

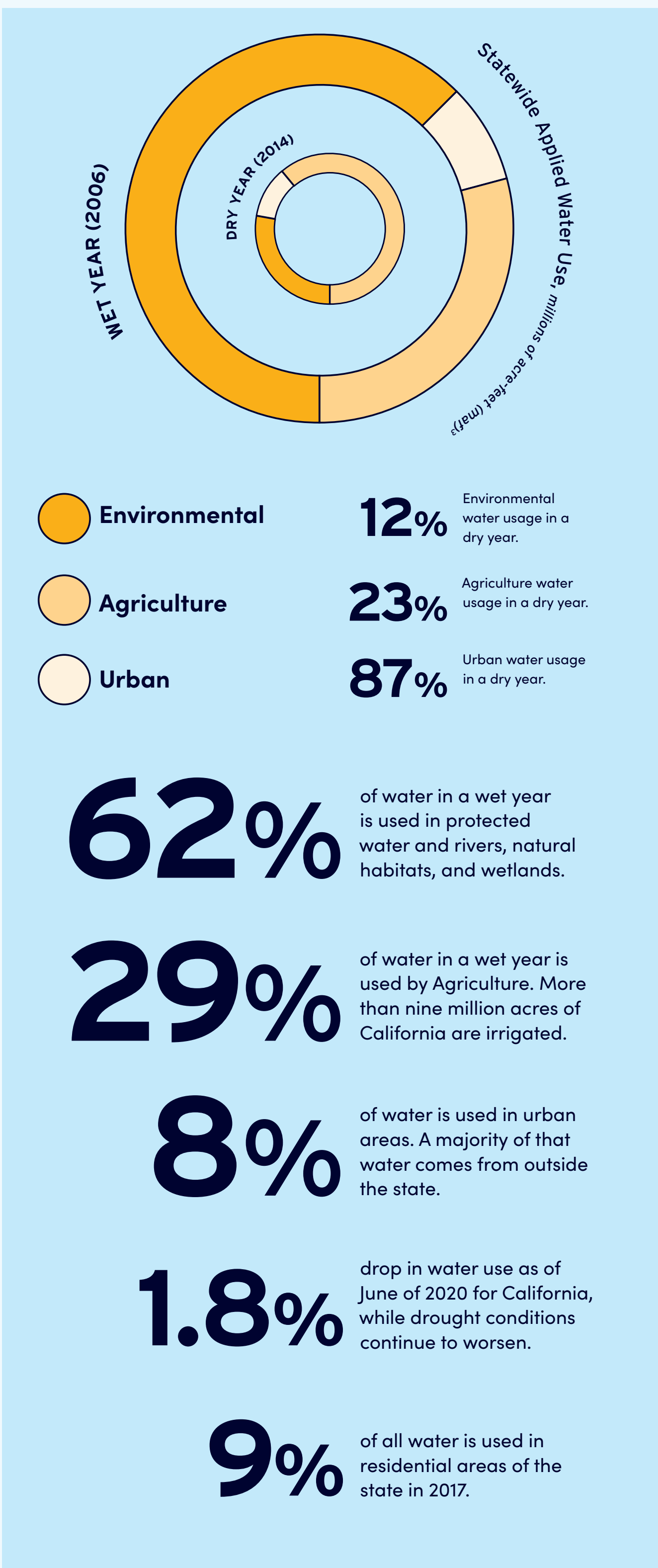
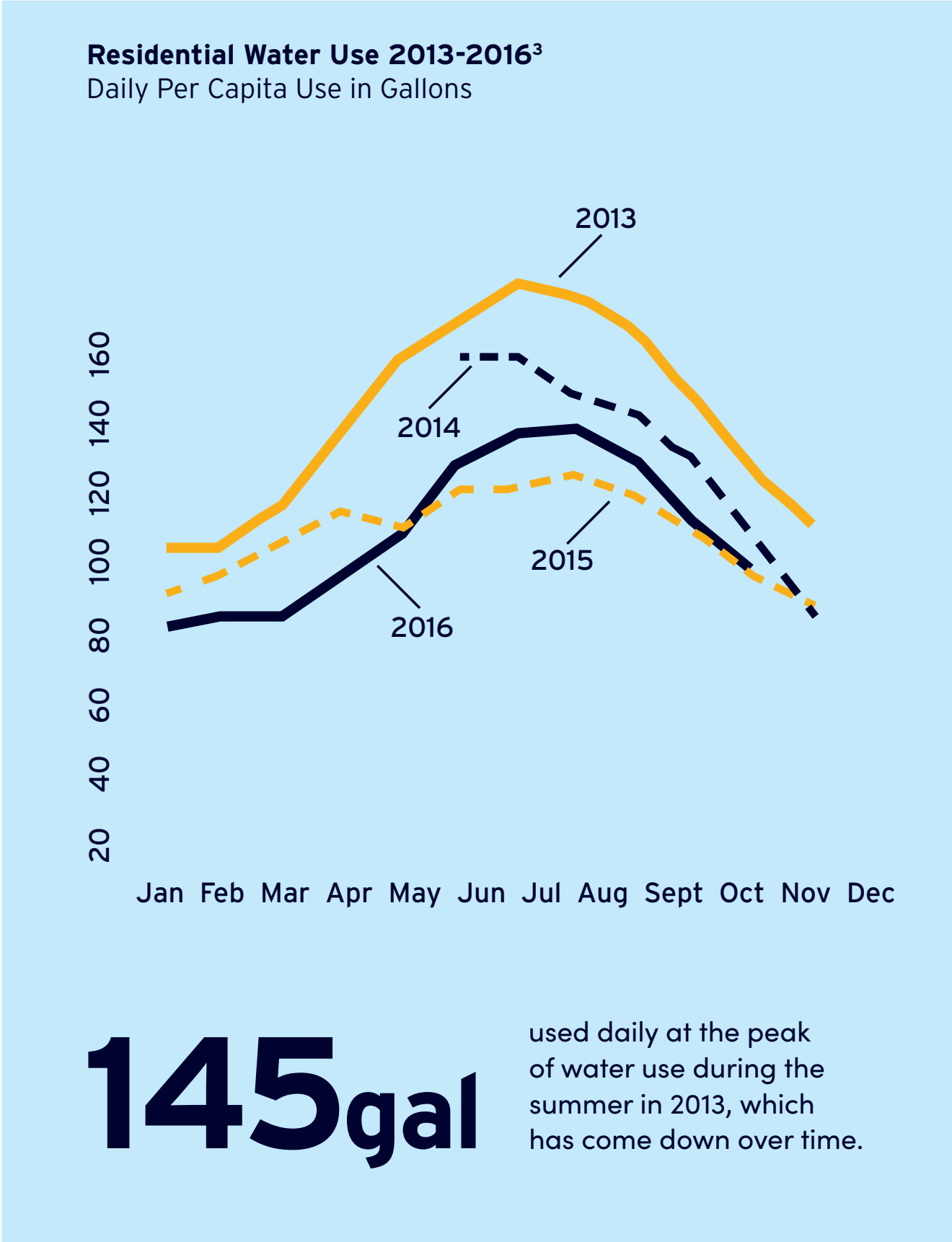
