

# The Root Causes of Climate Change: Understanding Extractive Industries and their Impacts

October 30th, 2018

[CatholicClimateCovenant.org](http://CatholicClimateCovenant.org)



**Catholic Climate Covenant**<sup>sm</sup>

Care for Creation. Care for the Poor.

# **The Root Causes of Climate Change: Understanding Extractive Industries and their Impacts**

**We give thanks to God for creation and for being wonderfully made.**

**We ask for the grace to see creation as God does – in all its splendor and suffering.**

**We ask for the grace to look closely to see how our life choices impact creation and the poor and vulnerable.**

**We ask for the grace of conversion towards ecological justice and reconciliation.**

**We ask for the grace to reconcile our relationship with God, creation and humanity, and to stand in solidarity through our actions.**

**~ From the Jesuit Ecological Examen**



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# Control Panel >>>>

## Your Participation

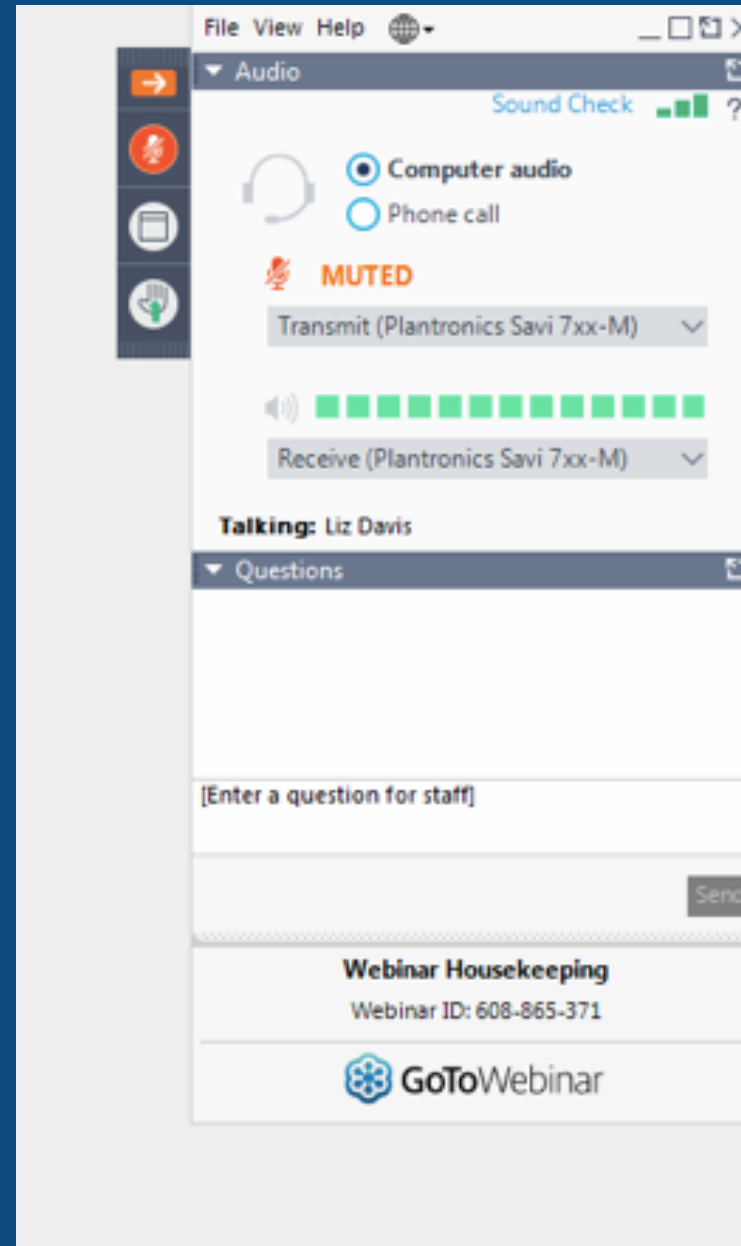
Open and close your control panel

Join audio:

- Choose **Mic & Speakers** to use VoIP
- Choose **Telephone** and dial using the information provided

Submit questions and comments via the Questions panel

**Note:** Today's presentation is being recorded and will be provided within 48 hours.



# The Root Causes of Climate Change: Understanding Extractive Industries and their Impacts



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Moderator: Paz Artaza-Regan, Catholic Climate Covenant

# Extractivism

a short-sighted model of development that exploits natural resources on a massive scale for the benefit of a few at the risk of serious social and environmental consequences, including climate change

[www.justresponse.faith](http://www.justresponse.faith)





“..carbon dioxide emissions and atmospheric concentrations of greenhouse gases remain very high. This is disturbing and a cause for real concern. Yet even more worrying is the continued search for new fossil fuel reserves, whereas the Paris Agreement clearly urged keeping most fossil fuels underground.”

