Science & Technology

Why US Cities Are Sinking

New research reveals the toll of massive groundwater extraction in cities from Houston to New York.

Fall 2025



Houston is one of the fastest-sinking cities. (Win McNamee / Getty Images)

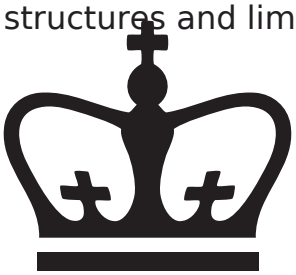
A study of twenty-eight big US cities finds that all are sinking — largely because of groundwater extraction for drinking and for industrial uses — and that this is making them more vulnerable to flooding and building collapses.

The researchers, led by Columbia postdoctoral scientist Leonard Ohenhen, used satellite data to map out vertical land movements down to the millimeter in all US cities with populations exceeding six hundred thousand. They found that in twenty-five of the cities, two-thirds or more of their land is sinking, with some areas going

down as much as two inches per year.

Most concerning, the scientists say, is that cities are sinking at different rates in different spots, potentially destabilizing buildings, bridges, and other infrastructure. Particularly fast-sinking zones include areas around New York’s LaGuardia Airport and parts of Las Vegas, Washington, DC, and San Francisco.

The authors say that cities susceptible to tilting hazards can retrofit existing structures and limit new building in the areas of greatest risk.



Guide to school abbreviations

All categories >