



Joliet Alternative Water Source Study

Topic #1: State of Water in the World September 24, 2018

October 10th will be the fourth annual Imagine a Day Without Water (<http://imagineadaywithoutwater.org/>) that was started by the Value of Water Campaign (<http://thevalueofwater.org/the-facts/waters-value>). Imagine a Day without Water is a day to raise awareness and educate America about the value of water.

One of the most publicized cases of water shortage is in Cape Town, South Africa. Day Zero is the day when the City's water supply will run dry for over four million residents. The exact day keeps changing as rains come and fill the City's reservoirs. Earlier this year, in January 2018, Day Zero was April 16th. Then in February, after agricultural use decreased, Day Zero moved to May 11th. Currently Day Zero is pushed back to 2019 – see this link for current Day Zero data: <http://coct.co/water-dashboard/> and the City's website: <http://www.capetown.gov.za/Family%20and%20home/residential-utility-services/residential-water-and-sanitation-services/make-water-saving-a-way-of-life>. Even though Day Zero was pushed back, water restrictions are still in place which limit daily usage per person to 50 liters (~13 gallons) per day. The average water usage per person in Northeastern Illinois is 100 gallons per person per day.

Another highly publicized case of potential water shortage in the US is one that is impacting Arizona, Nevada and California. A report published in August says there is a 52% chance that the water levels at Lake Mead will fall below 1,075 feet by 2020, which could trigger a shortage declaration on the Colorado River which supplies drinking water to 40 million people (<https://www.upi.com/Drying-Lake-Mead-could-trigger-federal-water-shortage-by-2020/3861534440240/>). The Arizona Department of Water Resources has developed a Lower Basin Drought Contingency Plan working together with California, Nevada, the US Bureau of Reclamation and Mexico to try to leave enough water in Lake Mead so that the shortages are delayed (<https://new.azwater.gov/media/videos/2018-05-09>). However, no one thinks that water shortages will be avoided in their entirety (<https://new.azwater.gov/news/articles/2018-05-09>).

There are many other examples (such as Los Angeles, Salt Lake City, Miami and Texas) and many articles online that talk about water scarcity in the United States as well as throughout the world. If you are looking for more information, try these links as well:

<https://www.curbed.com/2018/2/16/17013532/cape-town-water-crisis-drought>

<https://news.nationalgeographic.com/2018/03/world-water-day-water-crisis-explained/>



<https://cleantechnica.com/2018/03/10/3-us-cities-next-face-severe-water-crisis/>

<https://www.bbc.com/news/world-42982959>

<https://www.usnews.com/news/best-states/articles/2018-02-16/as-world-eyes-cape-town-water-crisis-texas-study-explores-new-options>

As we were compiling all of this information, there was an op ed article that hit a nerve: <https://www.cnn.com/2018/03/05/opinions/water-scarcity-cape-town-opinion-ratner/index.html>. In particular, water scarcity is different from other disasters because it gives us lead-time for preparation. Mitigation means accepting that there is a risk and taking action now to try to minimize that risk.