

How could there ever be a “water scarcity?” Isn’t water the most plentiful thing on Earth?

– Chris Carroll, Austin, TX

Ocean water may cover more than 70 percent of the Earth’s surface, but thirsty humans rely on finite supplies of freshwater to stay alive. And with exploding human population growth, especially in poor countries, these finite supplies get quickly spoken for. Further, in places without proper sanitation, water can become tainted with any number of diseases and parasites.

Billions of People Lack Clean Water

According to the World Bank, as many as two billion people lack adequate sanitation facilities to protect them from water-borne disease, while a billion lack access to clean water altogether. According to the United Nations, which has declared 2005-2015 the [“Water for Life”](#) decade, 95 percent of the world’s cities still dump raw sewage into their water supplies. Thus it should come as no surprise to know that 80 percent of all the health maladies in developing countries can be traced back to unsanitary water.

Water Scarcity Likely to Increase as Population Grows

Sandra Postel, author of the 1998 book, *Last Oasis: Facing Water Scarcity*, predicts big water availability problems as populations of so-called “water-stressed” countries jump perhaps six fold over the next 30 years. “It raises tons of issues about water and agriculture, growing enough food, providing for all the material needs that people demand as incomes increase, and providing drinking water,” says Postel.

Developed Nations Using Disproportionate Amount of Water

Developed countries aren’t immune to freshwater problems either. Researchers found a six-fold increase in water use for only a two-fold increase in population size in the United States since 1900. Such a trend reflects the connection between higher living standards and increased water usage, and underscores the need for more sustainable management and use of water supplies even in more developed societies.

Environmentalists Oppose Desalination Solution

With world population expected to pass nine billion by mid-century, solutions to water scarcity problems are not going to come easy. Some have suggested that technology--such as large-scale saltwater desalination plants--could generate more freshwater for the world to use. But environmentalists argue that depleting ocean water is no answer and will only create other big problems. In any case, research and development into improving desalination technologies is ongoing, especially in Saudi Arabia, Israel and Japan. And already an estimated 11,000 desalination plants exist in some 120 countries around the world.

Water and Market Economics

Others believe that applying market principles to water would facilitate a more efficient distribution of supply everywhere. Analysts at the Harvard Middle East Water Project, for example, advocate assigning a monetary value to freshwater, rather than considering it a free natural commodity. They say such an approach could help mitigate the political and security tensions caused by water scarcity.

Personal Action to Conserve Water Resources

As individuals, we can all rein in our own water use to help conserve what is becoming an ever more precious resource. We can hold off on watering our lawns in times of drought. And when it does rain, we can gather gutter water in barrels to feed garden hoses and sprinklers. We can turn off the faucet while we brush our teeth or shave, and take shorter showers. As Sandra Postel concludes, “Doing more with less is the first and easiest step along the path toward water security.”