Secure Utah's lifeline: The urgent need for earthquake-resilient aqueducts

UTAH'S EARTHQUAKE RISK

There is greater than a 43% chance of a magnitude (M) 6.75-7.6 earthquake on the Wasatch Fault in the next 50 years — essentially a coin toss. A M7.0 earthquake would release **90 times the energy** of the 2020 Magna earthquake and would be among the **deadliest disasters in US history**.

UTAH'S AQUEDUCTS

Four major water aqueducts provide most of the water for over two million residents of the Wasatch Front. These massive pipelines were built three generations ago before the seismic risks of the Wasatch Faults were understood, and they cross landslide zones, high ground shaking areas, fault lines, and liquefaction regions. It is unlikely they will withstand the "Big One."

A POTENTIAL CATASTROPHE

It is projected that a M7.0 earthquake in Salt Lake would leave over a **million people** without water for more than 90 days. Repairing a major aqueduct rupture would likely take six months or even longer. Because repairs require custom parts, it's not possible to stock or purchase parts to reduce the disruption timeline.

Construction of the Salt Lake Aqueduct began in 1940 and was completed in 1951. Unlike our freeways, much of Utah's aqueduct infrastructure has not been updated for generations.







IMPACTS ON THE STATE

Water is essential for power, medical care, and fire response, in addition to residents and businesses.

If much of the Wasatch Front is without water for more than six months, many businesses will close and numerous Utahns will move elsewhere. In fact, Utah's economy and way of life may never fully recover from the "Big One." Other places that have experienced this level of disaster have taken years, even decades, to recover—if they recover at all.

PROGRESS

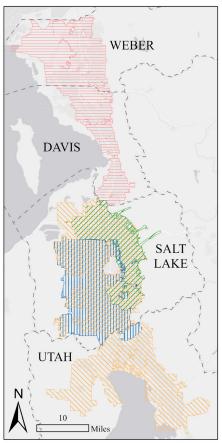
In the 2023 legislative session, the Utah legislature funded \$50 million to improve the seismic resilience of Utah's aqueducts. This funding is leveraging district and FEMA money to fully fund upgrades to the Davis Aqueduct and Alpine Aqueduct.

The remaining two projects, the Jordan Aqueduct and the Salt Lake Aqueduct, have a funding gap of \$125 million, which is only a portion of the \$400 million+ total cost. These projects serve Salt Lake County, which houses more than a third of Utah's population and almost half of the state's jobs.

RECOMMENDATION

Closing the remaining \$125 million funding gap for the Jordan and Salt Lake aqueducts is the top priority recommendation from the Utah Seismic Safety Commission. Governor Cox included \$20 million in his budget for the 2024 legislative session.

Areas Served by Aqueduct Projects



Interface and the second second

JOIN US IN KEEPING WATER FLOWING

The Utah Seismic Safety Commission recommends these aqueduct upgrades as by far the most important infrastructure projects to protect Utah's economy in the event of the "Big One." Your support can accelerate water district efforts and pave the way for a more resilient future. For more information visit <u>USSC Report and Recommendations</u>.

