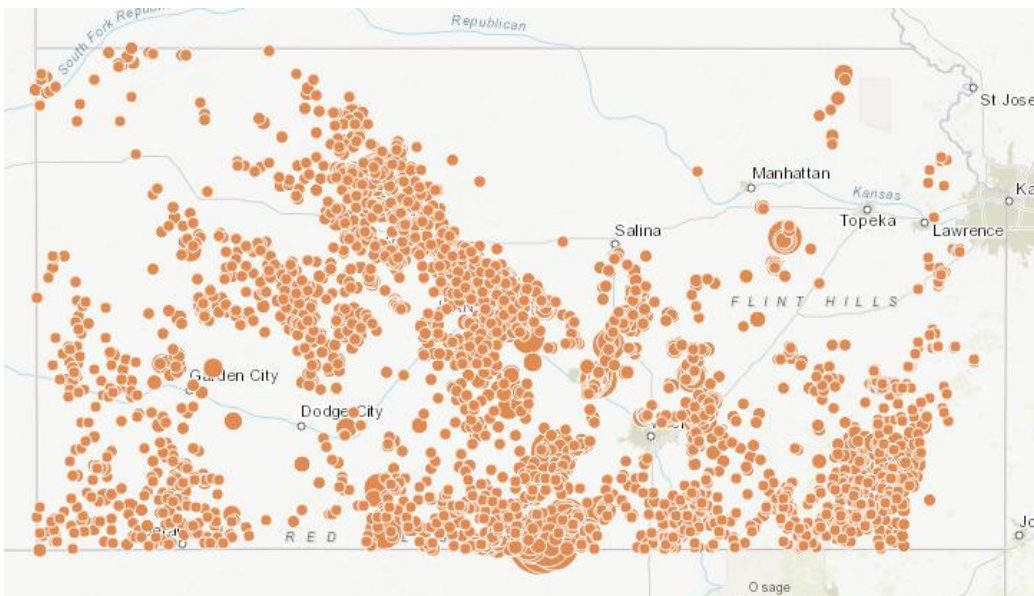
The Kansas Corporation Commission's (KCC) action to limit injection in South-central Kansas made positive progress in reducing our bigger earthquakes. However, earthquakes are now being triggered outside of that regulated zone, necessitating further action by Kansas officials to reduce earthquakes and their damages statewide.

In 2015, the KCC finally responded to the earthquake problem in south-central Kansas by ordering a draw-down of wastewater injection to an 8000 barrels per day limit for a certain 2-county area of wells. After studying the data and realizing the success of this policy, the KCC permanently instituted this limit for that area and further expanded a restricted zone to a greater area with a less-stringent barrels per day limit. It is my understanding that our Kansas earthquakes have significantly been reduced in this area, and that the oil and gas industry has readily complied with the order and have not experienced significant negative economic outcomes by the KCC order.

However, since 2012, we have seen a significant increase in earthquake epicenters outside of the KCC restricted area too. Kansas communities like Parsons, Mound City, Pratt, Cheney, Hutchinson, Salina, Mankato, Ellis, and more, have experienced such a spike of earthquakes, many of them over a 3.0 magnitude. These earthquake epicenters are often just miles away from numerous Class II wastewater injection wells. To date, no injection limits or earthquake-prevention regulations exist to protect these communities from an increased earthquake risks, nor is there a liability requirement in place for the oil and gas industry to be held responsible for damages to public or private buildings. Currently, many communities and citizens are absorbing the costs of these earthquakes on their own, with no compensation from industry that is now known to be at fault.



Earthquakes in Kansas, courtesy of the Kansas Geological Survey website



Class II Injection Wells in Kansas as of 2015, courtesy of Fractracker Alliance;
<https://www.fractracker.org/2016/12/oklahoma-kansas-injection-wells/>

With the success of the 8000 barrels per day limit in south-central Kansas, we hope a statewide limit will help reduce earthquakes in other areas, and prevent more unfair earthquake damages to Kansans.

We ask you to support HB 2641 as one way to help prevent earthquakes from occurring across Kansas. Otherwise, do pass some legislation this year to address the manmade earthquake problem. It is time to hold industry accountable for their part in induced seismicity and to protect Kansans from enduring the unfair costs of damages.

Thank you,

Zack Pistora | Legislative Director and State Lobbyist, Kansas Chapter of Sierra Club
zackpistora@gmail.com | 785-865-6503

The Sierra Club is the largest grassroots environmental organization dedicated to enjoying, exploring, and protecting our great outdoors. The Kansas Chapter represents our state's strongest grassroots voice on environmental matters for over forty years now.