

The Great Decoupling Between Water and Growth

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Abstract

Over the past 40 years the United States has experienced a decoupling of the long-running relationship between population growth and increasing water demand. We found that more than half (57%) of all US counties experiencing population increases in recent decades have been able to decrease their use of public water supplies. This counterintuitive phenomenon is largely explained by water conservation efforts that have successfully reduced per-capita water use, along with improved efficiency in industrial and manufacturing uses. Recurring and increasingly severe water scarcity challenges have stimulated conservation efforts, particularly in cities utilizing the Colorado River in the Western US. To gain deeper insights into the water conservation strategies being applied, we surveyed urban water utilities to obtain annual data on water use and service population size, along with documentation of their conservation strategies. We identify additional untapped potential that can sustain and widen this decoupling for many cities.

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