

Protecting Groundwater is Essential for our Country and Economy

Groundwater, or water found underground, plays an outsized role in supporting the U.S. economy, with [90%](#) of U.S. water systems relying on groundwater to meet demand. It is particularly vital for agricultural production and for the estimated [13 million](#) American households that rely on private wells for their drinking water. In the United States, approximately [30%](#) of the freshwater used for drinking, cooking, agriculture, and other important needs comes from groundwater.

Groundwater is a life-giving resource in every [state](#) across the United States, which also means threats like drought, contamination, and overuse threaten the entire nation. Recent [analyses](#) have [shown](#) that climate change and overpumping pose an increasing threat to the quality and quantity of groundwater supplies across the United States. Given the importance of groundwater to the U.S. economy and public health, it is essential that local, state, and federal government build on recent federal investments in infrastructure and invest in proven management [strategies](#) to protect this vital resource.

Groundwater provides essential benefits for Americans and the economy.

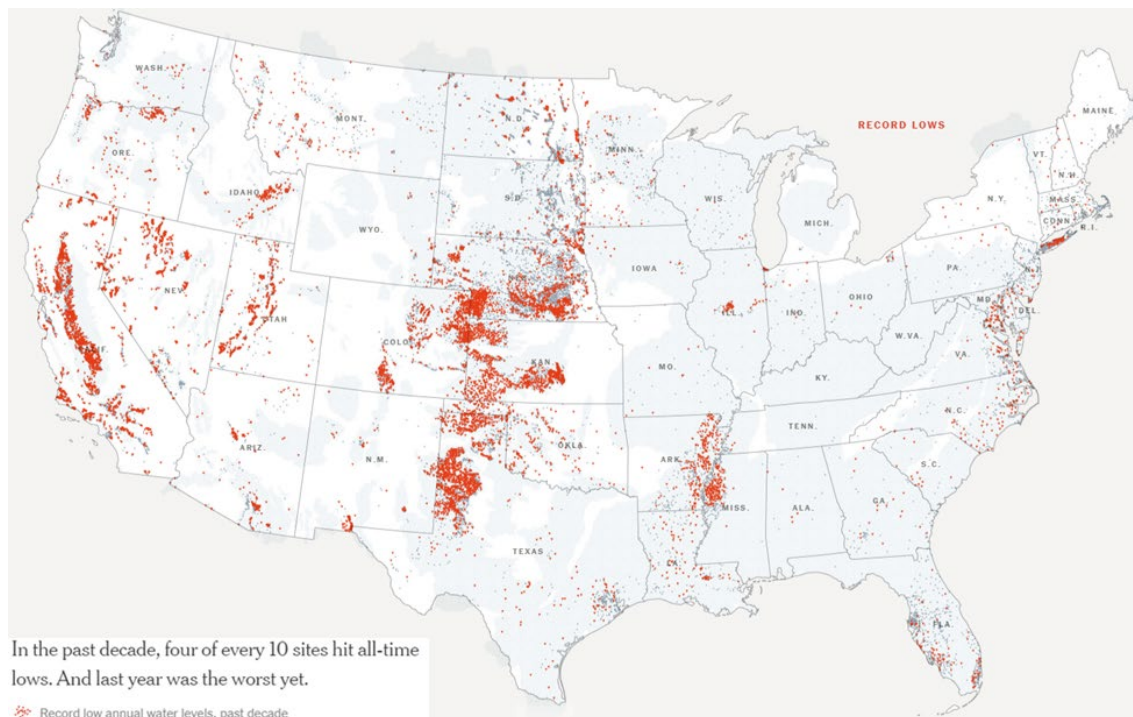
- Groundwater is [important](#) for irrigating food, livestock, and industrial crops in the United States, and also a key input in mining, manufacturing, energy generation, and other industrial processes.
- Groundwater reserves serve as an important buffer against surface water shortages, which are expected to [increase](#) as the climate changes. In a drought, groundwater can serve as insurance because surface water supplies are more variable.
- Looking at international evidence, low-income countries with access to adequate safe water and sanitation saw [higher](#) GDP growth compared to those with limited access, highlighting the economic benefits of water security.
- Some scholars have advocated for applying traditional asset valuation [measures](#) to groundwater to better estimate the economic impacts of conservation policies. A [study](#) using this approach found that increased groundwater withdrawals from Kansas's High Plains aquifer between 1996 and 2005 reduced the state's wealth by [\\$1.1 billion](#).

