

Water Shortage, Rising Demand, Dwindling Supply

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ABBEY 1: Many Americans may think that the global water shortage is not a huge deal. Why should we care when we can take long showers and still have hot water when we're done? What does it matter that my tap water is safe to drink, yet I still purify it and buy it bottled? WHAT DOES THE WATER SHORTAGE HAVE TO DO WITH ME? The truth is, the people in denial lack knowledge of the subject, and we need to change the way the world thinks about water.

CHARLOTTE 1: Water is a finite resource throughout the world even though we use it excessively. We use it to wash dishes, clean cars, and drink. Everything is created with water. It is used for domestic, agricultural, and industrial purposes as well as inspiration for poems, songs, and paintings.¹ The people of the United States have been relatively lucky to not be affected like the one billion people in the world without access to clean water, which is approximately one person in every eight worldwide.² Because of this shortage, places like China, Northern Africa, and the state of Colorado are experiencing water scarcity, with places like Southern Africa, Western Europe, and the Middle East not far behind.³

ABBEY 2: Water shortage is present all around the world and happens for many reasons. A lot of the time, people tend to live where there is less water. In populated cities such as Los Angeles and Las Vegas, there are too many people in a place with an insufficient water supply. In Southern California, for example, efforts are being made to run pipes from Northern California in order to supply the Los Angeles area with enough water.⁴ Los Angeles, along with most of Africa, is also drought prone. Another huge cause of water shortage is heavily irrigated agriculture and farming. In Colorado, for example, state-wide water shortages are present because of the high amounts of cattle farming. Cattle farms use between 50 and 100 million gallons of water per day in Colorado. Raising cattle and farming uses between 50 and 100 million gallons of water per day. Texas, however, is the largest water consumer for cattle farming, using 250 to 260 million gallons of water per day.⁵

¹ The Atlas of Water: PG 9

² Water.org (source 8)

³ The Atlas of Water: PG 22-23

⁴ Plumbing California (source 2)

⁵ USGS (source 7)

CHARLOTTE 2: If water shortages were the only problem plaguing the world, perhaps scientists could find a way to slow down our consumption. However, the rising demand for water throughout the world just makes the water shortage problem worse. Because of meat-rich diets and lavish lifestyles, demand for water is rising rapidly. Water for agriculture is the biggest culprit, consuming about 70 percent of usage in areas including Africa, the Middle East, China, Indonesia, Australia, and South America. These areas use the most water for agriculture because these developing areas depend on their crops and farms to survive. Industry is up next, consuming only 20 percent of the world's water in places like Russia, most of Europe, the United States, and Canada. Lastly, domestic use takes up a mere 10 percent of water usage. These levels continue to rise and are projected to exponentially increase in the future.⁶

ABBEY 3: For a specific example about how much water is used for agriculture, let's look at the United States. Water is used in two ways in agriculture: irrigation and livestock. Livestock consumes more water, however, as mentioned previously with the example from Colorado. In the US alone, 141 billion gallons of water are used per day for irrigation. However, this water must be used to water the farms and crops. Herein lies the problem. For almost every nation around the world, agriculture and farming livestock keep the economy rolling. If there is no water, there is no food. This leads us into how we humans decrease the supply daily.⁷

CHARLOTTE 3: The last factor in this equation is the dwindling supply of water. Grouped with the water shortage and the rising demand, water's decreasing supply is quite mindboggling. As you may know, 70 percent of the earth is made up of water. 98 percent of the water on Earth is saltwater from the oceans, so is unable to be used for drinking. The other 2 percent of the Earth's water is fresh water, but 1.6 percent of THAT is in glaciers and icecaps, making it inaccessible to us. The rest, about 0.4 percent, is for us humans to use.⁸ Some of this water is stored in aquifers and groundwater, and some is stored in lakes and rivers.⁹ Because of the growing demand for water, civilizations are over pumping their aquifers. Mexico City's population of 18.7 million people calls for large amounts of water. Because of the millions of gallons being pumped out of the aquifer, the city is sinking, causing buildings to fall down, sewage systems to be crushed, and the water quality to diminish. Mexico City's aquifer is not replenishable, but others around the world are. This is one extreme case, but many other areas such as Northern Africa, Australia, Saudi Arabia, and the Western United States all have groundwater basins and aquifers with low recharge rates as well.¹⁰

⁶ The Atlas of Water: PG 24-25

⁷ Water Supply, Sources, and Agricultural Use (source 3)

⁸ How Much Water Is There On Earth (source 4)

⁹ The Atlas of Water: PG 26

¹⁰ Mexico City (source 6)

ABBEY 4: All in all, we are running out of water. It is not from one of these reasons solely, but from all of them together. The rising demand strains the small amount of water we have, causing the world-wide supply to dwindle. In the words of National Geographic, "the challenge we face now is how to effectively conserve, manage, and distribute the water we have."¹¹ As well as infrastructure, we need to change the way the world sees the water crisis. To learn more about the world freshwater crisis, visit nationalgeographic.com/water.

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¹¹ Freshwater Crisis (source 5)

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