

# TRIBAL COMMUNITIES AT RISK



THE  
DISPROPORTIONATE  
IMPACTS OF OIL AND  
GAS AIR POLLUTION  
ON TRIBAL AIR  
QUALITY

**CLEAN**AIR  
TASK FORCE

# TRIBAL AIR QUALITY

A new analysis of public data shows that Native American communities often face disproportionate health impacts from air pollution from the oil and gas industry. Meanwhile Interior Secretary Ryan Zinke and EPA Administrator Scott Pruitt are seeking to eliminate federal rules designed to limit waste and air pollution from this industry on tribal lands.

In the United States, the oil and gas industry dumps millions of tons of air pollutants into our air each year. On tribal lands alone, this mix of pollutants includes **18.4 billion cubic feet of methane**, a potent climate pollutant and the primary component of natural gas. In fact, the total amount of natural gas emitted and flared on tribal lands would fetch \$100 million if it were brought to market and generate millions in royalty revenues for tribes each year.



**MEMBERS OF THE NAVAJO NATION.  
SOURCE: ENVIRONMENTAL DEFENSE FUND**

**LIKELIHOOD OF LIVING WITHIN  
A ½ MILE OF AN OIL AND GAS  
FACILITY COMPARED TO  
ENCOMPASSING STATE(S)**

**2X  
MORE  
LIKELY**

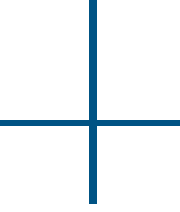
**FORT BERTHOLD INDIAN  
RESERVATION**

**2X  
MORE  
LIKELY**

**NAVAJO NATION (UTAH &  
NEW MEXICO ONLY)**


**42X  
MORE  
LIKELY**

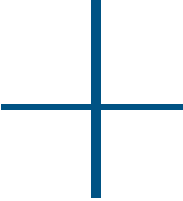
**UINTAH-OURAY  
(NORTHERN UTE)**



Moreover, oil and gas operations emit volatile organic compounds (VOCs) and nitrogen oxides (NOx), which combine to form ozone smog. Ozone smog poses a serious threat to children who suffer from asthma as well as seniors that have emphysema. While ozone smog is often associated with urban areas, some rural areas with oil and gas production – such as the Uinta Basin in Utah, home to the Northern Ute – have high ozone smog levels. Air pollution from the oil and gas industry also includes toxic air pollutants, such as benzene, formaldehyde, and acetaldehyde. Toxic air pollution emissions can directly affect the health of individuals living, working, or going to school adjacent to pollution sources. The impact of oil and gas air pollution is not felt equally by all communities – proximity to oil and gas operations and underlying socioeconomic factors can exacerbate the impact of this air pollution.

"If you can see pollution, you are breathing it. On Fort Berthold the oil and gas industry pollutes our air by releasing toxic gas from flares and methane leaks. Since the oil activity started in 2008, my husband and I have experienced respiratory issues and we have heard more complaints about people having coughs and worsening asthma. We are being poisoned on our own lands"  
-Lisa DeVille, Mandaree, ND (Fort Berthold)



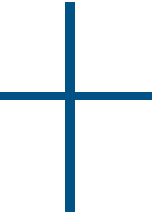


Air pollution from oil and gas facilities can have a significant impact on public health. This analysis finds that communities near active oil and gas operations experience a higher frequency of acute health impacts. We use a ½ mile radius here based on [research](#) by the Colorado School of Public Health at University of Colorado, which has found a clear correlation between health impacts and the presence of oil and gas facilities.

This is likely a conservative estimate given that other research has linked oil and gas operations to air pollution at [distances much greater than ½ mile](#).

For instance, the ½ mile threat radius underestimates populations subjected to unhealthy ozone or smog pollution in areas like the Northern Ute lands in Utah's Uinta Basin. This basin was recently listed as "nonattainment" with health-based standards for ground level ozone pollution by the U.S. EPA, [a problem that has been directly linked to pollution from local oil and gas development](#). On days with unhealthy smog levels, residents across the basin are subjected to polluted air, stretching far beyond the ½ mile radius used here.

We analyzed population data and oil and gas facility information for three tribal groups on whose lands there is significant oil and gas production. We calculated how many Native Americans living on tribal lands live within a ½ mile of oil and gas facilities and compared this percent to the total population in encompassing the state(s) living within a ½ mile of oil and gas facilities.



