

HOW DO PEOPLE AROUND THE WORLD GET WATER?



Where do you get your water from? How does climate or geography influence your water source?

Geography and climate play a huge role in how and where people access water. While there are many different ways to get it, not all provide the same quality of water. Surface water, or water that collects on top of the ground (like lakes and rivers), is more likely to be contaminated than ground water (like wells and aquifers), which has a chance to filter through layers of earth to become clean. Even ground water sources can be contaminated if they are too shallow, or are not filtered or treated correctly. In some places, people have to walk several miles to the nearest water source and carry water back to where they live.

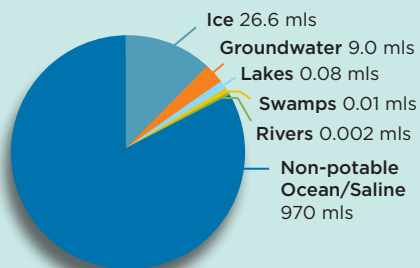


In most developed nations, we take access to safe water for granted, less than one percent of American households have no access to safe water. The lack of access to safe water is deadly, dangerous, and a major obstacle to the people of developing nations.

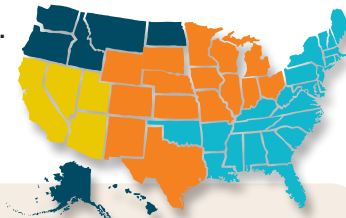
To many of us in the United States, potable (safe to drink) water may seem so ubiquitous that it is hard to comprehend that it is actually one of our most precious resources. Water is essential for our survival—it exists around us, even inside of us in large quantities. We work with, play in and consume water constantly. And yet, the amount of potable water in our world is actually minuscule. It is even speculated that past civilizations became extinct without sufficient water access (Kolbert, 2009). Despite 70 percent of our planet being covered by water—only 2.5 percent of this water is fresh, and even less of it (around 1 percent) is accessible for drinking. Some estimates project that by 2050, “a third of people on earth may lack a clean, secure source of water” (Freshwater Crisis, 2017).

“If all the water in the world were 1000 mls”

This is how it would be distributed:



Even though the amount of water on earth remains same, the way that it is distributed around globe is increasingly imbalanced. Water scarcity is exacerbated by global shifts in weather patterns due to climate change. In the United States we are lucky that our infrastructure provides the large majority of our population with sustainable access to drinking water¹ yet we are not immune to the impacts of climate change or other sustainability problems in growing urban populations. The frequency of water safety-related incidents in the U.S. has increased in recent years.²



In the **Pacific Northwest**, a large portion of water comes from snowfall and melts into rivers and streams. This water is monitored by scientists, who take samples year-round to make sure that the water remains clean and safe for drinking¹.

In the **Northeast/Mid Atlantic**, a large portion of our water comes from rivers and aquifers. Annual precipitation, as well as the frequency and intensity of heavy precipitation events, has increased.

In the **Midwest**, The Ogallala aquifer underlies parts of eight different states acting like “a giant underground sponge made of a jumble of gravel, silt, sand and clay.” Extended droughts in recent years have resulted over-pumping of the aquifer, and many fear that it will eventually become depleted^{2, 3}.

In the **West/Southwest** people depend on rivers, with 74 percent of the people living in the greater Los Angeles and San Diego areas being served by aqueducts and dams transporting and storing Colorado river water.

Country	Population ⁱ	Number who lack access to safe water ⁱⁱ	Water resources
Cambodia ⁱⁱⁱ	15.14 million	3.8 million	Cambodia has plenty of available groundwater; the problem is that not much of it is safe enough to drink.
India	1,311,050.53	77 million	India has about 4 percent of world’s freshwater resources, ranking it among the top ten water-rich countries. Despite this, India is a “water scarce region” due to rapid urbanization, and unsafe hygiene practices.
Honduras	2,002.33	800,000	Rural communities face the most challenges, as many people obtain their water from small springs that are unprotected, contaminated and often without water during the dry season
Pakistan	44,911.81	16 million ^{iv}	The geography of Pakistan (arid deserts and remote mountain regions) makes accessing safe water every difficult for the poorest people.
Nigeria	173.6 million	57 million ^v	Niger has over two billion cubic meters of drinkable water available under a desert. The problem is, few can afford to build systems to bring it to the surface.

¹ http://www.seattle.gov/util/myservices/water/water_quality/
² <http://www.nationalgeographic.com/magazine/2016/08/vanishing-midwest-ogallala-aquifer-drought/>
³ <http://www.nationalgeographic.com/magazine/2016/08/vanishing-aquifer-interactive-map/>

ⁱ <http://data.worldbank.org/indicator/SP.POPTOTL>
ⁱⁱ <http://water.org/country/>
ⁱⁱⁱ https://www.charitywater.org/projects/countries/cambodia/?utm_medium=p-pe&utm_source=sadwords&utm_campaign=problemgeo&utm_content=water-cambodia18gclid=CILe0MfUktCFYRmfgodkZELqQ
^{iv} <http://www.wateraidamerica.org/pakistan>
^v <http://www.wateraid.org/ng>



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