

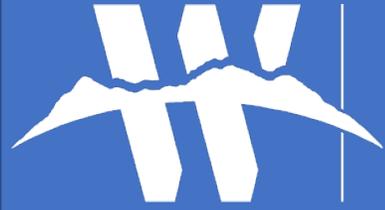


**Western  
Environmental  
Law Center**

**NEW MEXICO'S METHANE REDUCTION STRATEGY:**

**Erik Schlenker-Goodrich, Executive Director  
October 28, 2020**



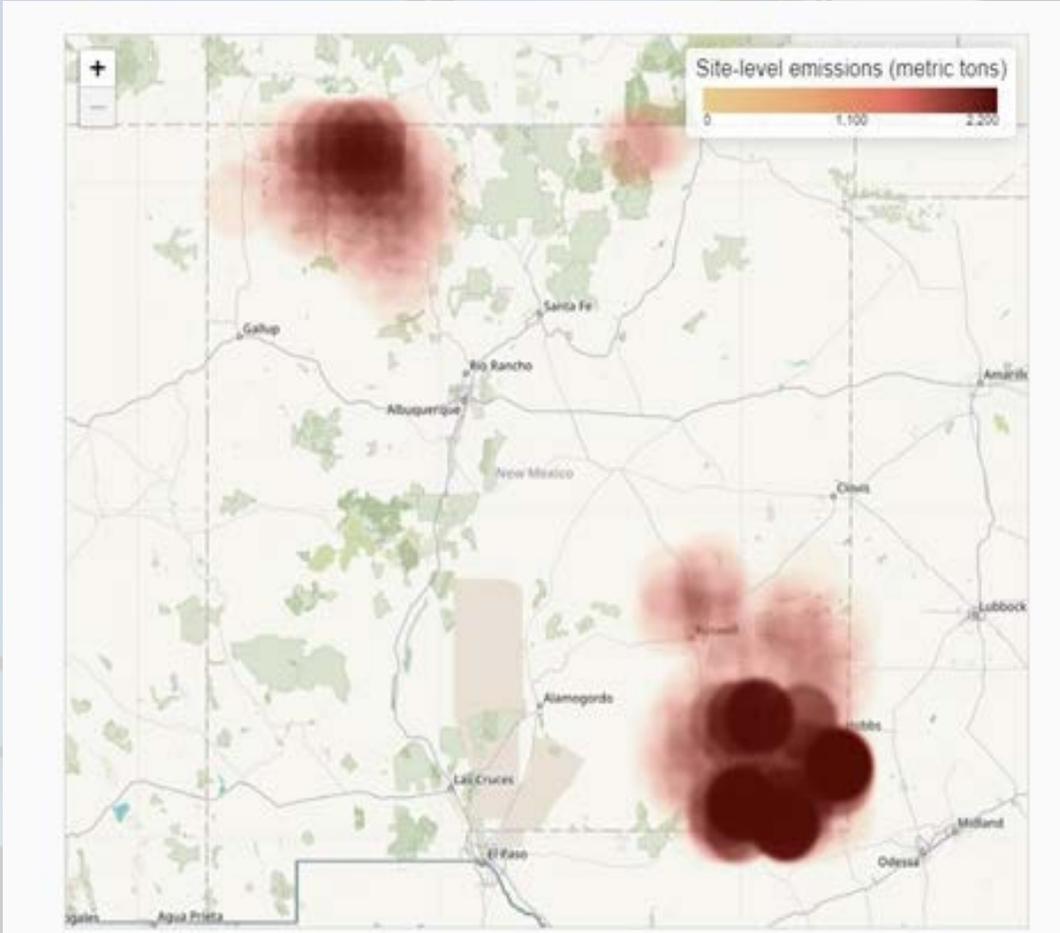


Western  
Environmental  
Law Center

## Comment Partners

- Baake Law, LLC
- CAVU (Climate Advocates/Voices Unidos)
- Clean Air Task Force
- Conservation Voters NM
- Diné CARE
- Devils Spring Ranch
- Earthworks
- NM Environmental Law Ctr.
- NM Interfaith Power & Light
- NM Sportsmen
- Oil Change International
- ProgressNOW NM
- Rio Grande Indivisible
- Sierra Club – Rio Grande Chapter
- San Juan Citizens Alliance
- Western Leaders Network

