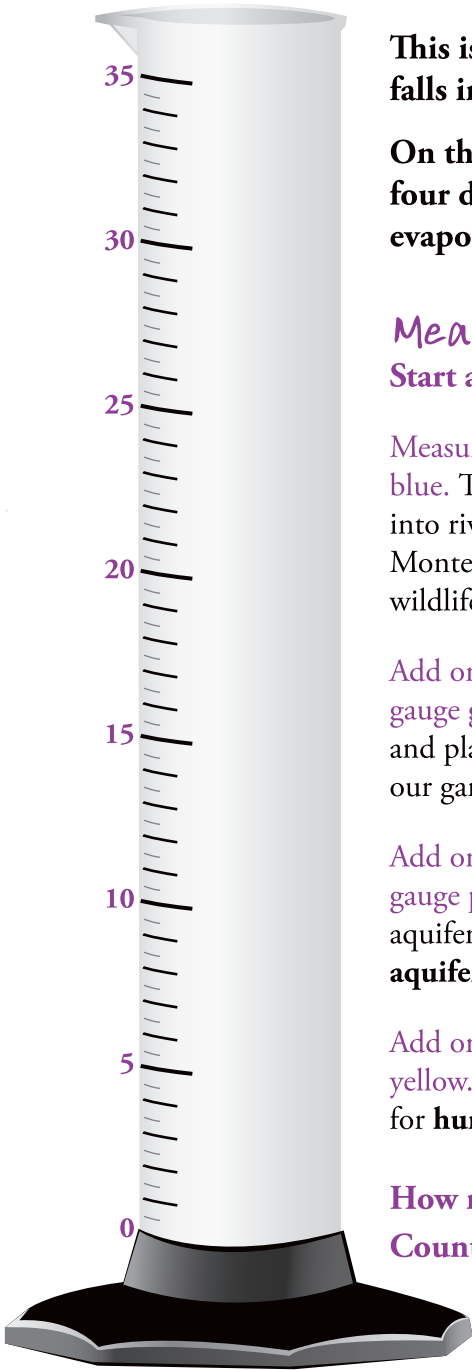


# How Much Rainwater Can We Use?



This is a picture of a rain gauge. A rain gauge measures how much rainwater falls in inches. Each dark line equals an inch of rain.

On this rain gauge, you are going to divide the county's annual rainfall into four different parts. Each part will show a place where rainwater goes—runoff, evaporation, groundwater, and human use.

## Measure and Color

Start at the bottom and fill up the rain gauge.

Measure **16.5 inches**. Color this part of the rain gauge **blue**. This water is called **runoff** because it runs off into rivers, creeks and storm drains and then into the Monterey Bay. The fish, amphibians, and other wildlife use this water to live.

Add on **11.5 inches**. Color this part of the rain gauge **green**. This water **evaporates** from the ground and plants. Plants in the wild, on our farms, and in our gardens use this water to live.

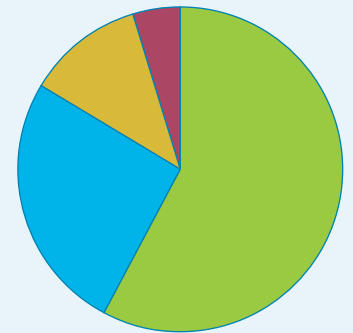
Add on **2.5 inches**. Color this part of the rain gauge **purple**. This water travels to **groundwater** aquifers. **We are pumping more than this from the aquifers each year.**

Add on **0.5 inches**. Color this part of the rain gauge **yellow**. This water is taken out of streams and rivers for **human use**. This is called **surface water**.

How many total inches of rain does Santa Cruz County get in one year? \_\_\_\_\_ inches

## Santa Cruz County

### Human Water Use



- Agricultural**  
50,000 acre-feet
- Residential**  
22,000 acre-feet
- Industrial/Commercial**  
10,000 acre-feet
- Parks/Schools**  
4,000 acre-feet

Total = \_\_\_\_\_ acre-feet

## Santa Cruz County Water Math: Imagine How Much Water We Use Each Year

Large amounts of water are measured in **acre-feet**. One acre-foot is the area of an adult soccer field covered with one foot of water. Santa Cruz County uses about 86,000 acre-feet of water each year. If this water was spread over all the county, we would be standing in 3 1/2 inches of water.

But what if it wasn't spread out? Imagine a fifty-story building covering that soccer field. Each story is ten feet tall. So you have 500 acre-feet for one building (50 stories x 10 feet/story).

How many buildings would it take to hold 86,000 acre-feet of water?

$86,000 \text{ acre-feet} \div 500 \text{ acre-feet per building} = \underline{\hspace{2cm}} \text{ buildings}$