*Pope Francis to oil executives, June 2018*

# Exploring Extractivism and Climate Change



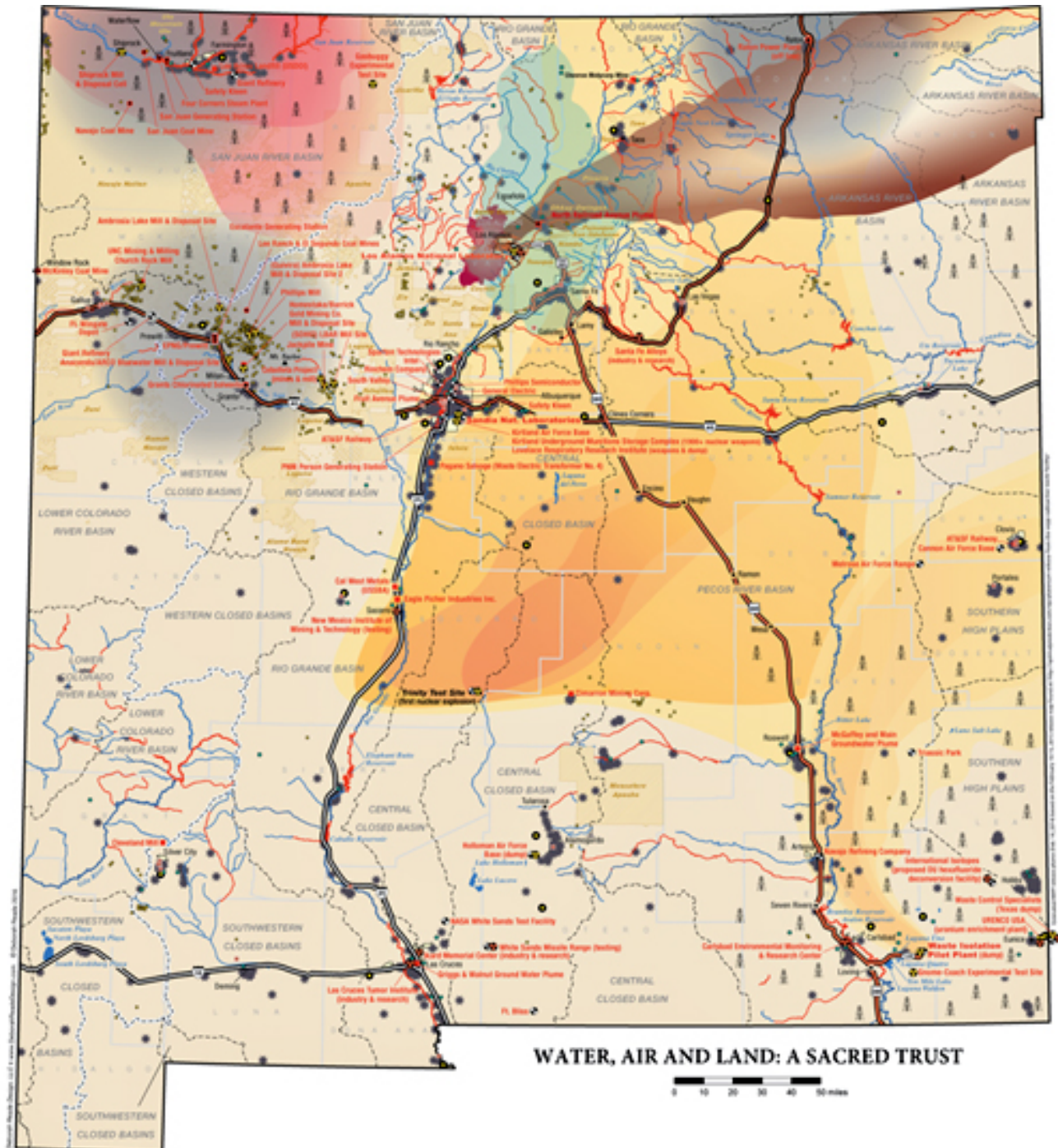
- Extraction of fossil fuels negatively impacts communities and the environment
- Recognition of our complicity through our demand for fossil fuels
- Large-scale extractive industries rely heavily on fossil fuels
- Beware extractivism in the shift to renewable energy (human rights abuses, environmental degradation)

