BlueTech Forum Interview: Alexis Morgan, Water Stewardship Specialist at WWF

What does WWF do and what is its mission?

WWF is a global conservation organisation that has been instrumental in making the environmental conservation and species protection a matter of world concern for over 50 years. Businesses make a huge impact on the natural world and are critically dependent on it too, so we have long been heavily engaged with an array of different industries including the forestry sector, fisheries, food and beverage, retail and power.

A lot of the work we do with the private sector relates to developing standards, for example, through the Forest Stewardship Council and Marine Stewardship Council. Market-based standard systems can be used to help drive supply chain change. We do a lot of engagement with businesses because they have the ability to not only cause problems, but to solve problems too.

Part of that is engaging in water governance, making sure that the management systems are better and stronger on behalf of governments and that the necessary policies are in place.

Why is WWF, a conservation organisation, taking part in an event like BlueTech Forum?

For a very long time, non-governmental organisations (NGOs) like WWF have been the canary in the coalmine - they are mostly using pretty good science to flag things that are an issue. We have started to see that companies are increasingly paying attention to the environmental and social issues NGOs are raising because at a certain point they become business issues.

By working with companies, we get a view into what they are struggling with and where are they shifting their attention. In my view, they are hitting a point where it does not necessarily make sense to invest in greater technology in individual facilities - the next frontier is finding ways to engage with and invest in the catchment or watershed to mitigate risks. That is what I really want to explore at the BlueTech Forum.

How can companies better manage their water risk?

WWF does a lot of work in water risk identification, so we have our own software tool that is called the Water Risk Filter, which helps companies identify risks on a global basis and then begin to develop mitigation solutions. We found that the pathway that has traditionally been followed around improving process efficiency has begun to reach the end of its useful curve.

Business leaders are now wondering how to address the issue of scarcity. They have done everything within their facility to improve efficiency and resilience, so they're asking, 'What next to make sure that my investment in this multimillion dollar asset is not going to go to waste?'

They may be in certain catchment or river basin, facing a drought situation or extreme weather events. At WWF we've started to look a lot more at shared solutions and collective action.

We need to start thinking about industrial ecology; an ecosystem of businesses, so one company's waste becomes another's resource input. You might have a wastewater treatment facility; if it has biosolids, it has phosphorus and nitrogen that can become a resource. There has already been a lot of work on that notion, but it is about really trying to scale that sort of thinking in the context of a watershed.

In what ways does WWF work with corporates on water?

WWF has actually got a long history of working with leading companies in different markets, like Coca Cola, IKEA, H&M, even HSBC. We try to drive more sustainable business practices into their actual operations, working directly with them on their challenges and beginning to reform their business practices. On water, that often starts with a discussion around a company's operations or supply chain and the risks for the company so they are not left with stranded assets.

Mining companies are very concerned that they could invest hundreds of millions of dollars into an operation that then has no water. Food and beverage companies are very concerned that drought in their supply chain could really interrupt operations or drive costs much higher.

It is often on the agricultural side that companies turn to WWF. Usually, it is not just about the growers, it is about how water is being used within a watershed. In those circumstances companies tend to be outside their comfort zone and expertise. It requires multi-agency engagement and discussions about natural capital and aquifers and how water is replenished.

How do you get multiple stakeholders and companies to collaborate?

We spend a lot of time developing 'basin strategies', which are really an exercise in mapping which stakeholders and companies are operating in a river catchment area. From a systems perspective we work out not only how to engage the right people, but how to get people to collaborate more effectively.

Once you have identified the shared water challenges there is a real opportunity to bring in innovators, entrepreneurs and venture capital players. That is where it gets to be really exciting because once you can talk about a US$300million investment rather than a U$3 million investment, from an impact perspective, there are some really exciting opportunities.

In terms of water and corporate stewardship, how would you quantify the value of water?

Last fall we put out a working paper with the International Finance Corporation on that exact topic. It is one of the big challenges when it comes to innovation and clean tech. Nobody questions the huge need for all this technology because water is a huge issue, but when it comes time for actually putting investment into it, people say, 'Water is cheap and energy is expensive, so we're going to invest in the energy side of things.'

First of all it is important to make clear the distinctions between the price of water, the cost of water and the value of water. The price of water is the water tariff that the municipality or supplier charges the customer for water.

Then there is the cost of water. You may get water from a provider, but you may also need to treat it further for specific purposes, so those additional processes add cost. The cost of water is the price that you paid for it plus the cost of further treatment.

Then there is the value of water - how does water affect your operations in all areas? That figure comprises not only the cost factors, but also the value of production per day. How would your business look if there was a shortage or a regulatory change and your water allocation was modified? What is the value of your wastewater treatment facility as an asset? How much does it cost your bottom line when staff are sick because they don't have access to sanitation and hygiene facilities and worker productivity is affected?

The value of water touches assets, liabilities, revenue and cost factors within operations. It is much more significant in terms of its financial impacts than the price of water, which is what people often talk about.

In what ways are companies missing the true value of water in their business operations?

The starting place for much of this is to think about how water affects your financial statement, because that defines not only where there are significant risks and liabilities, but also where the opportunities lie. Software tools are beginning to emerge that pull these things together so there is a relationship between water risk and the potential financial impact on a company. At WWF we are in the process of building one that we hope to release in the coming months.

From a water perspective there may be assets that a company is not currently capitalising on. We are starting to see this within the forestry sector where traditionally people have looked at their forest management units as just providing timber or pulp.

Now they are saying, 'Wait a minute, by not logging all of the forest we're providing a key service to users downstream. It is retaining sediment and helping to purify water.' This means there is a potential revenue stream there.

So setting up a system where stakeholders receive a guarantee that these services are going to be maintained, or perhaps even enhanced, may provide an incentive to log even less, because those services become more valuable than the timber or pulp.

Have you got any further examples of how best practice can be shared across different industries?

WWF has been heavily engaged in the use of a standard system called the Alliance for Water Stewardship (AWS), which is a market-based standard system not dissimilar to Fairtrade, but focused on water. The standard is universal whether it's applied to a wastewater treatment facility, a water service provider, a mine or a farming operation, so it is a good example of how we've developed something that is universal across sectors.

We have done some application of this in the chemical manufacturing sector in an industrial park in China and have begun to scale from using AWS at a facility level to industrial park level. By using AWS as a basis for collaboration, companies could begin to collectively invest in wetland restoration or a shared water treatment facility or perhaps even extreme weather defence systems. The learnings from this example are now being transferred to the apparel sector.

Mapping supply chains and identifying where there are commonalities is another area where there are opportunities, because a lot of tier-two suppliers actually provide services to multiple companies and so share supplier networks. A group called the Sustainable Apparel Coalition has identified the need to have common metrics so companies can compare operations.

This is another reason to engage with BlueTech Forum, because I think we can help to diffuse that learning and share lessons learned, including technological knowledge.

Alexis will join the Corporate Water panel at BlueTech Forum to debate the question - Can innovation mitigate corporate water risk and deliver value? BlueTech Forum takes place on 1st June in San Francisco and the theme is ***20:20 Vision - Insights to future-proof your water strategy.***

BlueTech Forum is taking place on 1st June in San Francisco.

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