

Counting *the* drops

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Earth has the same amount of water it had in prehistoric times; it just tends to move around a lot. In nature's water cycle, every water molecule gets back to the kind of place from which it started. It just takes about 2, 500 years.

The total amount of water on earth is hard to quantify, but that hasn't stopped people from trying. So let's crunch some numbers.

Mathematical estimates of all the water on Earth range in the area of 1.4 billion cubic kilometers. (That's 311, 886, 586 cubic miles in case you're opposed to the metric system)

One cubic mile, more than four times the volume of a cubic kilometer, would fill 119, 961 Olympic-sized swimming pools.

Of the total volume of Earth's water, about 97.5 percent is the salt water that covers 71 percent of the earth's surface.

That leaves a paltry 2.5 percent left over as fresh water.

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The water underground, nearly 2 million cubic miles, represents 100 times more water than can be found in the planet's lakes and rivers at any given moment.

Water deep underground tends to stay there for as long as 1, 400 years. The water in lakes and fresh water seas tends to stay there for about 17 years. Water in rivers and streams, on the other hand, tends to stay there for only 16 days.

The remaining water on Earth is in soil, where it stays for about a year; in the air as humidity, where it stays for about eight days and in the cells of plants and animals, where it only stays for several hours.

So of all the planet's freshwater, only about 1 percent (.007 percent of the world's total water) is available for human use.

And it's not distributed very evenly across the planet.

Consider that while a full 15 percent of the world's freshwater is in the Amazon basin, only 0.3 percent of the world's population lives there.

China has 21 percent of the world's population but receives only 7 percent of the globe's precipitation.

"To put it another way, " Marq DeVilliers wrote in "Water, " published in 2000, "if all the earth's water were stored in a five-liter container, available fresh water would not quite fill a teaspoon."