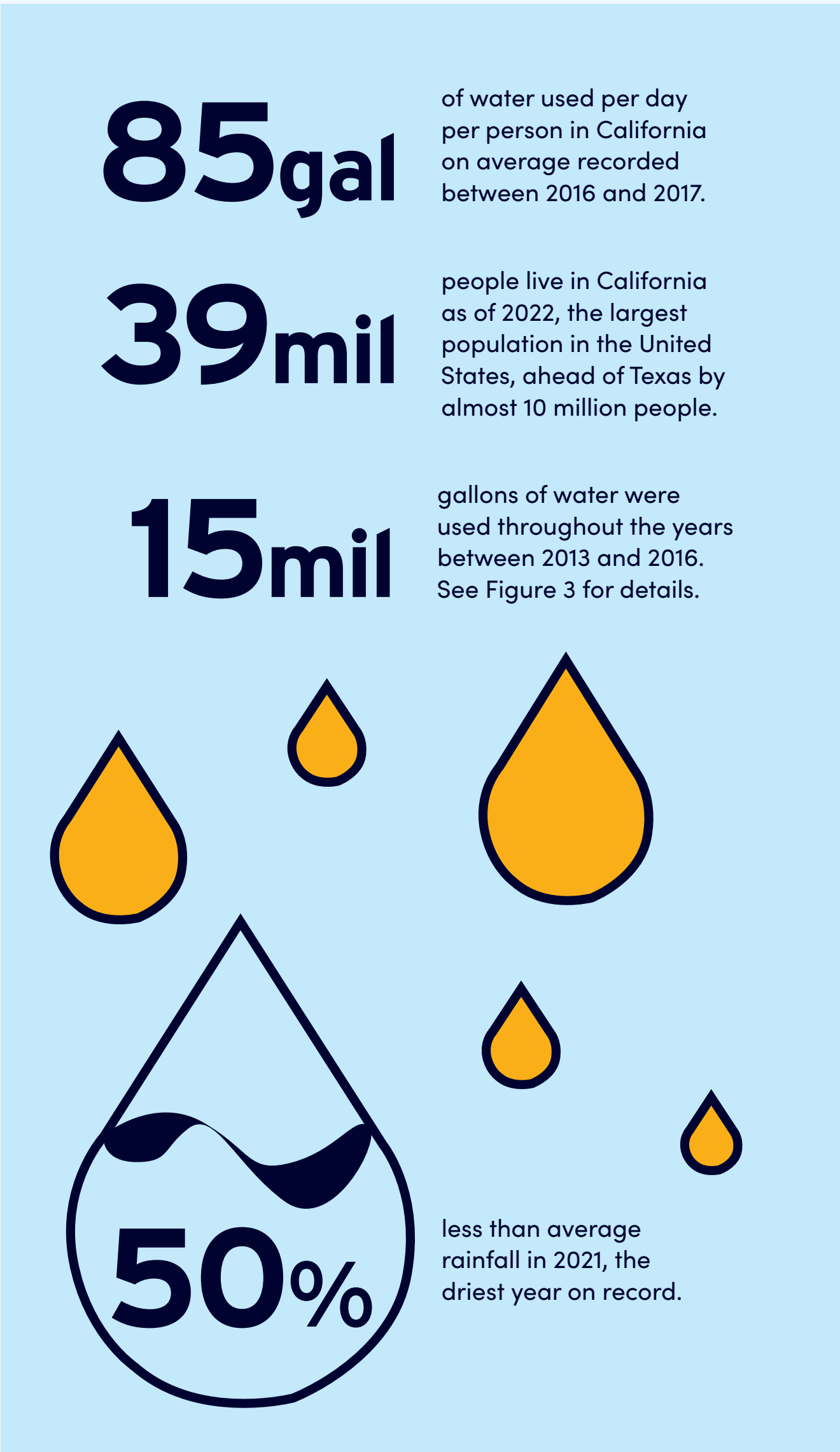