# New Mexico Extractivism Sacrifice Zone



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# New Mexico Social Stats

- \*Colonized by Spain 1598—named New Mexico in 1563--State 1912**
- \*\$43,820 median income ---US about \$54,000**
- \*1 in 5 live in poverty**
- \*2018 Family Prosperity Index, NM last at 3.35-- Utah highest at 7.37. NM ranks near bottom of indices for 30 years.**
- \*49<sup>th</sup> in child well being 2018**
- \*20 percent of NM families with children, neither parent has had secure employment in past year**
- \*25% of all New Mexico children under 18 live in poverty and 40 percent Native American children**
- \*47% Hispanic----10% Native American—41% Anglo**



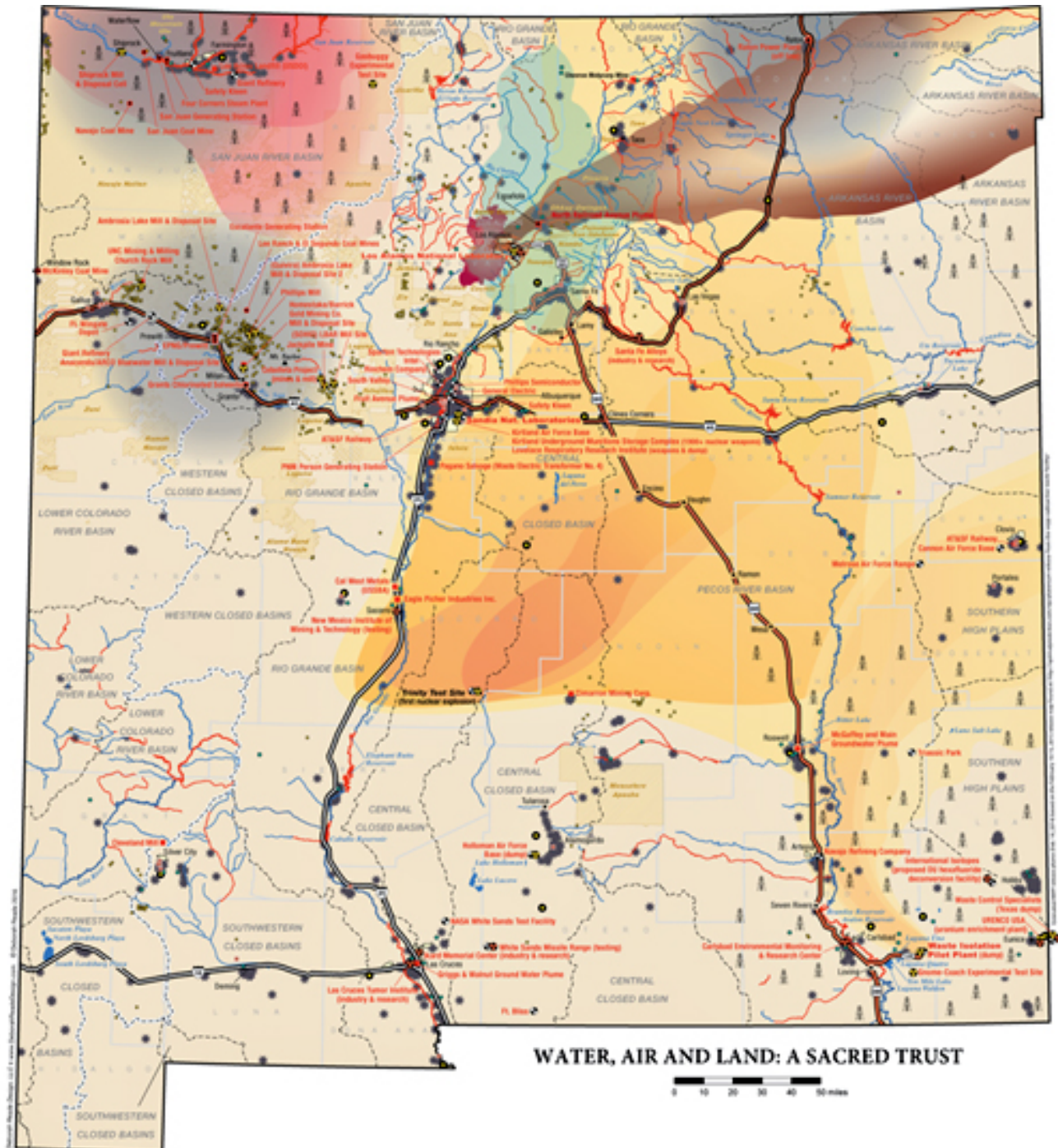
# New Mexico Extractivism Stats

- \*34.7% of all land in NM under Federal jurisdiction**
- \*Split Estate separates minerals from land**
- \*3<sup>rd</sup> nationally in oil production with large boom in Permian Basin**
- \*8<sup>th</sup> in natural gas**
- \*2<sup>nd</sup> in copper**
- \*1<sup>st</sup> in potash**