# Annual Oil and Gas Air Pollution and Methane Waste in New Mexico



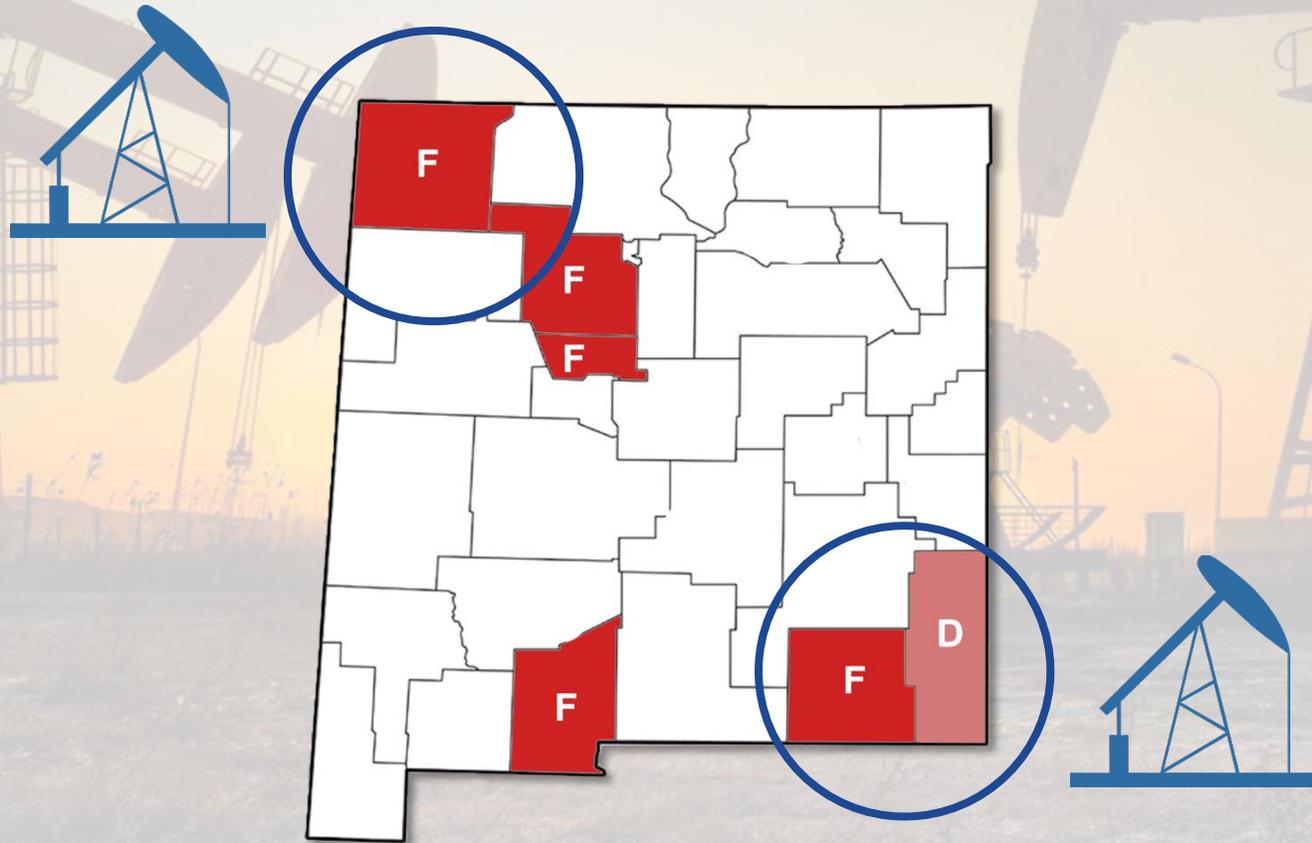
**1 million tons**  
of methane emissions

