THE STATE OF CLIMATE ACTION IN NEW MEXICO: A Call to Action



September 2024



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The Toll of Climate Change on Rural Communities

Rural communities and low-income communities bear a disproportionate burden from the climate crisis. They frequently have fewer resources and less infrastructure than urban areas and are at the epicenter of the "wildland-urban interface," where structures and other human development meet wild, undeveloped vegetation. Furthermore, rural communities' economies are often connected to tourism and rely on the health of the land for quality of life and revenue. All of these factors make them vulnerable to the impacts of climate change.



New Mexico is recognized as one of the best states in the nation for pecan, chile pepper, milk, cheese and onion production (New Mexico Department of Agriculture, 2024). In 2022, agricultural production contributed over \$3.7 billion to the state's economy. New Mexico's signature crop, the chile pepper, is also particularly vulnerable to high temperatures and heatwaves (Yu, 2021; Gleason, 2024b). Chile and pecans are also water-heavy crops, and increased drought further stresses irrigation resources. As crops become stressed, the likelihood of pest and disease outbreaks increases, threatening entire farms, local economies and community food security (Singh et al., 2023; Tayag, 2024). The agricultural industry also contributes to climate pollution, from equipment exhaust fumes to byproducts such as manure and fertilizer (Yang et al., 2022). Strategies such as converting farm equipment to electric and mitigating fertilizer emissions will help minimize climate pollution in rural communities.

In addition, outdoor workers, such as agriculture and oil field workers, are more likely to be impacted by heat waves and heat-related illnesses. **In fact, the American Lung Association reports that agricultural workers are 35 times more likely to die from heat extremes than other workers (Becerra, 2023).** Due to discrimination and a lack of health insurance, farmworkers face a disproportionate challenge in accessing healthcare. According to MHP Salud (n.d.), only 56% of farmworkers report having health insurance, and 77% identify as people of color. Immigrant workers also comprise nearly three-fourths of all agricultural workers nationwide but experience discrimination from language barriers and racism (Moriarty, 2022). These impacts are likely to further strain agricultural worker health, quality of life, retention and recruitment.

Rural communities with bustling tourism industries, from skiing to whitewater rafting, are also dramatically impacted by climate change. Recent winter seasons have shifted to warmer temperature trends, minimizing the days of snowfall that have traditionally supported the ski and snow recreation industry (Melhado, 2021). As a result, ski hills have now become reliant on snowmaking, and the industry is witnessing a shorter ski season overall (Traverso, 2021). Whitewater rafting companies, along with other water tourism industries such as fishing, are also subject to the whim of water levels, temperatures, and drought conditions. As the climate continues to change, conditions that allow these industries to thrive will be threatened.



In northern New Mexico, acequias are being threatened by flooding, wildfires and drought, destabilizing sustainable and community-informed water management traditions (Segarra, 2022). Acequia systems and their community-driven management practices are vital to traditional and democratic water distribution, ensuring that all users in the system equitably receive water, even in drier periods (Marzia & Zahra, 2024). However, less mountain snowpack and water runoff will inevitably mean fewer water resources for irrigators, including acequia communities. Other climate disasters, including wildfires, also destroy acequia systems and deteriorate water quality from ash and soil runoff (Lohmann, 2022). These threats have become so elevated that acequia leaders declared 2022 the "worst year on record" for fire and drought (Lohmann, 2022).



Heat also increases demand for cooling systems and the electric grid, raising the cost of utilities for homes and businesses. Many homes lack insulation or even cooling systems, which adds to health concerns. The risk of downed power lines, grid limits and energy costs disproportionately impact rural residents, who are often served by smaller utilities with less grid infrastructure. Increasing grid capacity sometimes means that transmission lines and towers are proposed without consultation with impacted communities, especially Native nations, or without adequate consideration for environmental impacts. Climate disasters, such as floods and wildfires, are also more likely to disrupt or destroy rural infrastructure constructed with limited resources, such as roads and bridges, and water and wastewater systems that are vital lifelines for the community. Furthermore, research has highlighted a \$180 billion funding backlog for rural infrastructure nationwide (TRIP, 2022). This represents a significant challenge: Vulnerable roads, bridges and other infrastructure vital for rural connectivity are also aging. As a result, a flooded road may keep an entire neighborhood from accessing emergency care or escaping dangerous conditions. Natural disasters such as wildfires also threaten infrastructure, homes and livelihoods, thus, uprooting and destroying entire communities.



One-quarter of all New Mexico families do not have internet access at home, with low-income and rural New Mexicans impacted the most (McKay, 2020). Internet connectivity provides communities with access to ecommerce, remote work possibilities, education and training resources, opportunities for civic engagement and more. Although internet technology requires energy for data storage and technology operations, it also reduces air and carbon pollution in surrounding communities, especially rural areas with homes far from commercial centers, by providing engagement options that do not require travel (York, 2024). However, the energy it takes to power the internet also contributes over 3% of global climate emissions, and more steps need to be taken to ensure that internet data centers and bitcoin mining, for example, are powered by new, dedicated renewable energy sources (York, 2024).

Statistics on violence against Native people, especially Murdered and Missing Indigenous Women (MMIW) are sobering. While Albuquerque and Gallup are among the 10 U.S. cities with the highest number of MMIW and girls, the percentages tell a more nuanced story (New Mexico Department of Indian Affairs, n.d.). In Farmington, 66% of Native people's cases were missing females, and of the solved homicide cases, Native people represent 43%. In Gallup, Native people comprise 76% of all missing persons and 87% of all homicide cases between 2014–2019. In fact, Native women in New Mexico have the highest rate of homicide among all racial and ethnic groups. **One contributing factor is the influx of outsiders, such as non-Indigenous male workers brought in to work in the oil and gas fields (Mutert, n.d.).** Nationally, 96% of Indigenous female survivors have experienced violence from a non-Indigenous perpetrator.



It is also particularly important to emphasize the tremendous impact on Native people from being unable to adapt to changing natural systems, as they have done from time immemorial, by moving. They now live "within the overlay of a foreign government and within boundaries and systems not entirely of their own choice" (Pasqual, 2024). They are now embedded in the landscapes and systems in which they find themselves and must rely on generations, and centuries, of accumulated knowledge and understanding of those systems to find a way to adapt.

Climate change's impact on vital rural industries will also undoubtedly impact the local workforce and economy. Less revenue and economic opportunities due to shrinking industries will increase mental stress and health disparities among rural residents. Heat, drought and aridity will also lead to increases in dust and air pollutants, triggering respiratory problems, such as asthma and chronic obstructive pulmonary disease (Bayram, 2017). All of these circumstances will further strain the rural healthcare system.

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