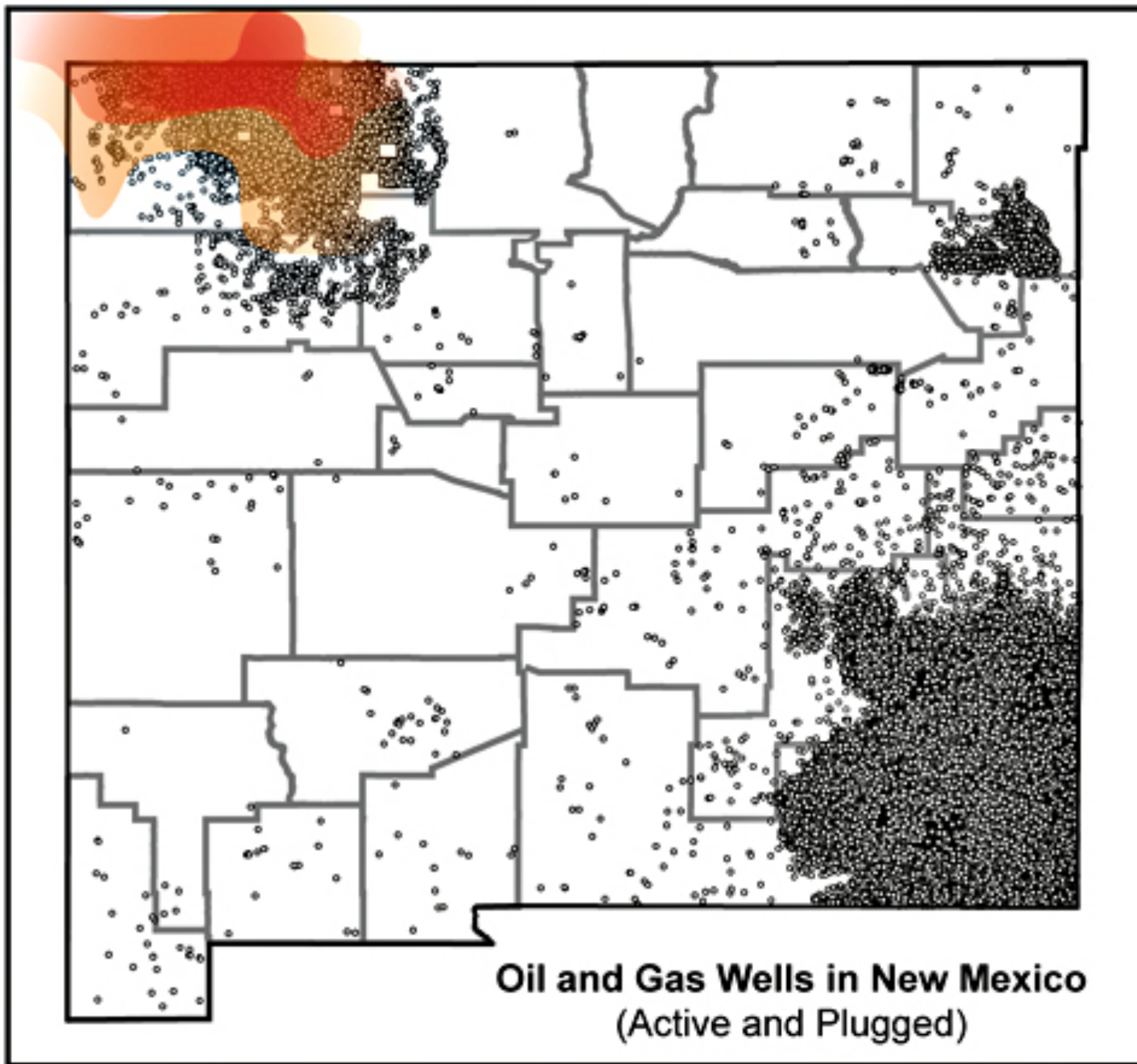
## **Potential extraction statistics**

- \*2<sup>nd</sup> in reserves of natural gas**
- \*2<sup>nd</sup> in reserves of crude oil**
- \*2<sup>nd</sup> in reserves of uranium**





Source: New Mexico Bureau of Geology & Mineral Resources • <http://geoinfo.nmt.edu>



**Oil and Gas Wells in New Mexico**  
(Active and Plugged)

# Ecological and Social Challenges

## Extractivism involves more than the element extracted

### \*Extraction of culture, human dignity, sacredness of land and communities

\*Chaco Canyon, Bear's Ears, Permian Basin, Grants Uranium Belt

\*takes advantage of undocumented workers and those with limited English

### \*Extraction of social and physical health

\*asthma, cancers, health of pregnant women and infants

\*domestic violence, sexual abuse of women, drugs/alcohol abuse

\*damaged roads and increased traffic accidents

### \*Extraction of economy for short term profit

\*companies often house corporate centers out-of-state, banks

\*jobs are local draw for industry, but often workers are imported

\*companies abandon clean-up

### \*Extraction of long term ecological health, water, land, air

\*pollution of water, land

\*legacy issues, nuclear power plants and high level waste disposal

\*ie. uranium mining legacy of polluted water, cancers, genetics.

300 abandoned legacy mines and 1000 abandoned prospects with current applications in various stages around old sites



