Assessing water risks is the first step towards developing strategies and there are a number of tools that can help. This post explores the cost of water risks, it then explores some of these risks and concludes with a review of five assessment tools.

Water related issues are a significant and growing risk and corporations are stepping up. They represent a $63 trillion risk and the actual cost of these risks increased five fold last year ($14 billion in 2016 compared to $2.6 billion in 2015). These risks include drought, flooding, tightening environmental regulation and the cost of cleaning up water pollution and fines.

Businesses need to start by quantifying water requirements then they must examine the hydrological and ecological characteristics of the local systems in which they operate.

As explained by Sissel Waage, director of BSR’s biodiversity and ecosystem services practice in an Environmental Leader article, companies can future-proof their water supplies. To do so they will need to conduct a risk assessment that includes regulatory and competitive landscape issues. It must also include a thorough analysis of all water requirements. The key to future-proofing water supply is to view it holistically, says BlueTech Research chief executive Paul O’Callaghan. He also said corporate water risk is, "an input that is necessary to economic survival."

Corporate water management is complex and the impacts of scarcity on business are far reaching. To help corporations manage tools are being developed that do much more than just help corporations with water conservation.

The following video addresses water risks and introduces the WWF’s Water Risk Filter.
There are a number of other water risk assessment tools including WRI’s Aqueduct, Global Environmental Management Initiative’s Water Sustainability Tool, and Ceres Aqua Gauge and Water Risk Monetizer. The analysis that these tools provide is both an essential and a fundamental part of developing a water strategy.

Here is a video review of the WRI’s Aqueduct

The following webinar reviews the business value of water risk assessment tools. It also addresses specific water risk tools focusing on GEMI and IPIECA
One of the most capable tools is the Water Risk Monetizer. It is designed to transform the way businesses consume and manage water by ascribing financial values to current and future risks.

This publicly available online financial modeling tool helps businesses understand the impact of water quantity and quality on their operations. It gives them the insights they need to make more sustainable business decisions. The data derived from this tool can be translated into actionable insights.

The Water Risk Monetizer uses economic techniques and scientific methodologies. The tool is site specific as it draws on local water data. In addition to scarcity and quality, the tool quantifies human health and environment impacts of water use and displays risk levels for individual facilities in comparison to current water costs.

The Water Risk Monetizer was developed by water technology and services firm Ecolab and environmental data and risk analysis specialists Trucost, and built on Microsoft Azure Cloud technology. The quantification of reputational risk exposure is provided in partnership with RepRisk.

The Water Risk Monetizer prices water correctly, "it translates scarcity into the language of business which is money". By using the actual market price of water businesses will be more likely to value it. Here is a good overview video explaining the tool:
Here is a good introduction to how the Water Risk Monetizer works:

Christophe Beck, Ecolab executive vice president and president, Nalco Water, an Ecolab company explained the business value of the tool:

"Successful business leaders will drive water strategies that go beyond simply using less to reuse and recycling. Data provided by the Water Risk Monetizer not only encourages conservation but also helps make circular water management an important and viable option to ensure a more resilient future for businesses and communities.”