Metropolitan Policy Program at BROOKINGS

For Immediate Release
October 20, 2017

Contact: Anthony Fiano, afiano@brookings.edu, 202.238.3113

Data Interactive + Report: http://brook.gs/2kUQr9a

Decreasing water use in the U.S. poses challenges to managing infrastructure upgrades

New Brookings report reveals first-ever look into water use at a metro scale and offers new strategies for local, state, and federal leaders to manage water infrastructure challenges

Washington, D.C. – As the United States faces a rising number of extreme weather events and other infrastructure concerns, new analysis released today from the Brookings Metropolitan Policy Program highlights where different metro areas stand when it comes to their water needs. From Los Angeles to Detroit to Philadelphia, the new research underscores the enormous scale and complexity of how businesses, farms, power plants, manufacturers, and households use water every day – up to 355 billion gallons nationally – and what that means for their infrastructure and economy.

In "**Less water, more risk: Exploring the national and local water use patterns in the U.S.**," associate fellow Joseph Kane examines more than 50 years of data from the U.S. Geological Survey (USGS) to highlight differences in water use between the county's metropolitan and nonmetropolitan areas.

By creating a new barometer to compare water use across the country, the report explores water infrastructure's foundational economic role and the pressure that many water utilities face to maintain safe, efficient, and affordable service.

"One enormous challenge becomes clear: the dual stress that leaders in many metro areas face achieving greater economic efficiencies while promoting economic equity," Kane said. "Declining levels of water use hold promise for a more sustainable future, but utilities and other users must still grapple with aging, inefficient infrastructure, which requires an influx of new investment and results in a growing cost burden."

The report provides a new starting point for leaders to consider while balancing water efficiency and equity considerations. Key findings include:

- **The need for more efficient water use depends on metro areas, where more than 221 billion gallons of water use takes place each day, accounting for 63 percent of the U.S. total.** In short, metro areas are central to managing the country's water resources since they contain many of its biggest water users. Just 25 of these metros, including New York, Chicago, and Washington, use 90 billion gallons of water each day, a quarter of the U.S. total.

- **Metro areas are already leading the charge to more efficient water use – driving almost 90 percent of U.S. declines over the past three decades – but this also introduces greater economic risk**. From 1985 to 2010, total water use nationally fell by about 42 billion gallons each day, and metro areas were responsible for 39 billion gallons of that per day.

- **Several factors – including higher levels of energy and agricultural production, shares of developed land, and population densities – have a significant effect on water use within metro areas and non-metro areas, revealing certain policy levers that might be available to drive additional water efficiencies.** Crucially, a smarter, compact mix of land uses is likely to require less water – and potentially result in greater efficiencies – than more sprawling development patterns.

"These trends reaffirm that there are no one-size-fits-all solutions to the country's water infrastructure challenges," Kane said. "Traditional ways of managing scarce water resources are no longer sufficient to achieve long-term, dependable service and fiscal certainty. At a time when consumer demands are evolving, climate concerns are intensifying, and the need for greater technological innovation is growing, utilities and other local, state, and federal leaders must have a clearer assessment of the major environmental and economic risks at hand."

The report is accompanied by interactive maps that allow users to explore metro, non-metro, and state-level water use data across the country, providing a more comprehensive and consistent way to gauge water demands and infrastructure considerations from place to place.

###

The Metropolitan Policy Program at Brookings delivers research and solutions to help metropolitan leaders build an advanced economy that works for all. To learn more, please visit www.brookings.edu/metro. Follow us on Twitter at www.twitter.com/brookingsmetro.