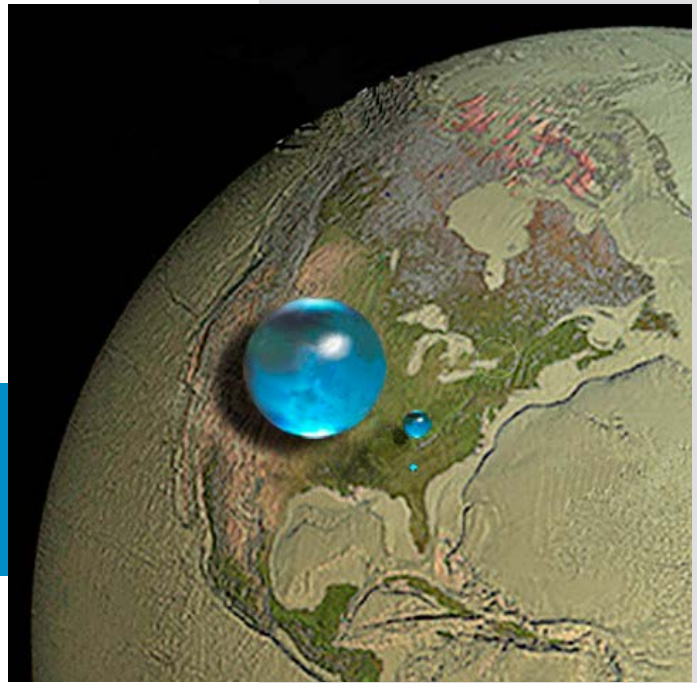


Precious Water



Picture in your mind a 1-gallon milk jug. Got it?

Now imagine 12 of them lined up on a table. That's how much water the average American is carrying inside their body. 12 gallons. That's a lot of water!

Every day we're exhaling water vapor, sweating or excreting water, and if we don't drink water or eat watery foods to replenish it, in as few as 3 days we'd be dead.

Water is very much a life or death issue to all humans and all living creatures. But for the most part, we take it for granted. Often when that happens, it's because we have an abundance of something.

But do we? Sure, we live on the Blue Planet. Look at a photo taken from space and it's easy to see that 70 percent of Earth is covered in water.

Take a closer look, though, and you'll see that number is misleading. Water, even groundwater, is really just on the surface of Earth. Oceans may seem deep to us, but they're incredibly shallow, just a sliver-thin veneer compared to the massive diameter of Earth.

As a matter of fact, all the water on the entire planet would fit into a sphere the width of Texas. And the fresh water that we depend on is less than 1 percent of *that*.

Fresh water is indeed a precious resource—and a topic you'll hear a lot more about, on EarthDate.

All of Earth's water, liquid fresh water, and water in lakes and rivers. The spheres show (1) All water (sphere over western United States, 860 mi in diameter); (2) fresh liquid water in the ground, lakes, swamps, and rivers (sphere over Kentucky, 169.5 mi in diameter); and (3) fresh-water lakes and rivers (sphere over Georgia, 34.9 mi in diameter).

Credits: [Howard Perlman](#), USGS; globe illustration by [Jack Cook](#), © Woods Hole Oceanographic Institution; Adam Nieman.

Precious Water

BACKGROUND

Synopsis: All of the water on our planet is a very small volume compared to the size of Earth. Only a tiny fraction of that is fresh water.

- Earth is known as the “Blue Planet” because of the water that covers 71% of its surface.
- People can live without energy, but they can’t live without water.
 - The human body is more than 60 percent water. Blood is 92 percent water. The brain and muscles are 75 percent water. Bones are about 22 percent water.
 - A human can survive for a month or more without eating food, but only a week or so without drinking water.
 - Fresh water is essential for public drinking supply and food production.
- It is amazing that Earth has such a large proportion of liquid water, given that water is only liquid within a narrow temperature range (0–100°C or 32–212°F).
- Our oceans seem very deep to us, with trenches ranging to more than 6.8 mi deep (Marianas Trench). But compared to the volume of Earth, the oceans are a very thin veneer.
- All of Earth’s water would fit in a sphere with a diameter of 860 mi. That’s just a little bit bigger than the distance across the state of Texas (824 mi from Beaumont to El Paso), or just less than the distance from New York to Atlanta (883 mi).
- On Earth, 96.5 percent of water is seawater and 1 percent is salty groundwater.
- Only 2.5 percent of Earth’s water is fresh water, and about two-thirds of that is locked up as ice. About one-third is groundwater below the surface of Earth, and only about 1 percent of the fresh water ends up as surface water in rivers and lakes.
- If all the water on Earth were represented by 1 m, only 2.5 cm, about 1 inch, would be fresh water. And just 1.5 cm of that would be locked up in ice sheets, leaving only 1 cm as fresh groundwater and surface water. Surface water in rivers and lakes would only be 2.5 mm—just 1 percent of the total fresh water on Earth.
- Land-based life on Earth evolved and lived off of this tiny fraction of Earth’s water until man learned to access fresh groundwater in wells.
- Fresh groundwater and surface water are connected close to the surface of Earth in caves and springs.
- The water cycle connects the vast quantity of oceanic water to both the atmosphere and to our precious fresh water.

Precious Water References

[How much water is there on, in, and above the Earth? | USGS](#)
[Water Basics | USGS](#)
[Water | Wiki](#)
[Water Resources | GreenFacts](#)

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