



DOW LIVE EARTH RUN FOR WATER WATER CRISIS FACT SHEET

ABOUT THE GLOBAL WATER CRISIS

While 70 percent of the Earth's surface is covered by water, only 2.5 percent is suitable to drink for a community of nearly seven billion people. Water scarcity is an issue affecting many countries, communities and families all over the world. Communities in Africa, Latin America and Asia suffer 1.8 million deaths every year from diarrheal diseases and the death of 5,000 children each day due to inadequate water infrastructure. In these areas, women and children often must walk 6 km (3.7 miles) each day to secure available water - which is likely unsuitable for drinking.

In developing countries, unsafe water causes 80 percent of all illness and disease, and kills more people every year than all forms of violence, including war. Children are especially vulnerable to these consequences. Of the 42,000 deaths that occur each week from unsafe water, 90 percent are children under the age of five.

Women and children spend nearly 40 billion hours per year collecting water, which translates to children missing billions of hours of school, continuing a lack of education and ultimately perpetuating a state of poverty.

However, the water crisis is not limited to developing nations. In various parts of the world, such as the Western United States and Australia, water scarcity affects the public through enforced water rationing and increased costs. In 60 percent of European cities with populations greater than 100,000, groundwater is being used faster than it can be replenished.

Climate change is already having an impact on water supplies and will make the problem worse in the future. As climates shift and ocean temperatures warm, precipitation patterns will become more seasonal and change in both location and volume. Some areas that traditionally received predictable rainfall will see rain patterns shift to different latitudes, altering runoff into rivers and reservoirs, and changing how or even if groundwater sources are recharged. Many parts of the world will see more precipitation fall as snow, leading to more runoff and floods in the spring, in turn creating less availability and more water stress in the summer. In the United States, west of the Mississippi, large areas are already under high or very high water stress due to multi-year droughts; these areas are expected to continue to dry out. In addition to these changes in water availability, climate change will impact water quality as key water-shaping ecosystems are lost or altered and the effects of pollution are amplified through both flood and drought cycles.

The water crisis can be solved through increased awareness, water conservation efforts and investment in sustainable, scalable and replicable water projects.

STATISTICS

- **The Issue**

- Seventy percent of the Earth's surface is water; 97.5 percent of that is saltwater, which leaves 2.5 percent —much of which is polluted or unsafe — for use by nearly seven billion people
- By 2025, two-thirds of the world's population could be living under water stressed conditions
- Currently, close to one billion people don't have access to clean, safe drinking water (one in eight)
- 1.8 million people die every year from water-related diarrheal diseases. Ninety percent of those are children under five years of age
- 443 million school days are missed due to water-related diarrheal diseases
- Fifty percent of malnutrition is caused by water-related diarrheal diseases

- **Event Goals**

- Raise awareness for the global water crisis
- Inspire the global community to participate in run/walks around the world featuring concerts and educational water villages to engage with the issue
- Encourage water conservation within homes and communities around the world
- Raise funds to support sustainable, scalable water projects in the developing world

- **Dow Live Earth Run for Water Funded Solutions**

Money raised from Dow Live Earth Run for Water events will go towards funding water purification and filtration solutions around the world, including, but not limited to:

- Disinfection – Various methods are available to disinfect water to kill the bacteria that causes waterborne diseases. These include chlorine, clarifiers and ultra-violet (solar and UV bulb) treatments.
- Rainwater Harvesting – A rainwater harvesting system carries rainwater in pipes from rooftops to a large storage tank. The stored water is treated and used for drinking.
- Water Kiosks/Reverse Osmosis –Using reverse osmosis filtration technology to treat dirty water, these kiosks allow community members to purchase clean and safe water for an average of 25 cents per liter.
- Spring Protection – Spring protection helps shield spring water sources located near communities from contamination, which helps reduce the spread of water-related diseases and contributes to the overall health of the community.
- Gravity Fed Filters – Water is forced by gravity through a sand and gravel filter, eliminating much of the contamination. This treatment is often coupled with a disinfectant at the point of contact to ensure safety.
- Water Boreholes – A deep hole that provides access to ground water beneath the Earth's surface. Boreholes are lined with material to prevent surface contamination from entering the hole and an electric pump attached to the bottom of the borehole draws water to the surface.

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