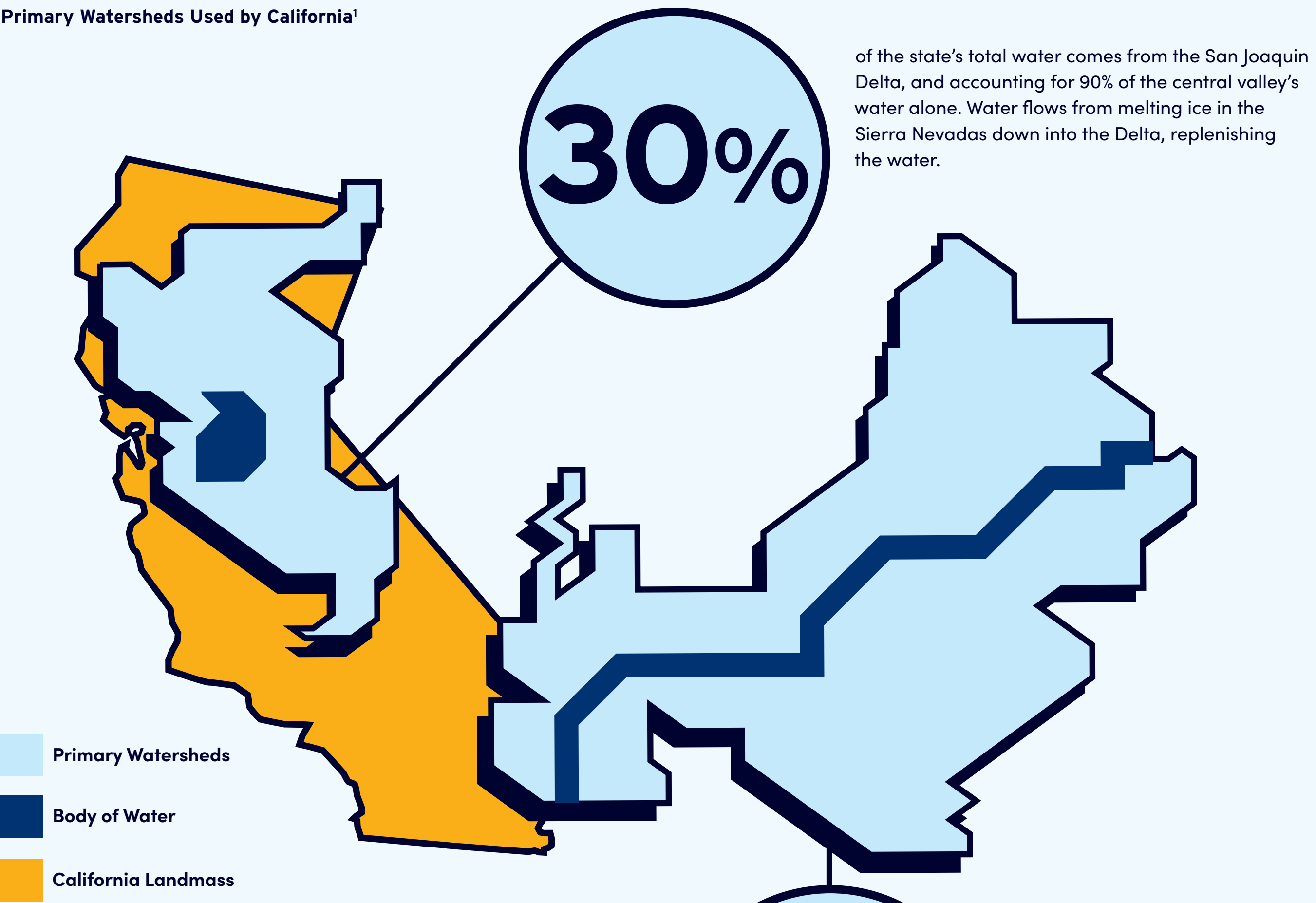
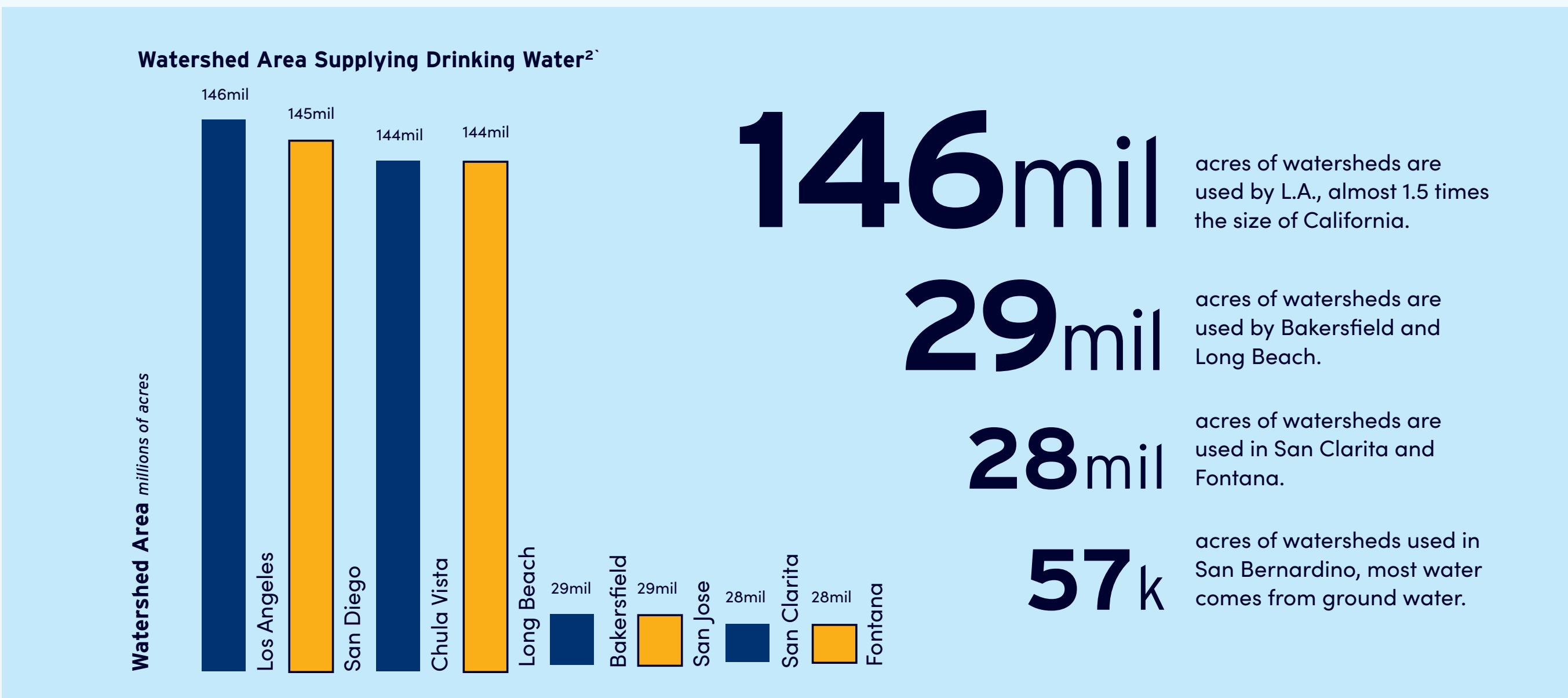