**\$43 million**  
in lost revenue

**\$275 million**  
in wasted gas

**Unhealthy**  
air quality

# Oil and gas counties are experiencing unhealthy levels of ozone



**American Lung Association Ozone Rankings**

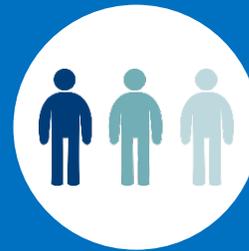
Courtesy Environmental Defense Fund

# Strong Protections Are Needed for New Mexico's most vulnerable populations

## San Juan Basin



**94% of wells**  
would not be checked



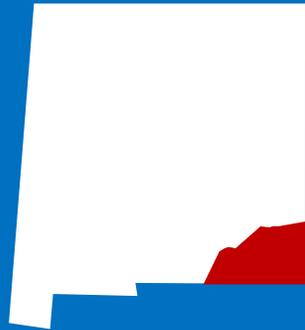
# 54,000

Vulnerable people  
live within a half mile of these  
wells

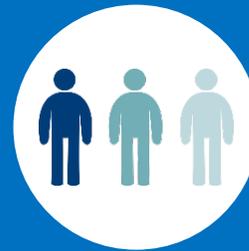
County	Kids under 5	Latinos	Native Americans	African Americans
Rio Arriba	7%	1%	27%	12%
San Juan	72%	91%	45%	82%

# Strong Protections Are Needed for New Mexico's most vulnerable populations

## Permian Basin



**87% of wells**  
would not be checked



**28,000**

**Vulnerable people**  
live within a half mile of these wells

County	Kids under 5	Latinos	Native Americans	African Americans
Eddy	38%	39%	40%	30%
Lea	33%	35%	27%	16%

# Quantifying methane emissions from the largest oil-producing basin in the United States from space

 Yuzhong Zhang<sup>1,2,3,4,\*</sup>,  Ritesh Gautam<sup>2,\*</sup>,  Sudhanshu Pandey<sup>5</sup>,  Mark Omara<sup>2</sup>, Joannes D. Maasakkers<sup>5</sup>,  Pank...

+ See all authors and affiliations

*Science Advances* 22 Apr 2020:  
Vol. 6, no. 17, eaaz5120  
DOI: 10.1126/sciadv.aaz5120

<https://advances.sciencemag.org/content/6/17/eaaz5120>

- Permian Basin oil & gas operations losing methane at twice the average rate of 11 other major U.S. oil & gas regions
- 3.7% of total natural gas production lost through venting, leaks, and unlit or malfunctioning flares

**TABLE 3. PERCENT OF PRODUCTION FLARED BY TOP 25 COMPANIES, RANKED BY 2019 FLARING VOLUMES**

<b>COMPANY</b>	<b>2019 GAS PRODUCTION (MCF)</b>	<b>2019 FLARED (MCF)</b>	<b>PERCENT OF PRODUCTION FLARED</b>
XTO ENERGY/XTO PERMIAN OPERATING/BOPCO, L.P.	72,028,232	4,467,296	6%
DEVON ENERGY PRODUCTION COMPANY, L.P.	110,174,749	4,082,241	4%
AMEREDEV OPERATING, LLC	4,600,491	3,591,068	78%
MARATHON OIL PERMIAN, LLC	27,338,268	2,252,093	8%
OXY USA/OCCIDENTAL PERMIAN	155,501,254	2,174,278	1%
CIMAREX ENERGY	78,995,491	2,062,078	3%
COG OPERATING/COG PRODUCTION	151,328,114	1,905,262	1%
WPX ENERGY PERMIAN, LLC	15,706,022	1,820,509	12%
EOG RESOURCES INC	157,968,423	1,709,131	1%
MATADOR PRODUCTION COMPANY	40,232,961	1,527,662	4%
CENTENNIAL RESOURCE PRODUCTION, LLC	5,742,344	1,350,926	24%
TAP ROCK OPERATING, LLC	6,050,693	1,051,638	17%
BTA OIL PRODUCERS, LLC	25,363,851	1,040,554	4%
APACHE CORPORATION	31,669,356	992,751	3%
SPUR ENERGY PARTNERS, LLC	2,333,468	891,471	38%
PERCUSSION PETROLEUM OPERATING, LLC	2,950,123	785,810	27%
CHISHOLM ENERGY OPERATING, LLC	9,832,639	489,190	5%
BURNETT OIL CO INC	3,809,527	439,480	12%
MURCHISON OIL AND GAS, LLC	2,710,429	344,418	13%
CONOCOPHILLIPS COMPANY	16,091,164	331,961	2%
IMPETRO OPERATING, LLC	808,641	244,726	30%
STEWART ENERGY II, LLC	645,320	203,494	32%
FASKEN OIL & RANCH LTD	1,770,362	124,446	7%
RIDGEWAY ARIZONA OIL CORP.	129,739	91,789	71%
POGO OIL & GAS OPERATING, INC	915,939	86,607	9%

