

widespread drought that lingers for a decade or more. The Chaco Canyon ghost town of structures built by the ancestors of the Pueblo people stands as a silent testament to how megadrought can affect society. Buildings that collectively housed more than 3,000 people were abandoned by this civilization during a long dry spell in the second half of the 12th Century.

While higher evaporation rates over land can promote drought, higher evaporation rates over the ocean contribute to the expectation for more floods. What goes up must come down, and there's reason to believe that some of the moisture in the atmosphere will come down in more frequent torrential rains. For instance, Thomas Karl and Kevin Trenberth at the National Center for Atmospheric Research analyzed daily precipitation values for a variety of climate regimes and found warmer climates were more likely to receive their moisture in large episodic doses.

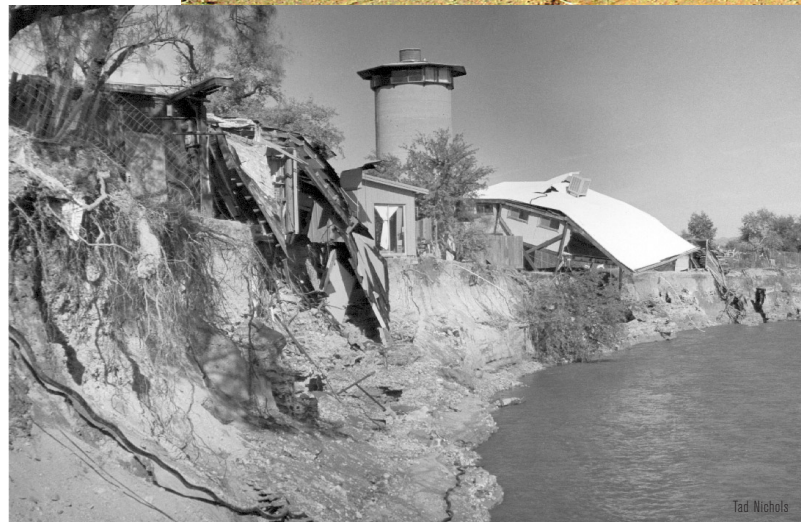
The semi-arid lands of the Southwest already tend to have more than their share of extreme events compared to the rest of the country, at least when measured in terms of devastating drought and erosion from flooding. Climate change seems more likely to reinforce rather than temper the southwestern climate see-saw, which some climatologists sum up with the adage that droughts tend to end in floods.

An increase in aridity brings challenges for plants in southwestern deserts and forests alike. In the desert, plants already struggling for survival will face



Mark Dimmit

▲ During a "megadrought" all the vegetation in an area may die. Aguirre Valley, AZ.



Tad Nichols

▲ Flood damage along Tucson's Rillito River, October 1983. The semi-arid lands of the Southwest tend to have more than their share of extreme events compared to other parts of the country.

photo caption info to come ▶

