



Good News, Bad News: The Current State of Global Water

March 22, 2017

by [Sustainable Brands](#)

World Water Day typically sees brands unveil new initiatives designed to reduce impact in their supply chains, report successes and team up with charities to raise awareness about water security in vulnerable regions across the globe.

While there is certainly progress to celebrate, the reality of the matter is that much more must be done to address the [growing global water crisis](#).

First, the good news.

Ecolab, **Trucost** and **Microsoft** have teamed up to expand the capabilities of the [Water Risk Monetizer](#) in an effort to help businesses respond to water availability and quality challenges.

Developed by Ecolab and Trucost, global leaders in water technologies and services and environmental data and [risk analysis](#), and built on Microsoft Azure Cloud technology, the Water Risk Monetizer is designed to advance corporate water management in an increasingly water-scarce world.

The Monetizer is industry's first publicly available financial modeling tool that enables businesses to factor current and future water risks into decision making, and now incorporates water quality into its site-specific risk analysis to provide a more comprehensive risk assessment. The enhanced tool helps business understand the impact of water quantity and quality on their operations and [gives them the insights they need](#) to make more sustainable business decisions.

With global demand for water expected to exceed supply by 40 percent by 2030, the tool's new features will provide companies with critical information regarding the compounding impacts of decreasing availability and declining water quality.

"The market price of water in most of the world does not account for quantity and quality risks," said **Libby Bernick**, global head of Corporate Business for Trucost, part of **S&P Dow Jones Indices**. "This disconnect between the market price and value of water makes it difficult for businesses to substantiate investments in

[strategies that address water risks](#). By utilizing Trucost’s data, analytics and insight, the Water Risk Monetizer seeks to quantify water quality risks and the potential impact of water scarcity on a facility to help businesses make better informed decisions on water strategies and management.”

The Monetizer features best-in-class water basin datasets, economic techniques and scientific methodologies developed by Trucost to monetize water-related business risks. The tool quantifies the full value of incoming and outgoing water to a specific location based on basin-level quantity and quality considerations — taking into account tangible factors such as scarcity and quality as well as less tangible human health and environmental impacts of water use. Risk levels for individual facilities are displayed in comparison to current water costs.

New features of the Water Risk Monetizer include:

- Assessment of incoming water risk based on water quantity and quality
- Assessment of outgoing water risk based on water quality
- Enterprise risk profile based on three-year projected output growth and location-specific water stress
- Incorporation of reputational risk exposure provided in partnership with **RepRisk**
- Enhanced user interface and functionality including the ability to organize and sort facilities and rank them based on risk level to make it easier to prioritize action

“The impacts of water scarcity on business are complex and far-reaching,” said **Christophe Beck**, Ecolab Executive Vice President and President, **Nalco Water**, an Ecolab company. “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.”

Meanwhile, the **United Nations** (UN) has come out with a new report that suggests that improved wastewater management has the potential to unlock economic returns, reduce water scarcity and help achieve water-related targets outlined in the **Sustainable Development Goals** (SDGs).

Currently, approximately two-thirds of the global population live in areas where water scarcity is a daily reality and 500 million live in areas where water consumption is double the amount of local supply. And by 2030, 33 countries are expected to be at risk from water stress. But according to *[Wastewater: The Untapped Resource](#)*, once treated, wastewater could prove invaluable in meeting the growing demand for freshwater and raw materials, as well as [enhancing food security](#). Wastewater even has the potential to [produce renewable energy](#). Additionally, the report points out that for every \$1 spent on [sanitation improvements](#), \$5.5 will be returned to society.

“Wastewater is a valuable resource in a world where water is finite and demand is growing,” said **Guy Ryder**, chair of UN-Water and Director General of the **International Labor Organizations**. “Everyone can do their bit to achieve the [Sustainable Development Goal target](#) to halve the proportion of untreated

wastewater and increase safe water reuse by 2030. It's all about carefully managing and recycling the water that runs through our homes, factories, farms and cities.”

“The 2017 World Water Development Report shows that improved water management is as much about reducing pollution at the source as [removing contaminants from wastewater flows](#), reusing reclaimed water and recovering useful by-products [...] Raising social acceptance of the use of wastewater is essential to moving forward,” said UNESCO Director General **Irina Bokova** in her foreword to the report.

There are, however, obstacles. While wastewater treatment for both industry and municipalities is common practice in wealthy countries, only 28 percent of wastewater is treated in lower-middle income countries. The number is even lower for low-income countries, where less than 8 percent of wastewater is treated.

This is in part due to the high costs associated with current wastewater management systems and technologies, particularly in the case of large centralized models. Employing low-cost treatment solutions, adopting decentralized models and increasing investment will be key in promoting the widespread adoption of wastewater treatment efforts. Additionally, [new technologies are required](#) to keep up with growing demand and tougher legislation is required to provide incentives and penalize those who fail to adapt to the changing landscape.

“In a world where demands for freshwater are continuously growing and where limited water resources are increasingly stressed by over-abstraction, pollution and climate change, neglecting the opportunities arising from improved wastewater management is nothing less than unthinkable in the context of a circular economy,” the report states.

Water insecurity poses a serious threat to the global economy, representing an annual cost of \$500 billion. Now more than ever, water stewardship is a crucial for businesses' survival.

And now the bad news.

After being charged with six separate accounts for polluting the River Thames with 1.4 billion liters of raw sewage, **Thames Water** has been smacked with a hefty £20.3 million fine by the **Environmental Agency**. The facilities at fault include five [sewage treatment plants](#) in Arborfield, Aylesbury, Didcot, Henley, Little Marlow, as well as a pumping station in Littlemore.

The water company is responsible for 68,000 miles of sewer pipes and operates 350 sewage works across London and the Thames Valley, which recycle 4.4 billion liters of sewage back into the environment every day. However, these new violations could prove detrimental for Thames Water's image.

Judge Francis Sheridan was determined to make an example out of the company and has quoted saying: “The fact that Thames Water takes its name from the River Thames does not make it their property to poison and pollute.”

“One has to get the message across to the shareholders that the environment is to be treasured and protected, and not poisoned,” [he added](#).

Thames Water has already begun rolling out damage control measures. “We deeply regret each of these incidents at six of our sites during the period 2012 – 2014. We asked for these incidents to be considered and sentenced together, because it was clear that our performance in this part of our region, at that time, was not up to the very high standards that we and our customers expect,” said Thames Water Chief Executive **Steve Robertson**.

“Since then, we’ve reviewed how we do things at all levels and made a number of key changes. These have included increasing the numbers of staff in key operational roles and investing heavily to improve reliability. As a result, our performance has significantly improved. We understand our huge responsibilities to the environment, have learned from these serious events and continue to invest at the rate of around £20 million a week on continually improving our service to our customers and the environment.”

According to Robertson, the company will open its doors to customers and stakeholders later this year at each of the sites in question, providing a glimpse at the improvements that have been made at each facility and opportunities to speak with the operational teams who maintain them. Thames Water will also be adding £1.5 million to its Community Investment Fund for projects to improve the river, its wildlife and surrounding environment in affected locations.