CASE STUDY OF CALIFORNIAN WATE

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.

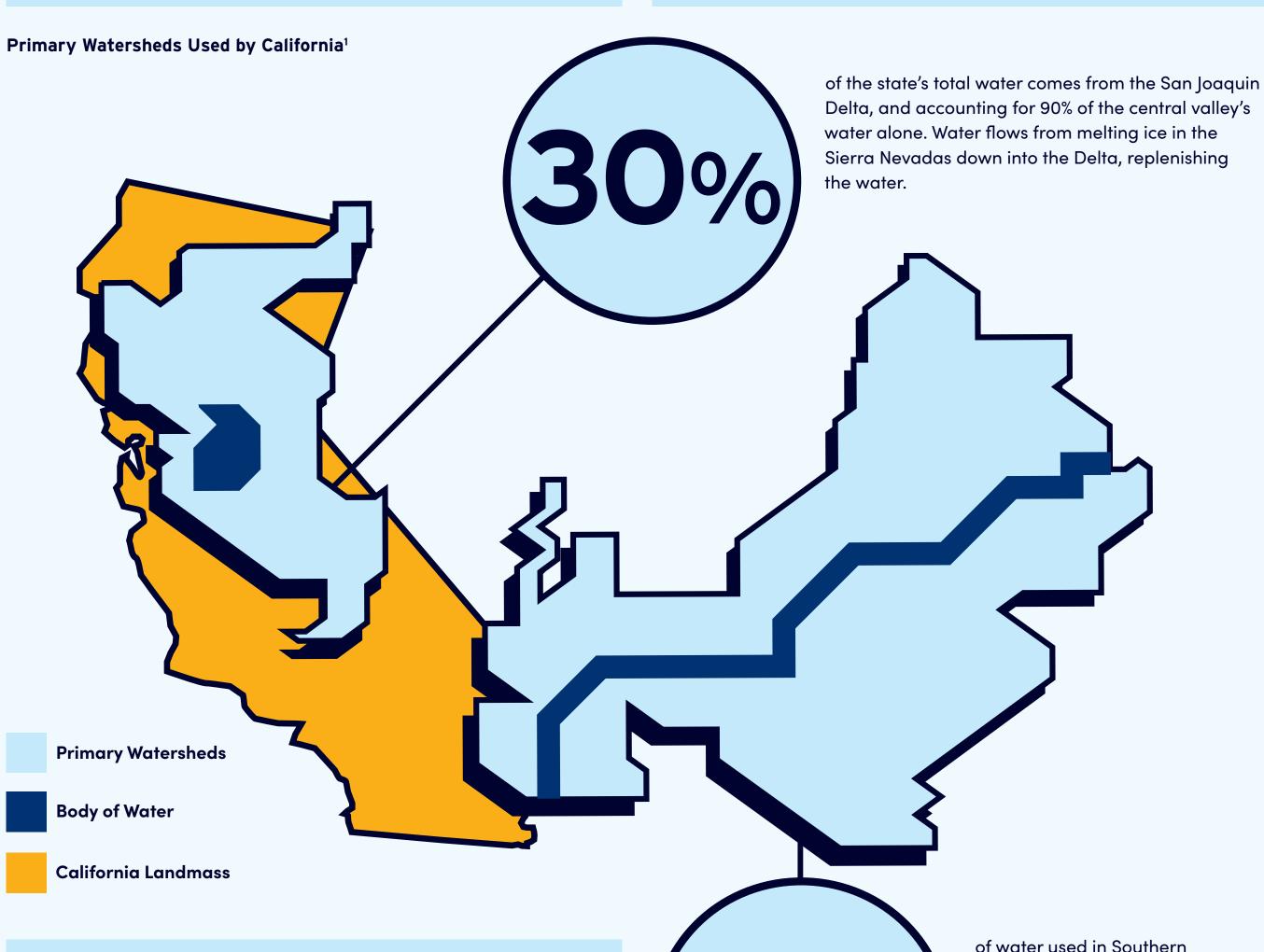
Most recently, because of the rapidly changing climate, California has been experiencing more common dry periods, like in 2007-09, and between 2012-2016. Because California has some of the most complicated and elaborate infastructures for transporting water to and across this huge landmass, these dry 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.

60 90 100

(F) was the highest temp. recorded in CA in 2021.



