

Breaking the link between growth and water use

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Based on the presentation “Decoupling of Growth from Water Use in the Colorado River Basin” by Alejo Kraus-Polk, March 3, 2017.

“We need to revisit the narrative that assumes more people and more economic activity inevitably means we’ll need more water.” –Alejo Kraus-Polk

More people use more stuff. More cars, more houses, more food, more land. We generally think this applies to water as well. How can we have more food without using more water? In the Colorado River Basin, water is an especially limiting resource, after all, it is a desert. However, recent efforts are being made to decouple economic and population growth from the use of water in this region.

Water issues in the Colorado River Basin

The Colorado River provides water to seven states, Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming, and more than 30 million people. This river provides an oasis in a desert; it allows cities to thrive and farms to flourish. We have vast farms where it doesn’t rain and huge cities where there used to be only expansive desert. This region is important economically and is still growing; it produces much of the food we eat, facilitates recreation, and provides access to numerous national treasures (i.e., the Grand Canyon). However, water is not an infinite resource and the southwestern United States is quickly reaching the limit of how much the Colorado River can provide.

Decoupling economic growth from environmental impacts

While cities such as Las Vegas are still growing, the dependence on natural resources, water specifically, doesn’t necessarily have to grow as well, says Alejo Kraus-Polk, a graduate student at the University of California Davis. Kraus-Polk points to the idea of decoupling economic growth from environmental impacts.

What does decoupling mean exactly? Generally, a growing economy or population relies on more natural resources. For example, a new family in a city needs a house. They’ll buy a car and consume gas. The job at which they work will need resources to make its product. In short, growth typically relies on using and producing more stuff. However, this doesn’t have to be the case. We can imagine a situation where growth doesn’t require the use of more resources. That is, growth is decoupled from resources.

How do we achieve decoupling?

Cities in the arid southwest have made incredible progress in decoupling their water use from growth. They have developed waste treatment systems that allow water to be reused in an efficient way. In Las Vegas, the city has paid residents to remove grass from their yards. New houses cannot install sod and watering is restricted during the summer. From 2000-2010, Las Vegas grew by 3 million people, but water use increased by only 1.5 percent; a 33 percent per

person drop in water use¹. While the progress is good, net water use continues to rise, a trend that is unsustainable.

At first glance, it might seem simple to achieve decoupling. “It is a desert! Stop growing food there!”. While this is certainly reasonable, it may not solve the ultimate issue. Instead, this solution is simply pushing the problem to another region of the country or world. It is “externalization of a water footprint from one basin to another”, says Kraus-Polk. Much of the world is water stressed and is functioning beyond its sustainable capacity.

For example, the per capita water use in Las Vegas has been decreasing. However, these measures do not account for the virtual water trade. There is a virtual flow of water in commodities that move across the globe. Everything we consume requires water. Cellphones, cars, meat, vegetables. Just because that item isn’t produced where you live, doesn’t mean that you’re not contributing to water stress somewhere in the world.

A somewhat radical proposition

Water issues are a difficult thing to solve completely. One, somewhat extreme, solution is the concept of degrowth. Is progress worth it? Do cities, economies, industries, etc., always need to be expanding and growing? Is **more** always progress?

Degrowth is the idea of reducing consumption and production in order to limit negative impacts to the environment (among other things). Many will view this shrinking of the economy as a recession, but Kraus-Polk argues that it is entirely different. Recession is an unintentional reduction in the economy. Degrowth is an intentional change in the way in which we consume and exist as a society. It is a choice to limit consumption, waste, and production while maintaining wellbeing of citizens. It may just be one of the ways to truly preserve a scarce resource such as the water in the Colorado River.

While degrowth is almost certainly not an idea that will catch on nationwide any time soon, it can function as a positive counterpoint to the typical views of growth and progress. Much of the United States is facing daunting challenges when it comes to water availability. While a solution as extreme as degrowth may not be necessary, an effort to decouple economic growth from water supply is certainly needed.

References:

1. <https://www.outsideonline.com/2016686/water-conservation-brought-you-las-vegas>