

# Research for a Novel set in Oklahoma: from 19th Century Injustices to 21st Century Earthquake Swarms

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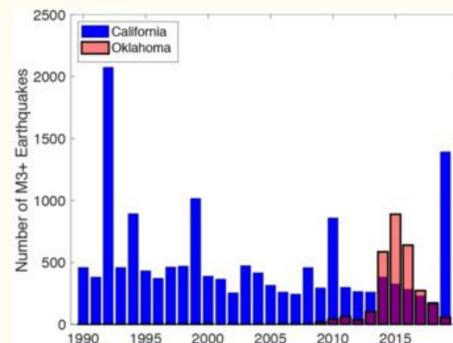


## Introduction

This study aims to tie the historical experiences of the Pawnee Nation to the present day Pawnee people of Oklahoma. It examines recently published theories on the true experience of a Native American tribe to better understand the context of its latest opposition to the government. It also examines the evidence behind the claims that fracking practices have caused the uptick in earthquakes, which started in 2009, as well as examining the state government's response to such claims.

## Methods

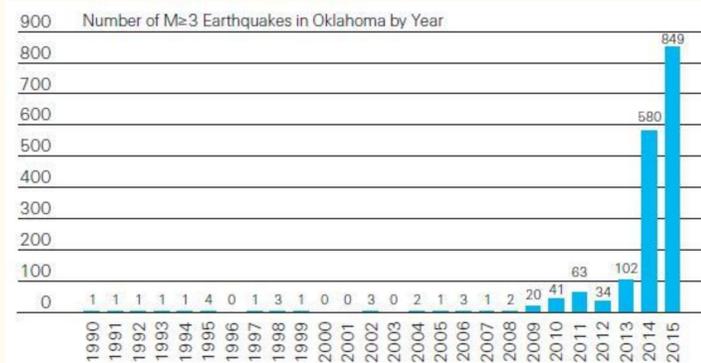
- Read and annotate *Quakeland: On the Road to America's Next Devastating Earthquake* as well as *The Other Slavery: The Uncovered Story of Indian Enslavement in America*.
- Search through local printed media in the months following the 2011 Prague earthquake and the 2016 Pawnee earthquake.
- Clip all printed items pertaining to the earthquakes, wastewater wells, and community response.



This graph produced by the USGS shows the sharp spike in seismic activity in Oklahoma beginning in 2009.

## Results

- *Quakeland: On the Road to America's Next Devastating Earthquake* showed the sharp increase of earthquakes since the advent of mass wastewater well injection in Oklahoma.
- *The Other Slavery: The Uncovered Story of Indian Enslavement in America* showed how Indian slavery in the New World was a critical driving factor in the decimation of native populations.
- The 2011 Prague Earthquake clips show OGS and other government officials denying wastewater wells impact on recent earthquakes.
- The 2016 Pawnee Earthquake clips show USGS, OGS, and other government officials taking action to shutdown wastewater well sites due to their impact on seismic activity.



This graph demonstrates the sharp spike of earthquakes. It shows how severe earthquakes were a rarity in Oklahoma before 2009 and how they have skyrocketed with over 800 minimum 3.0 M earthquakes in 2015 alone.

## Discussion

The results concerning Native population decline due to the North American practice of slavery are significant because it cuts against the common assumption and thesis, which is Native populations were decimated by European diseases. The results concerning the wastewater injection sites leading to increasing seismic activity are significant because these practices are jeopardizing people's lives and property. The clips show the state regulators resistance to admit their faults. However, truth is inescapable and they eventually took action to try to prevent seismic activity. One action the OGS has taken to curb seismic activity is a ban on wastewater well injection in certain areas. Another step they have taken is decreasing the amount of wastewater that can be legally injected into the well sites across the state.

## Conclusion

Although the OGS and USGS have taken steps to mitigate increasing seismic activity in Oklahoma, this only became reality due to the mounting pressure of the scientific community, Oklahomans, and the Pawnee Nation. These results do not show the exact ways in which the oil and natural gas industry exerted their influence to prevent well shutdowns because this mainly occurs behind closed doors. The next action the state of Oklahoma should take is focusing on reducing seismic activity and damages.

## References

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## Acknowledgements

Robert Powers  
Lauren Becker  
Marie Sintularie