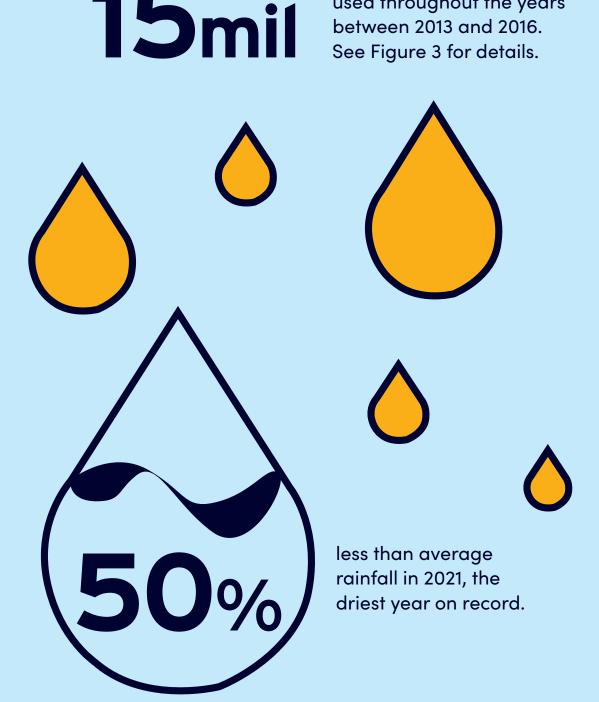




of water used per day per person in California on average recorded between 2016 and 2017.

people live in California as of 2022, the largest population in the United States, ahead of Texas by almost 10 million people.

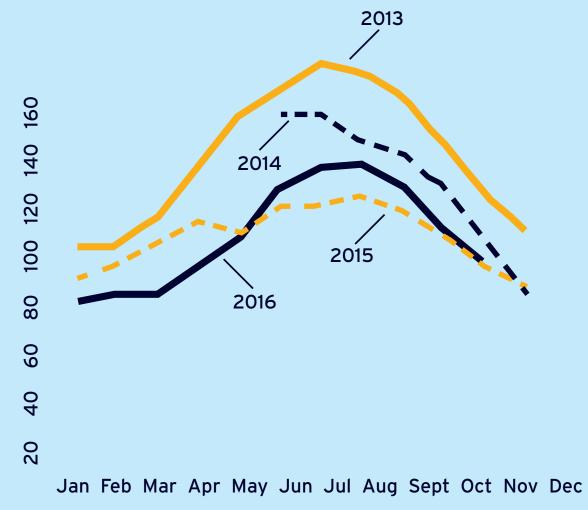
gallons of water were used throughout the years between 2013 and 2016.



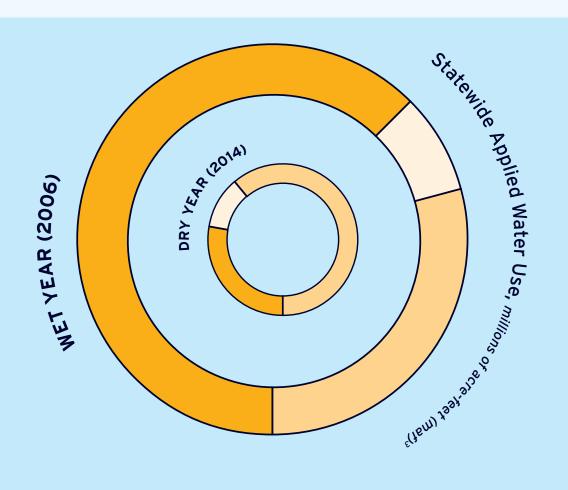


of water used in Southern California comes from the Colorado River, and about 15% of the entire state's water consumption. Los Angeles by itself uses 146 million acres of watersheds, 1.5 times the size of California.





used daily at the peak of water use during the summer in 2013, which has come down over time.



Environmental

Environmental water usage in a dry year.

Agriculture

23% usage in a dry year.

Urban

Urban water usage in a dry year.

of water in a wet year is used in protected water and rivers, natural habitats, and wetlands.

of water in a wet year is used by Agriculture. More than nine million acres of California are irrigated.

of water is used in urban areas. A majority of that water comes from outside

drop in water use as of June of 2020 for California, while drought conditions

of all water is used in residential areas of the

Despite some recent changes, the state is still incredible susceptiable to dry conditions. In particular, the Centeral 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 Centeral 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-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 Aguifers. Retrieved from https:// www.npr.org/2021/07/22/1019483661/without-enough-water-to-go-

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