

# California water managers vary in use of climate science

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Historically, water managers throughout the thirsty state of California have relied on hydrology and water engineering—both technical necessities—as well as existing drought and flood patterns to plan for

future water needs.

Now, [climate change](#) is projected to shift [water supplies](#) as winters become warmer, spring snowmelt arrives earlier, and extreme weather-related events increase. Some water utilities have started to consider these risks in their management, but many do not. Lack of [climate change](#) adaptation among water utilities can put water supplies and the people dependent on them at risk, especially in marginalized communities, a new University of California, Davis, paper suggests.

The paper, which analyzes various approaches to climate science by drinking water utility managers in California, was presented along with new research at the American Sociology Association Conference in Philadelphia on Aug. 11. The paper, "Climate Information? Embedding Climate Futures within Social Temporalities of California Water Management," was published this spring in the journal *Environmental Sociology*.

## **Timely study**

"Recent events and political conversation around water management and climate change in California makes this study especially timely," said Zeke Baker, a UC Davis doctoral candidate and lead author of the study. To conduct the study, Baker worked with co-authors and additional researchers in 2016 to interview 60 water managers. These managers were selected as a sample of the more than 3,000 [water utilities](#) in California.

## **Some look closely at climate change, others disregard**

"We found significant variation in how water managers engage with climate information," Baker said. "A finding we didn't expect is that

perspectives and experiences of water utility managers clustered in cultural terms, regarding how they understand the future." The authors label these "social temporalities" in order to bring attention to alternative ways that water managers view climate change and the future generally. Based on the interviews, the researchers found three types of manager's temporalities, or philosophies.

One type were those [water managers](#) who "modeled futures," or looked closely at climate change to anticipate and plan for [water](#) needs. Those were generally large metropolitan utilities with multiple resources and access to expertise, researchers noted. For them, envisioning uncertain futures 30 years out is a matter of course.

**More information:** Zeke Baker et al. Climate information? Embedding climate futures within temporalities of California water management, *Environmental Sociology* (2018). [DOI: 10.1080/23251042.2018.1455123](#)

Provided by UC Davis

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