

Factors that can affect per capita water

It is not appropriate to use Residential Gallons Per Capita Day (R-GPCD) water use data for comparisons across water suppliers, unless all relevant factors are accounted for. Factors that can affect per capita water include:

- **Rainfall, temperature and evaporation rates** – Precipitation and temperature varies widely across the state. Areas with high temperature and low rainfall need to use more water to maintain outdoor landscaping. Even within the same hydrologic region or the same water supply district these factors can vary considerably, having a significant effect on the amount of water needed to maintain landscapes.
- **Population growth** – As communities grow, new residential dwellings are constructed with more efficient plumbing fixtures, which causes interior water use to decline per person as compared to water use in older communities. Population growth also increases overall demand.
- **Population density** – highly urbanized areas with high population densities use less water per person than do more rural or suburban areas since high density dwellings tend to have shared outdoor spaces and there is less landscaped area per person that needs to be irrigated.
- **Socio-economic measures** such as lot size and income – Areas with higher incomes generally use more water than areas with low incomes. Larger landscaped residential lots that require more water are often associated with more affluent communities. Additionally, higher income households may be less sensitive to the cost of water, since it represents a smaller portion of household income.
- **Water prices** – Water prices can influence demand by providing a monetary incentive for customers to conserve water. Rate structures have been established in many districts to incentivize water conservation, but the effectiveness of these rate structures to deter excessive use and customers sensitivity to water prices vary.