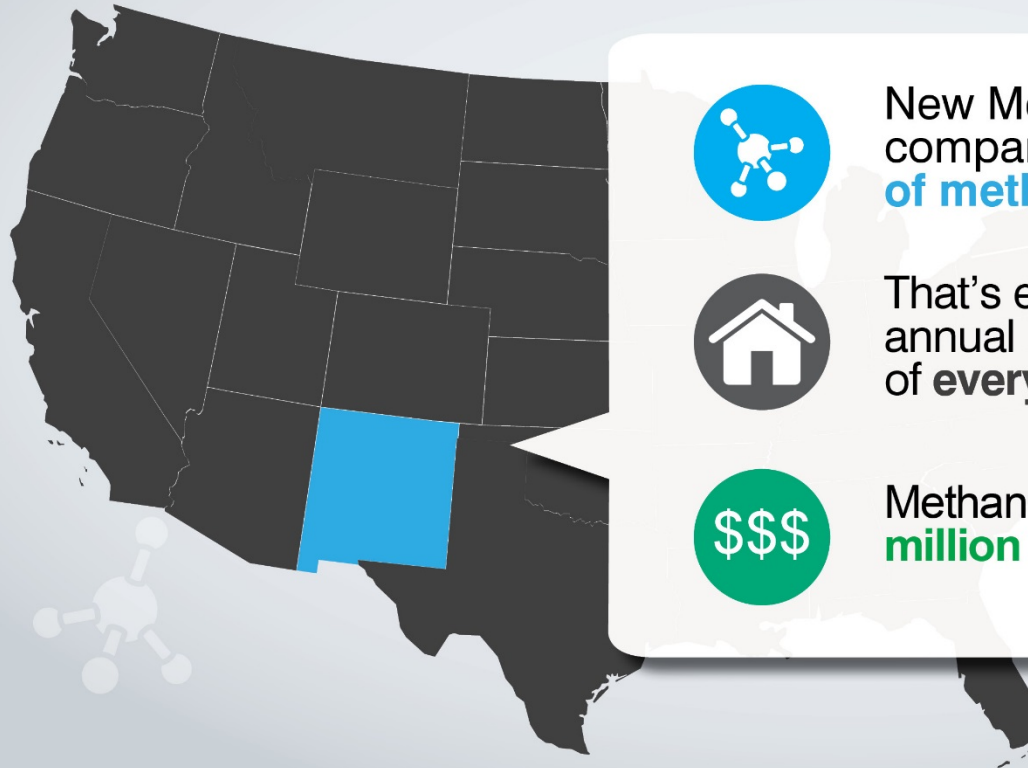
# Ecological and Social Challenges

## Long term climate change effects

- \*Oil and gas companies in New Mexico produce as much climate pollution as approximately 12 coal-fired power plants from methane waste (venting, flaring and leaks).
- \* US oil and gas industry is the leading source of methane pollution and without action this will increase 25% over ten years.
- \* **Methane** is responsible for about 25% of global warming and in the short term traps 80 times more heat in the atmosphere than the same amount of carbon dioxide
- \*Climate change makes **water** in the arid west increasingly vulnerable. Hydro-fracking utilizes generally between 2-8 million gallons of sister water per fracked well.
