

MANAGING WATER IN MANUFACTURING: A CHALLENGE THAT'S NOT GOING TO EVAPORATE



A recent Manufacturing Transformation blog post, [Can Manufacturers Do Something About the Weather?](#) talked about how the record snowfall in the Northeast U.S. has impacted manufacturing operations. This article will take a look at the opposite problem – a lack of precipitation.

It's easy to take water supplies for granted. We think of water as endless and nearly free. After all, while it may change its shape from liquid to gas to solid, it never really goes away, right? But of course, this is not really the case.

It isn't endless, nor is it free. This point has been driven home quite painfully to the millions of people and thousands of businesses in the Western United States over the past few years.

Since 2012, much of California has been suffering from a history-making drought, at an economic cost estimated to be over \$2 billion so far. And the problem is only going to get worse. Climatologists predict that major, widespread droughts will become common in the U.S. by 2050. As a native Californian, I am living this first hand.

The question is, what should you as a manufacturing enterprise do about the water problem? What can you do about it?

Some supply chain experts suggest that it's time for companies to change the way they look at water, as explained in a recent article by Kevin O'Marah at SCM World. O'Marah argues that it may be smarter to look at water as a tool, rather than as a resource. He writes: "Water, in most supply chain situations like cooling, cleaning and various materials handling processes, is more akin to a tool that one uses, cleans and puts back on the shelf, than a flow-through consumable to be discarded as post-production waste."

In other words, resources are used up, but tools are reused. The article points out that some big companies are putting this idea into practice in the form of recycling.

A Pepsico plant in Columbia is now recycling 75% of its water, and Taiwan Semiconductor says it is reusing 90%!

In addition to recycling, there are other steps manufacturers will need to take. One is to adopt a long-range view of water. Supply chain strategists need to think of water in terms of availability over a span of years, because that metric may be more important than cost. This involves asking questions such as: Is the plant located where there's a strong water infrastructure with long-range planning and policies? Is the local government committed to sustainable water supplies? Is there a history of droughts and shortages?

Finally, enterprises will need to be ready to respond quickly in their business operations and supply chains when sudden water shortages hit, a problem that's likely to grow in the years ahead. This will mean being able to do everything from finding new suppliers to relocating production operations and processes to another part of the world, either temporarily or permanently. For companies with agile, enterprise operations platforms, shifting processes and logistics will be far less challenging than for those companies that are still using the manual systems of the past. But it won't be easy for anyone.

Source: <http://www.aprison.com/blog/2015/03/managing-water-in-manufacturing-a-challenge-thats-not-going-to-evaporate/>