



Rural Population Research Network

A USDA supported multi-state research project on the causes and consequences of demographic change in rural America

March 18, 2022

Brief # 2022-7

Population Growth is Related to Natural Hazard Exposure in the Rural Western U.S.

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Most rural counties in the U.S. that are gaining population are located in the West.¹ At the same time, the West is experiencing unprecedented natural hazards, notably drought and wildfires. This population growth – driven mostly by in-migration – has important implications for the relationship between people and the natural environment. More people are exposed to natural hazards, and population growth can lead to increased stress on the natural environment. Exposure to, or risk of, environmental hazards can also shape whether populations stay, return, or resettle elsewhere.

In this brief, we review demographic trends and existing research on migration and natural hazards in the rural West. We discuss their interdependence and make suggestions aimed at increasing the resilience of human and natural systems. We focus on two interrelated natural hazards that are of particular importance to migration trends in the West – drought and wildfires.^{2,3}

The West is Growing Fast, Especially in High Natural Amenity Places

The U.S. population overall grew by 7.4% between 2010 and 2020. The West (9.2%) and the South (10.2%) were the fastest-

KEY FINDINGS

- Unlike the rural U.S. as a whole, the population in the Western U.S. is growing, mostly in high natural amenity places.
- More people are moving to and living in rural West places that are experiencing a “megadrought.”
- High in-migration to wildland-urban interfaces in the West is leading to increased vulnerability to wildfires.
- Policy and planning efforts must account for both the social and natural environment impacts of population growth.

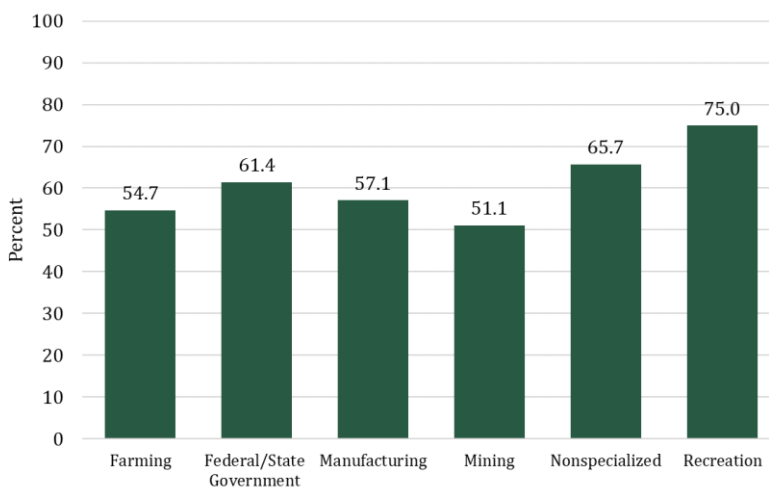


Figure 1. Percentage of Rural Counties in the Western U.S. That Gained Population 2010-2020, by County Economic Type

Data Source: U.S. Census and USDA Economic Research Service

growing regions. Meanwhile, rural America experienced its first overall decade-long population loss (-0.6%) in history between 2010 and 2020,¹ yet some rural places grew. As people increasingly seek to live in places with attractive natural and recreational amenities,⁴ and can do so because of new technology and infrastructure, recreation counties are experiencing the most rapid population growth. Seventy-five rural counties in the West are classified as recreation-dependent, and this number has increased over time. While rural counties in the West grew by 5.1% from 2010 to 2020, recreation counties grew faster at 6.1%. Three-quarters of recreation counties experienced population growth – a larger share than any other county type in the West (see Figure 1). The COVID-19 pandemic has exacerbated this growth trend in recreation counties, as employers allowed remote work, leading to what some have referred to as “Zoom towns”. This population growth has led to increased demand for housing, education, health care, and other services – needs that cannot always be quickly met with existing resources.

Droughts and Wildfire Affect Migration Trends in the West

Southwestern North America experienced its driest 22-year period of the last millennia from 2000-2021, what some have referred to as a “megadrought”³. At the same time, more people live in and move to the driest parts of the U.S., a trend that is projected to continue.⁵ The current megadrought has also been a significant driver of migration from Mexico to the Western U.S.⁶ Irrigated agriculture and energy generation consume most of the West’s water resources,⁵ yet population growth will further affect water demand, meaning water-related challenges will get worse if growth is not met with progressively greater conservation efforts. Along with the drought, wildfires have become increasingly prevalent and destructive in the West.² One contributor is rapid population growth, specifically in wildland-urban interfaces (WUIs), or places where development ends and wilderness begins.⁷ Population growth has been higher in WUIs with greater vulnerability to wildfires.⁸ Beyond the health, economic, and social consequences, severe wildfires in densely populated areas like southern California can displace large numbers of residents, driving migration to nearby unaffected areas.⁹

What Can Be Done?

Given current trends, policymakers should recognize that the risks posed by drought and wildfires in the West are likely to continue worsening and need to be addressed now. Policy and planning efforts must account for both the social and environmental impacts of population growth in the rural West and be proactive rather than reactive. For instance, as new housing is built to meet the demands of the growing population, not all states have minimum building codes that require using materials and landscaping that are resistant to wildfires. Investment at all levels (local, state, and federal) will be essential to provide resources to help educate existing homeowners about how to mitigate risk from natural hazards like drought and wildfires. Updating local zoning laws to allow for more mixed-use neighborhoods could also help in the needed transition away from fossil fuels through reduced car usage in meeting daily needs.

Data and Methods

The terms “nonmetropolitan” and “rural” are used interchangeably in this brief. We use the term natural hazards given that “natural” disasters don’t exist, only natural hazards that turn into human disasters given existing social processes.¹⁰ The data presented in Figure 1 is adapted from an article in *The Daily Yonder*.¹¹ The Economic Research Service’s mutually exclusive County Economic Type classifies recreation counties as those with high levels of tourism- or recreation-related employment and income, a large percentage of seasonal housing, and high per capita receipts from lodging. The Western region refers to all counties in the following states: MT, WY, CO, NM, ID, UT, AZ, NV, WA, OR, CA, AK, and HI.

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Suggested Citation: Ulrich-Schad, Jessica and Mathhew J. Barnett. 2022. “Population Growth is Related to Natural Hazard Exposure in the Rural Western U.S.” Brief # 2022-7. Rural Population Research Network.

The Rural Population Research Network is a USDA NIFA supported network of scholars who conduct research on the most pressing demographic, economic, social, and environmental challenges faced by rural communities in the United States. Our current project (2017-2022) is titled ‘W4001: Social, Economic and Environmental Causes and Consequences of Demographic Change in Rural America’. <https://www.nimss.org/projects/view/mrp/outline/18389>