- \*Some wells consume much more and a well may be fracked multiple times with an increased potential of chemical leakage into soil and local water sources.
- \*\$182-\$244 million worth of natural gas is lost in NM in a year with the state budget losing up to \$27 million for education



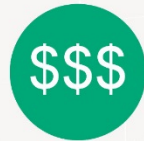
## How much natural gas is New Mexico wasting?



New Mexico's oil and gas companies emit **570,000 tons of methane** each year.



That's enough gas to meet the annual heating and cooking needs of **every home in the state**.



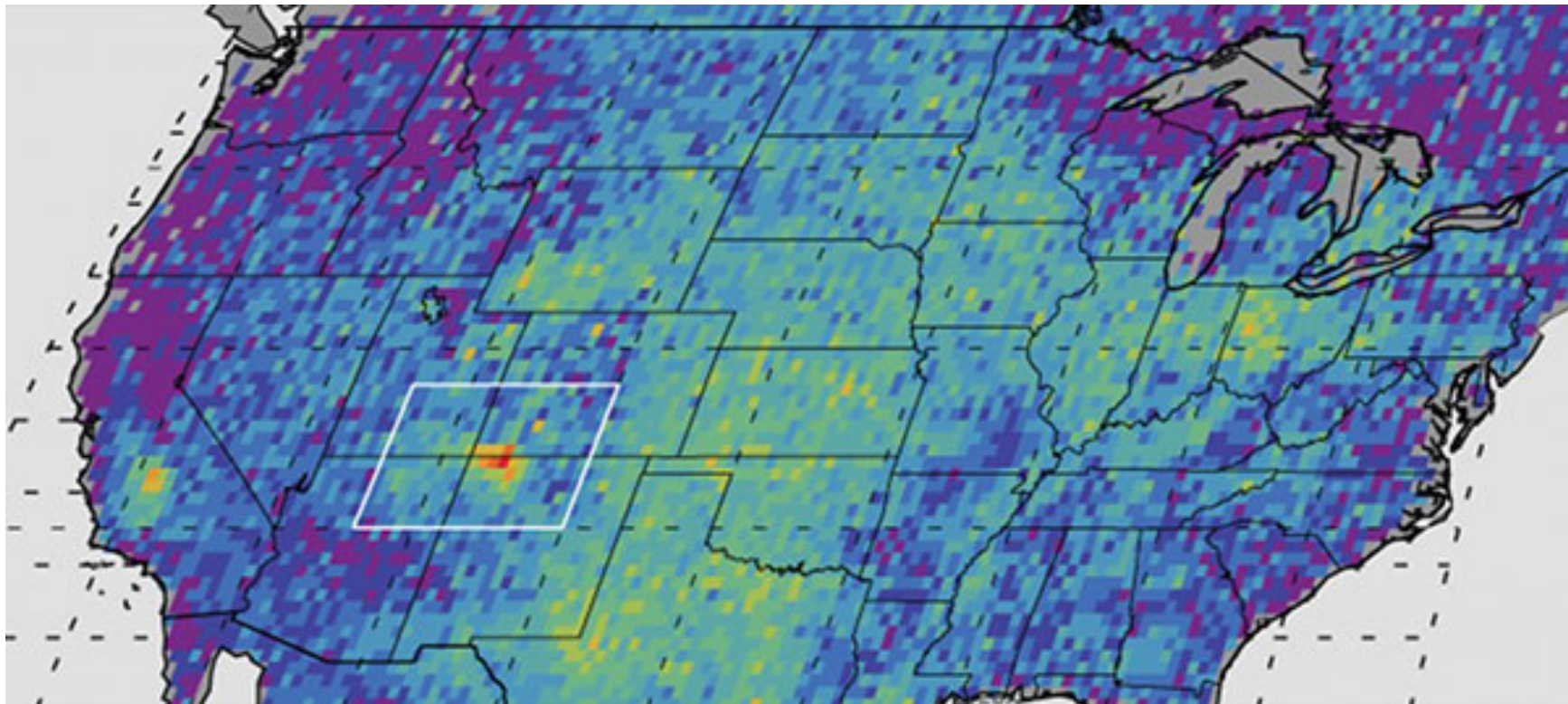
Methane leaks result in **\$180- \$244 million** worth of wasted gas.



