A problem: water and inequality

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Credit: University of California, Los Angeles

Lynwood and Pico Rivera are both working-class chunks of southeastern Los Angeles County, with modest homes and well-tended lawns gone brown. But the consequences of California's water crisis are playing out very differently in the two cities.

Water bills in Pico Rivera average less than $200 per family a year. In Lynwood, that same amount of water costs a family more than $1,500.

The disparity is striking, but not uncommon in Southern California, now stranded in a long-running drought and saddled with an archaic and complex water delivery system. That system and the disparities it has encouraged are the subjects of an ambitious, UCLA-based project aimed at mapping the region's water costs. The Water Atlas is providing a template for policymakers inclined to bring reason and fairness to supplying one of humanity's most basic needs.

Pico Rivera's 39,000 residents are served by its municipal system, which draws on groundwater sources and has some of the lowest rates in Los Angeles County. Lynwood is stuck with the privately owned Park Water Company, which purchases water conveyed from elsewhere and has some of the county's highest rates.

"There's a huge inequality in the price that people pay for water," said J.R. DeShazo, professor and director of public policy at the Luskin Center for Innovation in the UCLA Luskin School of Public Affairs. "Our current strategies to protect water and promote conservation are hitting low-income people extra hard."

The Water Atlas

With 52 pages of charts, analyses and recommendations, the atlas documents that vividly. "Community water systems are the fundamental building blocks of California's water supply network," the Atlas notes. And those systems vary dramatically.

Los Angeles County's 10 million residents get their drinking water from 228 agencies. They range from the giant Los Angeles Department of Water and Power, a public utility with 4 million customers, to a tiny,

privately run system that serves 25 residents of an Antelope Valley mobile home park. Some Los Angeles County households pay 10 times as much as others for the same amount of water, depending on which water agencies serve their neighborhoods.

"The questions of justice, climate change and drought are coupled in a very dramatic way," said Stephanie Pincetl, director of the California Center for Sustainable Communities at UCLA. That's particularly true with water, she and others noted, because consumers have no control over where they buy it or its price.

"All these people are captive consumers," DeShazo said.

Moreover, these problems are not new. Disparities are being highlighted by the drought, but their roots go back much further. "Through history, water has always been provided by various authorities that have power. And that power's often exercised unequally," said UC Irvine professor David Feldman, a political scientist who specializes in water management and policy.

That has benefited certain groups at the expense of others, he said. "Water is not neutral; it's subject to plans by engineers … and political decisions. The policies we make [dictate] who benefits and who pays. "

Faced with the drought, local agencies have launched a host of programs to encourage conservation. But those programs do not reach all people equally.

"Moderate- and upper-income people can cut back because they're consuming a lot of water to begin with," DeShazo said. "They respond to higher prices by watering less, not having the pool, not washing the cars, changing their landscaping. Poor people just have to bear it. They're using water only for essentials; they don't have many ways to cut back."

In addition, many can't tap rebates for conservation projects—replacing lawns with drought-resistant plants, for instance—because they can't afford the upfront outlay. Some have no access to the kind of subsidies that help pay skyrocketing bills. And for many low-income communities things are bound to get worse, as aging water systems need costly improvements and agencies raise rates to cover the tab.

That inequity is turning water management—its access, quality and cost—into an environmental justice issue that state policymakers have yet to address.

How Californians get their water

California has three basic types of water delivery systems: publicly managed utilities; profit-making companies; and privately run, nonprofit mutual districts. The state has legal authority over them but exercises little oversight.

Costs vary because some systems rely on water purchased from outside sources and others tap cheaper groundwater reserves. The Luskin center study found that private, for-profit systems tend to charge consumers more, as do small systems with fewer than 3,000 customers. And rates are likely to be higher in low-income communities, while water quality is likely to be worse—as was the case in Flint, Michigan.

Water systems have traditionally been tasked with prioritizing resource management, not addressing issues of equity. Tending to the needs of low-income customers has not been a priority. That may be changing.

"Affordability" is becoming the watchword of resource management now, said UCLA graduate student Greg Pierce, who worked on the Water Atlas. "It's the most important element; that's where the debate is moving."

Communities in south Los Angeles County have a high concentration of privately run so-called mutual water companies; relics of a rural era when water management was in the hands of small local co-ops. "Maywood has four of these," Pincetl said, "in a city that's the size of a postage stamp."

The century-old mutual districts that have endured are now limping along. Many lack the resources and capacity to maintain their infrastructure, plan for the future or embrace money-saving efficiencies.

"These are districts that are unable to—in a modern, 21st-century way—address climate impact on water supplies," Pincetl said. "I find it puzzling that we can't get over this system that just emerged over time, spontaneous and laissez-faire."

She thinks the small districts ought to be consolidated; "bought out by a larger utility, compensated and put out of business."

But that has been deemed, until now, politically unpalatable. "The state realizes that these small, poor systems are the real problem," DeShazo said. "They create the inequities. … But consolidation has become a negative solution. It's good for economics, public health improvement and stability, but there's resistance rooted in local politics: 'We don't want that group to join our group. We don't want those people with us.'"

Alternatively, the state could support small struggling districts with money and expertise, invest in infrastructure and strengthen policies that protect low-income ratepayers. But that approach sidesteps the issue, said Pincetl. "Why throw good money after bad?

"Why should we have 200 water delivery companies in L.A. County? Why is that right? Just because they exist? We're gun-shy when it comes to thinking about the right scale for the right purpose."

Protecting the poor

In the meantime, there are short-term fixes that could lighten the financial burden for poor families. For instance, researchers argue that every water district should have a customer assistance program that offers subsidies for low-income households, typically funded through surcharges on water bills.

"But in systems with nothing but low-income people, no one can subsidize those households," DeShazo said. "There are a bunch of small systems where everyone is uniformly poor. "

In fact, California's success at cutting water use may make that strategy hard to sustain. The less water people use, the less revenue the providers have, which leads to rate hikes to make up the difference. "That can make customers feel cheated," Pincetl said, "because they are using less and paying more."

That might lead to grumbling among middle-income consumers sacrificing lawns and showers—and then being required to spend more to subsidize the poor.

But subsidizing low-income consumers is not just a step toward environmental justice. It's an embrace of basic economics, said Feldman, who heads a water study initiative.

"The more you use of something like water, the more you are taxing the system that provides and treats that water," Feldman said. "The delivery, the treatment, the sewage we generate … it's very expensive.

"Because of the burdens you and I are placing on the system, the principle of equity says in exchange for those burdens, we should probably be paying more. There's a lot we should be thinking about for

the long run—but we need to start with that."

Provided by University of California, Los Angeles