Groundwater depletion and permanent shifts to a drier climate due to climate change are stressing water supplies and increasing the risk of contamination.

- In many regions of the country, water users have [adapted](#) to declining groundwater levels by drilling deeper wells. However, there are [varying](#) limits to how deep wells can be drilled before groundwater is no longer usable or available.

- Drilling also becomes increasingly [costly](#) at lower water levels, which can make it economically infeasible, particularly for disadvantaged [rural](#) communities.
- [Aridification](#), or a permanent shift to a drier climate, occurs as rising temperatures and less rain shrinks the water supply. This leads communities to pump [more](#) groundwater from aquifers, which reduces their resilience against an increasingly unpredictable climate.
- The Ogallala Aquifer, for example, [stretches](#) across large parts of the Southwest and Great Plains and supports a [\\$35 billion](#) agriculture-based economy. However, more than a quarter of the aquifer is now [depleted](#) to a point where it can no longer reliably support large-scale irrigation.
- Shrinking aquifers also leave underground spaces for the ground to collapse and create [sinkholes](#). This leads to permanent loss of water-holding capacity and costly damage to roads, canals, home [foundations](#), sewer pipes, and other infrastructure.
- In addition to aridification and depletion, increased contamination of groundwater due to climate change and overpumping is a major concern.
 - Groundwater is more susceptible to [salt water](#) contamination due to rising sea levels.
 - More than 132,000 contaminated sites in the United States, most of which are in low-income neighborhoods, are [susceptible](#) to rising groundwater pushed up by sea level rise, which may release toxic chemicals into other waterways.
 - Overpumping aquifers also increases the likelihood of [arsenic](#) contamination.

Data show that many wells across the country are at record low levels



Source: [New York Times](#)

Historic federal investments will improve water management and help protect this essential resource.

- The Bipartisan Infrastructure Law (BIL) provided more than \$50 billion for safe drinking water, wastewater, and stormwater [infrastructure](#). These investments will help replace aging water infrastructure [prone](#) to contamination and leakage, increasing the efficiency of water systems and potentially reducing [demands](#) on groundwater supplies.
- Broader climate mitigation investments from both the BIL and the Inflation Reduction Act are also helping to address climate change, mitigating its impact on water supplies.
- Recent case [studies](#) have shown that effective water management policies can halt or reverse declines in groundwater levels.
 - In 2008, Albuquerque’s water utility authority implemented a strategy to address declining groundwater levels. This included a large-scale surface water diversion project to decrease [reliance](#) on groundwater. Early promising evidence from the U.S. Geological Survey shows [rebounding](#) groundwater levels.
- The bipartisan [Water Data Act](#), introduced by JEC Chairman Martin Heinrich and other members of the New Mexico Congressional delegation, would help transform water management by harmonizing and investing in water data collection and use across the United States.
- Plugging and remediating [abandoned](#) oil and gas wells will also help reduce the risk that they contaminate nearby groundwater. Remediation can include [innovative](#) alternative uses for abandoned wells, including geothermal power production that can boost clean energy production while increasing local economic opportunity.
- The bipartisan [Voluntary Groundwater Conservation Act](#) from JEC Chairman Heinrich and Senators Michael Bennet (D-CO) and Jerry Moran (R-KS) would give farmers the flexibility and incentives they need to protect groundwater sources while maintaining food production.

Groundwater is essential for our country and economy, and recent federal investments provide historic resources for water infrastructure. Implementing these programs and passing additional legislation that supports innovative water management will help conserve this vital resource.