Sources: OCD C-115 data and Gas/Oil Production by Operator 2019. Available at <http://www.emnrd.state.nm.us/OCD/statistics.html>



## Flaring in the Oilfield: A Closer Look (August 2020)

<https://westernlaw.org/wp-content/uploads/2020/08/2020.08.05-WELC-NM-Flaring-Report.pdf>

Monetized  
Benefits of  
NMED ozone &  
OCD methane  
waste rules



Value of captured natural gas  
not vented, flared, or leaked



Human health benefits of  
reduced air pollution

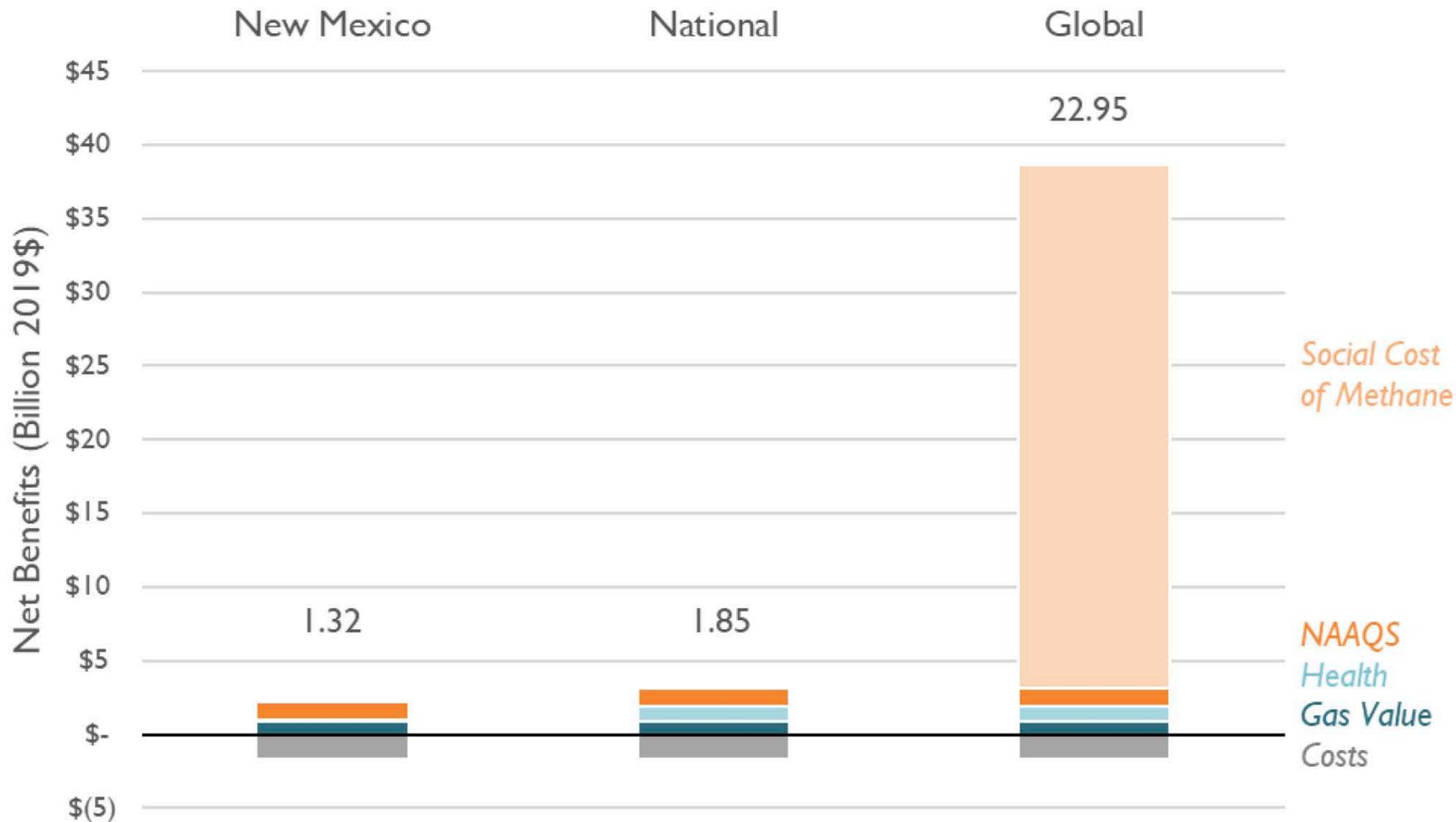


Global social benefit from  
greenhouse gas reductions



Avoided NAAQS  
nonattainment costs

Figure 3. Net benefits and benefit-cost ratios for the proposed rules in New Mexico



**TEN YEAR BENEFITS**

- \$126 million** in human health benefits from reduced VOCs
- \$1.2 billion** in avoided air quality nonattainment costs
- \$730 million** worth of captured natural gas
- \$99 million** in additional state royalties

Synapse Energy Economics, *Cost-Effectiveness of Proposed New Mexico Environment Department Oil & Gas Emissions Reduction Rules* (September 15, 2020)

<https://www.synapse-energy.com/project/benefit-cost-analysis-proposed-voc-emissions-rules-new-mexico>



## 2016 METHANE AND WASTE PREVENTION RULE

- ❖ Net benefits of \$46 to \$204 million
- ❖ Annual cost to industry of \$110 to 279 million.
- ❖ Profit margins for small operators reduced by less than 0.2% on average.

## French government blocks U.S. LNG deal as too dirty

The French trading firm Engie had been poised to sign the \$7 billion, 20-year contract.

“The French government, which is a part owner of Engie, stepped in to tell Engie’s board of directors to delay, if not outright cancel, any deal **because of concerns that U.S. natural gas producers emit too much methane** at the West Texas oil and gas fields that will supply gas to the NextDecade plant, said Lorette Philippot, head of private finance campaigns for French environmental group Les Amis de la Terre, a French affiliate of the green group Friends of the Earth that met with French government officials to oppose the deal.”

