

# In a word, why climate change matters: Water

May 27 2016, by Chicago Tribune

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Think climate change and what comes to mind? The Arctic Ocean melting like an ice cube under a July sun? Island paradises swallowed up by rising seas? Beefier hurricanes crashing into coastlines with greater frequency?

There's a ring of truth to all of the above, and it should make all of us think and act greener. Now, the World Bank has come out with a report that sums up one of the gravest of [climate change](#) consequences with just one word: water. As in, not enough of it.

By 2050, the report projects, water scarcity could cause economic growth in some parts of the world to drop by as much as 6 percent. Regions where water is plentiful will get thirsty, and regions already struggling with scarcity will get thirstier. Water availability in cities could plummet by as much as two-thirds by 2050 compared to 2015 levels.

The World Bank makes a good case for the linkage between global warming and water scarcity. Steady population growth in coming decades will produce a bigger demand for water. The world's population is expected to top 9 billion by 2050. That means food production will need to double, and ramping up agricultural output requires setting aside more water for farming. More people also means a need for more energy. Providing power is one of the biggest consumers of water. By 2035, the World Bank predicts, energy is expected to consume 85 percent more water than it does now.

At the same time, global warming will push up temperatures, creating more evaporation - meaning there will be less water at a time when farms and power producers need more of it. And with global warming come rising sea levels, which destroy coastal aquifers with salinity, further reducing available fresh water.

It's not that [global warming](#) sops up water and never returns it. Rather, water is being redistributed in ways that make matters worse for water-scarce regions. Those regions, for the most part, include poorer, developing countries that lack the wherewithal to solve water scarcity. Parts of the world most at risk include the Middle East, North Africa, Central Asia and Central America. Overall, a quarter of mankind lives in places burdened by water scarcity, the report states. In 20 years, that share could double.

It all sounds fairly grim. The World Bank, however, offers up some solutions. Too many cities and towns around the world make water free. The report advocates pricing that reflects water's value. We're likely to be better stewards of water if we price it as the precious commodity it is.

Desalination plants that turn seawater into drinking water have been godsend to countries such as Israel that for decades coped with water scarcity, but that approach has a flip side: Desalination devours energy and is therefore expensive. The report also touts recycling storm water and "gray water" - water from sinks, showers, tubs and washing machines.

Those remedies help, but they work around the edges of the core problem - climate change.

Reducing greenhouse gas emissions should top the list of answers. The Paris agreement on climate change, signed by more than 170 nations in April, is a good start. That accord calls for reductions in [greenhouse gas](#)

[emissions](#) that would limit the planet's warming to an increase of no more than 3.6 degrees above pre-Industrial Revolution levels.

Countries still need to hammer out action plans to meet that goal, however, and then act on those plans. The World Bank, the International Monetary Fund and many world leaders believe the right incentive to coax emissions reductions is to impose "carbon pricing," requiring fossil fuel polluters to pay for carbon dioxide they send into the air. President Barack Obama backs the concept, but he's leaving office in January.

Chicago is perched on one of the world's most plentiful fresh drinking water sources - one of the Great Lakes. So, why should Chicagoans care if parts of the globe run out of water? Well, water crises can lead to large-scale migration, and even conflict. The report is careful to not suggest that water scarcity will start wars between nations, but it does stress that water scarcity has in the past sparked violence and civil conflict within countries. "In a globalized and connected world, such problems are impossible to quarantine," the World Bank says.

The report ought to be a wake-up call to a world that has treated [water](#) as if its quantity is boundless. It's not. It's finite and increasingly scarce, and we need to start learning how to manage it better. One of the best ways to do that is to confront climate change head-on.

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Citation: In a word, why climate change matters: Water (2016, May 27) retrieved 18 April 2024 from <https://phys.org/news/2016-05-word-climate.html>

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