New Mexico's methane waste problem first made international headlines when [a 2014 NASA study](#) revealed a 2,500-square-mile methane (size of Delaware) "hot spot" over the Four Corners region—the highest concentration of this pollution found anywhere in the U.S.

Oil and gas operators can cost-effectively reduce their emissions. The International Energy Agency found a 75% reduction in global emissions is feasible with simple fixes, using available technologies.

<https://www.edf.org/energy/new-mexico-methane-waste-report>



# Questions and Difficult Conversations

- The economics of just transition from extractives to renewable energy is possible. The burden for job loss and economic downturn must be born equitably. How do we grapple with equity when the energy sources extracted come from rural areas going to mostly urban areas? And often from Indigenous land?
- Who does our use of energy harm in the entire energy chain? This echoes a theme of Catholic Climate Covenant, Who is under my carbon footprint. (ex. high level nuclear waste dump proposed for NM—NM has no nuclear power.)
- Often brothers and sisters in rural areas where there is extraction feel judged. If we are to address climate change and the effects of extractivism, it must include all voices. Faith communities have a unique role. How might we facilitate these conversations?

# What We Can Do

- Speak as individuals of faith to candidates and public officials about concerns of climate change and the link to energy and extractivism.
- Do a study group at your church or home. CAVU, a film project has a series called UNEARTHED that explores issues from various points of view in New Mexico. 15 minute video's available online to spark conversation.
- Find out about extraction pollution in your area. Use the interactive Oil and Gas Threats map from Earthworks. <https://oilandgasthreatmap.com/>
- Comment on EPA methane pollution rules. Sign Interfaith Power and Light petition at <https://www.interfaithpowerandlight.org/methane/>
- Information for EPA methane hearing in Denver Nov 14 or to make a comment on Federal registry by mid-December. Detailed information at <https://s3.amazonaws.com/public-inspection.federalregister.gov/2018-23570.pdf>

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Fr. Peter Hughes

## Amazonian Examples



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# So What Can I do?

- PRAY about your relationship with creation and about lifestyle adjustments you can make [www.ecoexamen.org](http://www.ecoexamen.org)
- PRAY with Amazonia: New Paths for the Church and for an Integral Ecology
- EDUCATE yourself and others [www.justresponse.faith](http://www.justresponse.faith)
- ADVOCATE with local and state groups addressing extractives projects in your communities
- ACT by minimizing your dependence on the extractivist model (buy fair trade and ethically sourced products, stop using bottled water, reduce use of oil and gas)

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## Questions ?



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For more information:

<https://catholicclimatecovenant.org/resource/protect-sacred-places>

and

[info@CatholicClimateCovenant.org](mailto:info@CatholicClimateCovenant.org)