<https://www.politico.com/news/2020/10/21/french-government-blocks-lng-deal-431028#>



**Institute for Energy Economics  
and Financial Analysis**  
IEEFA.org

“[I]t is a mistake to confuse production with profits. As this report explains, **overproduction of oil and gas contributed to the industry’s weak finances, even as it masked the fiscal risks New Mexico faces from its heavy reliance on oil and gas revenues.** Moving forward, weak demand growth for oil and gas—resulting from significant economic and technological trends described in this report—has created headwinds that will likely impede a rebound. As a result, the sector is likely to face even stricter financial constraints in the future.”

*-IEEFA, New Mexico’s Risky Reliance on Oil Revenue Must Change: Industry Fundamentals Point to Long-Term Decline (October 2020)*

[https://ieefa.org/wp-content/uploads/2020/10/New-Mexicos-Risky-Reliance-on-Oil-Revenue\\_October-2020.pdf](https://ieefa.org/wp-content/uploads/2020/10/New-Mexicos-Risky-Reliance-on-Oil-Revenue_October-2020.pdf)



# Five Key Points

- Ozone pollution and methane waste is a significant problem with a sensible solution: state-level rules that lead the nation and create a model for action.
- Rules likely to provide net benefits to New Mexicans, the U.S., and the world.
- Rules deserve full support via funding for NMED and OCD implementation.
- O&G industry tipping into structural decline due to downward spiral of oversupply, demand reduction, low prices, high debt levels, energy market competition, & climate risk.
- Fiscally prudent path forward for New Mexico: (1) Promulgate and support strong ozone and methane safeguards; (2) Build federal, state, tribal, and local partnerships; and (3) Leverage partnerships to diversify and stabilize state revenue streams and the economies of oil and gas dependent communities.