

Phoenix Is in No Danger of Running Out of Water

Farmers in Arizona use far more of it than residents do, so demand declines as the population grows.

By Sarah Porter and Kathryn Sorensen



Phoenix, Ariz., July 15. PHOTO: BRANDON BELL/GETTY IMAGES

This is now the nation's fifth most populous city, and it's unlikely to stop growing soon. People come to the Valley of the Sun in search of sunshine and opportunity. Accompanying this influx are media narratives that the region is doomed to run out of water. Some seem almost to be rooting for an existential water crisis.

This is odd. Phoenix residents may love to tease people enduring cold gray winters in other parts of the country, but no one here wants to see rising oceans swamp East Coast cities or hurricanes wipe out communities along the Gulf of Mexico. The idea that Phoenix will run out of water is more than odd, it's wrong.

Arizona uses roughly the same amount of water today as it did in the 1950s, though the state's population is more than seven times as large, and its economy is more than 15 times as large. Water demand is more dependent on land use than on population growth. In Arizona's arid climate, crops can consume six times as much water as subdivisions. As Phoenix's urban sprawl turned former farmlands into developments, water demand declined even while population increased.

Agriculture still uses more than 70% of Arizona's water, leaving room for at least some future reallocations to municipal and industrial uses—including new homes filled with families if those are the land uses we value most. Drought-related challenges on the Colorado River are real. Seven states, including Arizona, rely on it. The Colorado recharges aquifers and supplies drinking water to the Phoenix metropolitan area. But roughly 60% of Phoenix's water comes from the Salt and Verde rivers, not the over-stressed Colorado.

Groundwater is as important as river water in Phoenix. It is generally stable or increasing in the area, and the Arizona Department of Water Resources manages groundwater proactively over a 100-year timeline. The Water Department's recent, much-publicized prohibition on new groundwater-dependent growth on the fringes of the Phoenix area was imposed to protect groundwater supplies for future generations. It in no way signals that there will be insufficient water to "prepare your food, to bathe, to wash your clothes," as New York Times reporter Christopher Flavelle recently suggested.

Phoenix has water challenges, but to us they look less daunting than challenges other cities face. Moving a defined quantity of water from where it is now to where it is needed can be less complex and expensive than keeping rising sea levels from inundating cities or keeping floodwater out of places where it causes harm. Even adjusted for inflation, the \$4 billion price tag for the Central Arizona Project, which brings Colorado River water to Phoenix and Tucson, looks like a minor expense compared with the \$14 billion that the Federal Emergency Management Agency sent to New York City in response to Superstorm Sandy, a single, devastating event.

We would never characterize the construction of seawalls and sea gates along the East Coast as an effort by communities to "engineer [their] way out of reality," as Mr. Flavelle has characterized Arizona's exploration of alternative water-supply options. We understand that all infrastructure projects are expensive but necessary adaptations to protect public health, economic opportunity and our way of life. We certainly hope that no American city ever faces an "existential reckoning" in which it is declared to be "unlivable."

Generations of people, including from our own families, have called Phoenix home and found opportunity here. We hope to keep that going.

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