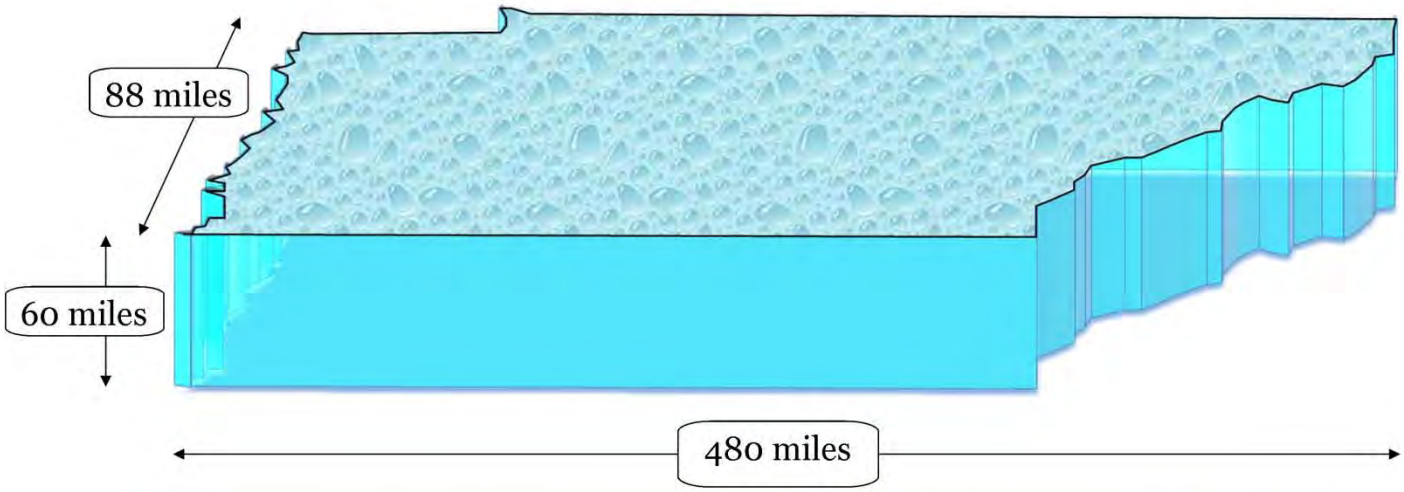
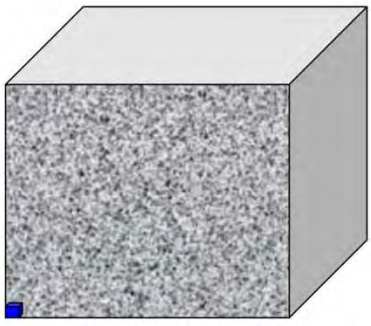
Graphic depicting the amount of fresh ground water in the world relative to the state of Tennessee.



Tennessee is approximately 480 miles long by 88 miles wide and has a surface area of 42,240 sq. miles. If it was 60 miles deep, as shown in the illustration, it would have a volume of 2,534,400 cubic miles

Water covers 70 % of the Earth's Surface. So there must be plenty of water, right? According to the USGS website Earth has some 321,000,000 cubic miles of water. That is enough water to fill a container the size of Tennessee 8,000 miles deep, roughly the diameter of the Earth, the distance from the north pole to the south pole. Although this is a lot, water makes up less than 1/2 of 1 % of the earth's volume, and of all the water, less than 3% is fresh water while over 97% is salt water. Salt water is deadly to drink and although it can be made drinkable it takes a lot of energy and it is very expensive to remove the salt from the water. Most people get their water from rivers and fresh water lakes. In Tennessee we get a lot of our water from ground water located in fresh water aquifers. According to the USGS website our earth has 2,526,000 cubic miles of fresh water aquifers. This volume of water would fill a container the shape and size of Tennessee to a depth of 60 miles, as depicted in the illustration. Is that a lot? Well it is but it isn't. Considering that it would take 1,490 Tennessees to cover the surface of the earth and that the Earth is nearly 8,000 miles thick I would say that it is only a drop in a bucket. If you were to add to the container the water from fresh water lakes and all of the river water, our three primary sources of fresh water, you would only add another 1/2 mile to the height of the container. As a percentage; fresh ground water, fresh water lakes, and river water make up only .0009936 percent of the earth's volume. A ratio of 1 to 105,199. This amounts to a one foot cube in a cube measuring 47 feet wide by 47 feet long by 47 feet high; containing 105,199 one foot cubes.



Water Volumes by Source

Water Source	Vol. Cubic miles *	Depth of Volumes Relative to TN Surface Area	Percentage
Total Water	332,511,874	7,885 miles	100.00 %
Oceans, Sea, Bays "Salt Water"	321,000,000	7,612 miles	96.54%
Permanent Ice "Fresh Water"	5,773,000	138 miles	1.74 %
Saline Ground Water	3,088,000	73 miles	0.93%
Fresh Ground Water	2,526,000	60 miles	0.76%
Fresh Water Lakes	21,830	.5 miles	0.0066%
Salt Water Lakes	20,490	.5 miles	0.0066%
Soil Moisture	3,959	475 feet	0.001%
Atmospheric Water	3,095	370 feet	0.0009%
Marsh Water	2,752	370 feet	0.0008%
Rivers	509	64 feet	0.0002%
Biological Water	269	34 feet	0.00008%

* Volumes based on data from USGS website

Average Diameter of the Earth 7,926 miles