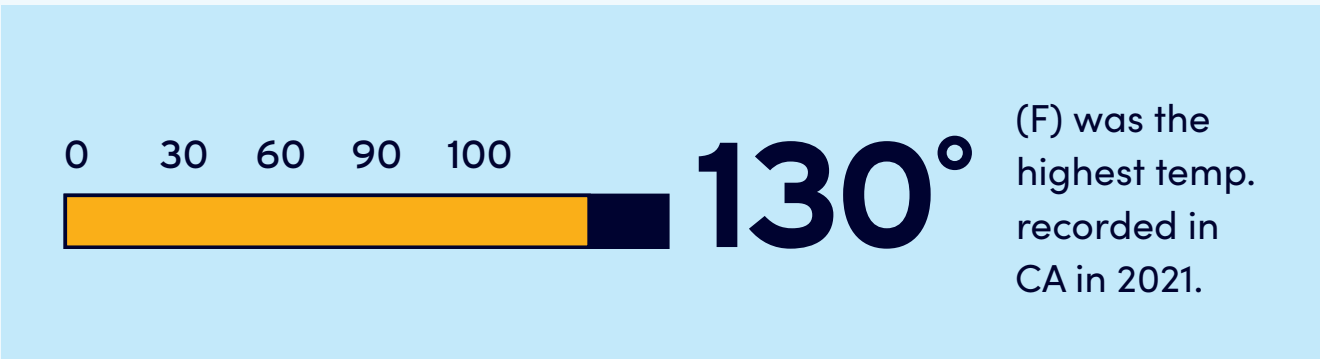
Water Scarcity

