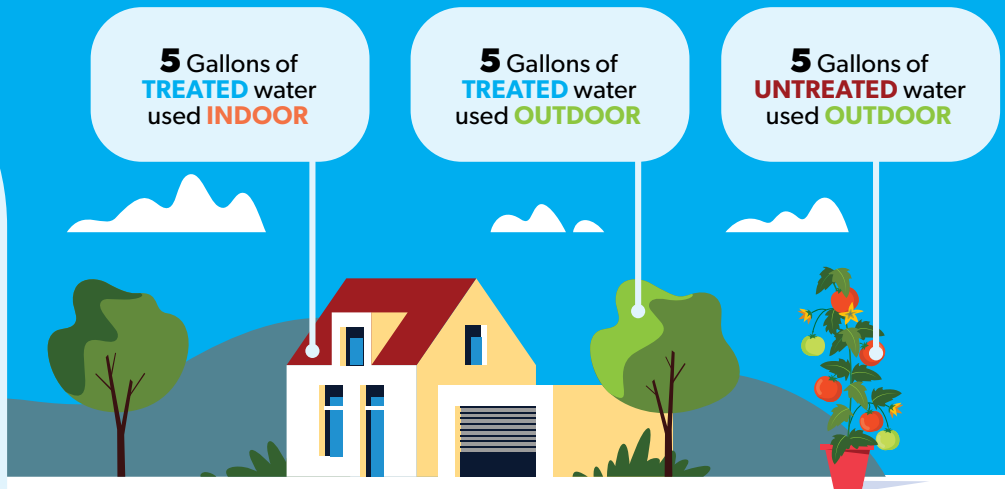


# CALCULATING WATER USE THE NUMBERS GAME



## HOW MUCH WATER DOES THIS PERSON USE?

- A. 3.3 gallons
- B. 5 gallons
- C. 10 gallons
- D. 15 gallons
- E. All of the above



Cities and states have different ways of calculating water use – there isn't a national standard. These varied calculation methods drastically alter the numbers, which is why water providers throughout the nation discourage using gallons per capita per day (GPCD) to determine a community's water use efficiency.

$$\text{GPCD} = \frac{(\text{water use} / \text{permanent population})}{365}$$

(number of days in a year)

## HERE'S HOW THE NUMBERS ARE CALCULATED:

**10 gallons / 3 people = 3.3 gallons**

Treated water use divided by the U.S. Census persons per household. Even though only 1 person lives in the home, the census average is 3 and therefore the use is reported as 3.3 gallons.

This method dramatically inflates population and decreases water use; however, in areas with large second home populations such as Washington County, this method would provide a more accurate estimate of per person residential use.

**10 gallons – 5 gallons = 5 gallons**

Depleted treated water use for 1 person. Even though the person used 10 gallons of treated water, 5 of it was used indoors and was returned to the system (via the sewer). If you use 10 but return 5, you report 5.

**5 gallons + 5 gallons = 10 gallons**

Treated water use for 1 person

**10 gallons + 5 gallons = 15 gallons**

Treated and untreated water use for 1 person



*All calculations are based on actual practices in other cities and/or states.*

## TO ANSWER THE QUESTION:

How much water does this person use? The answer is E. All the above. The amount calculated depends on where you live and how that water provider calculates water. In this scenario, Utah would report 15 gallons of use.

Utah has one of the most comprehensive water reporting practices in the nation, reporting all treated and untreated water use. While this practice is important for planning purposes, it often gives the false impression that Utah uses more water than other states.

So, the next time you hear that Utah uses more water than other cities or states—**check the math.**