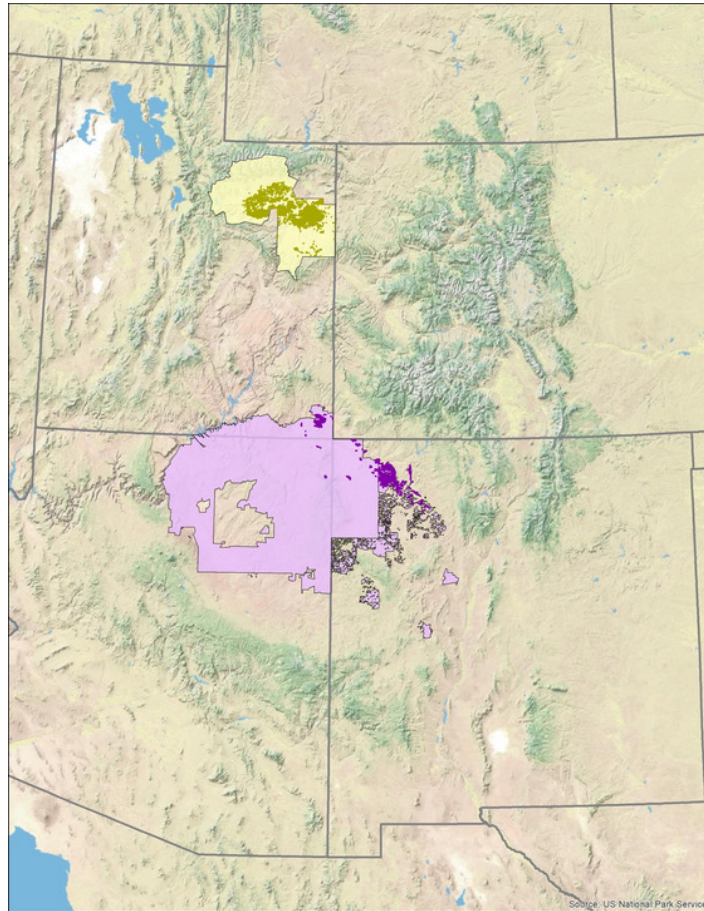
**In all of the cases analyzed, tribal communities are more likely to live in the radius than the population as a whole and therefore are disproportionately impacted by oil and gas pollution:**

Fort Berthold Indian Reservation	Percent of Population in ½ Mile Radius	Percent of Population Below Poverty Line
Native American Population on Tribal Land	4%	28%
Total State Population — North Dakota	2%	11%



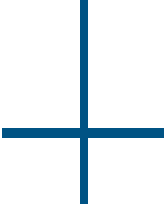


Navajo Nation (Utah and New Mexico only)	Percent of Population in ½ Mile Radius	Percent of Population Below Poverty Line
Native American Population on Tribal Land	7%	42%
Total State Population — Utah and New Mexico	3%	15%



Uintah-Ouray (Northern Ute)	Percent of Population in ½ Mile Radius	Percent of Population Below Poverty Line
Native American Population on Tribal Land	23%	28%
Total State Population — Utah	0.5%	12%


Source:  
 Radius data: U.S. Census, 2010. Oil and gas facility data: see <http://oilandgasthreatmap.com/about/data/>.  
 Poverty data: American Community Survey, 2016.



Individuals living below the poverty line or without health insurance are particularly burdened by the effects of air pollution. High poverty rates restrict housing options for families, and lack of health insurance limits access to quality health care. These economic factors exacerbate the impact air pollution has on low-income families. [Studies](#) have found that children with asthma that also live in poverty or without insurance are more likely to end up in the emergency room because of asthma attacks, because poverty and lack of quality health insurance can make it hard to keep asthma under control, resulting in more severe attacks and visits to the hospital. Thus, even for the same health risk, the health burden is greater for people living in poverty. Native American individuals living on these tribal lands are more likely to be living in poverty compared to the population of the encompassing state(s).

“Air pollution from the oil and gas industry threatens the health of the Navajo Nation, particularly our children. You can actually smell the gas from some wells while realizing that you can’t have gas service for your house in the winter. Oil and gas companies get rich while members of my community suffer from asthma attacks and nose bleeds and stay poor.”

-Carol Davis, Coordinator Diné Citizens Against Ruining our Environment



The bottom line: air pollution from the oil and gas industry affects Native American communities on tribal lands. Tribal communities need strong safeguards to limit methane, toxic air pollution, and other pollutants that form ozone smog from the oil and gas industry and keep communities healthy.