A CASE STUDY OF CALIFORNIAN WATERWAYS

California makes up almost the entirety of the United States's western coast, containing a land mass of more than 163,000 miles² of varied ecosystems. Despite this huge variation, drought has been a major statewide factor going back more than 1,000 years.

Most recently, because of the rapidly changing climate, California has been experiencing more common dry periods, like in 2007-09, and between 2012-2016. Because California has some of the most complicated and elaborate infrastructures for transporting water to and across this huge landmass, these dry periods can have a particularly devastating effect, which has only increased overtime.

While some action has been taken in the last decade, California waterways are still incredibly vulnerable and often mismanaged, resulting rising water cost and reduction of clean, usable water for Californians.



Despite some recent changes, the state is still incredible susceptible to dry conditions. In particular, the Central Valley, a region that supplies about 13.5% of all food produced in the country, needs to dramatically alter its current systems of water use. Groundwater has been over-pumped, making crops more vulnerable to water shortages. The state recently has required that groundwater be brought into balance by the 2040s.

Tactics like using less water-intensive crops like vine-based food in the Central Valley, and reduction in landscape irrigation on the Urban coasts must occur in the next two decades for California to continue to be one of the largest agricultural exporters in the world, and to avoid massive water shortages in residential areas of the state.

As drought persists, Californians are 'backsliding' in effort to conserve water. (2021, November 16). Retrieved from <https://www.latimes.com/environment/story/2021-11-16/californians-are-backsliding-in-water-conservation>

California, S. O. (2022, May 06). Drought. Retrieved from <https://water.ca.gov/water-basics/drought>

Charles, D. (2021, July 23). Without Enough Water To Go Around, Farmers in California Are Exhausting Aquifers. Retrieved from <https://www.npr.org/2021/07/23/1019483661/without-enough-water-to-go-around-farmers-in-california-are-exhausting-aquifers>

Commentary, G. (2022, January 26). Here is the first step to a sustainable water policy. Retrieved from <https://calmath.org/>

commentary/2022/01/here-is-the-first-step-to-a-sustainable-water-policy/

July 15, 2021, July 28). California Hasn't Come Clean About Its Water Use During the Drought. Retrieved from <https://www.nrdc.org/stories/california-hasnt-come-clean-about-its-water-use-during-drought>

Klausmeyer, K. & Fitzgerald, K. (2012, Oct). Where Does California's Water Come From? Land conservation and the watersheds that supply California's drinking water. Retrieved from <https://www.nature.org/media/california>

Person, Hans, E., & Mount, J. (2022, March 14). Water Use in California. Retrieved from <https://www.ppic.org/publication/water-use-in-california/>