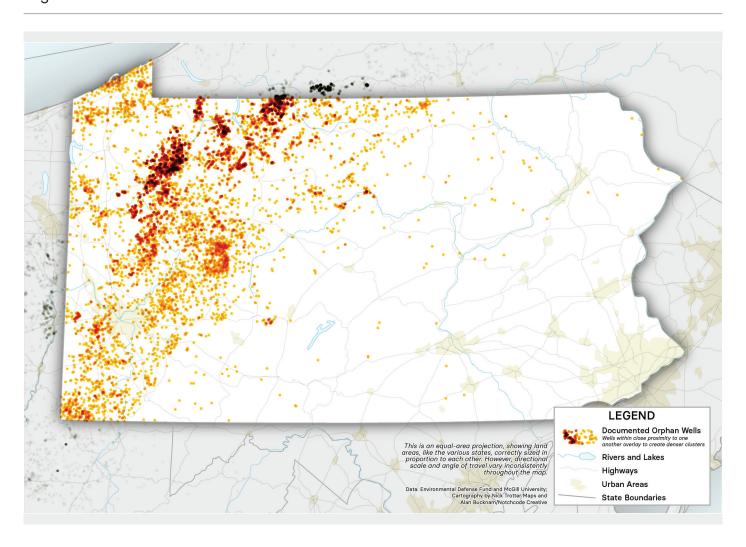


# Mapping Orphan Wells in Pennsylvania

# **Orphan Wells Are Threatening Pennsylvania Communities**

This new map shows the location of all 18,471 currently documented orphan wells across the state. The REGROW Act, passed as part of the Infrastructure Investment and Jobs Act (IIJA), will invest \$4.7 billion in plugging and remediating documented orphan wells in Pennsylvania and across the country. The state has already received initial grants of \$25 million and is eligible for hundreds of millions more.



#### The Trouble with Orphan Wells

In the 1850s, Pennsylvania was the first state to strike oil, which began the state's long history of providing the raw resources to power the American Industry. Unfortunately, this resource development has left a toxic legacy across the state where oil and gas companies failed to clean up after themselves, with potential liabilities for the state reaching into the billions of dollars.

After oil and gas wells are done producing, they must be properly closed to prevent air and water pollution, protect the health of the surrounding communities, restore the property values of the landowner, and in addition, prevent high-priority, climate-forcing methane emissions.

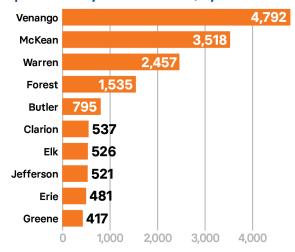
But many hundreds of thousands of wells, perhaps even over a million, across the country were not plugged by their operators and remain open to groundwater and nature, some for a century or more. These "orphan" wells have no solvent owner of record, so the cleanup liability falls on the states, federal agencies or overseeing Tribe. Unfortunately, until now, only pennies on the dollar have been available to properly clean up these wells.

## **How Do Orphan Wells Impact Communities**

When a well is left unplugged, it can leak oil and other toxic chemicals, endanger water wells, contribute to air pollution and emit methane - a powerful greenhouse gas. Orphan wells also significantly impact local communities and economies by threatening the health and well-being of residents and decreasing property values - which lowers funding for local schools, police departments, and other public services.



Top Ten Pennsylvania Counties, by Well Count



#### Where Are The Wells

To better understand where the documented orphan wells are eligible for closure funding under the REGROW Act, EDF partnered with researchers at McGill University in 2021 to develop a first-of-its-kind geolocated dataset. Our updated research in 2022 found more than 120,000 such wells across 30 states. Pennsylvania could receive hundreds of millions of dollars to plug the 18,471 currently documented orphan wells in the state. The REGROW Act makes a critical downpayment in making these dots disappear, with significant environmental, public health and quality of life benefits for surrounding communities and for the climate, while creating or retaining tens of thousands of oilfield services jobs nationwide.

### A Down Payment On A Big Problem

The EPA estimates that emissions from inactive, unplugged wells, of which documented orphan wells are a subset, range from 7-20 million tons of CO2 equivalent per year in the form of methane, and any reduction in methane emissions has an outsized short-term positive impact on the climate. This is equivalent to taking anywhere between 1.5 and 4.3 million cars in the United States off the road for a year. But our work is just getting started - a full accounting of wells with no solvent owner of record might number a million or more. There is also a large population (500,000+) of currently active wells that are low- or non producing which are likely to be orphaned in the future in the absence of policy change. The REGROW Act was a critical down payment in plugging existing orphan wells, but we must urgently pass meaningful policy reform related to financial assurance and fees, idle well management and well transfer to keep today's active wells from becoming tomorrow's orphans.