A water company is changing the culture of improving the quality and quantity of water it supplies, looking beyond traditional engineering and chemical treatment solutions to the improvement of catchment areas to make supply cheaper and more sustainable.

**THE IDEA**
South West Water had taken an interest in, and collaborated on, work in Exmoor National Park where the National Park Authority, Natural England, the Environment Agency and English Heritage had worked together to conserve and restore over 2,000 hectares of the Exmoor peat bogs. South West Water realised that expanding such work on Exmoor, and developing a pilot project on Dartmoor with its National Park Authority, the Duchy of Cornwall and commoners, would greatly improve catchment management, which would, in turn, support a more sustainable method of water treatment and supply.

At the same time, South West Water developed a programme to improve water quality from over 700 farms that are above key river water intakes. It was designed and is being delivered by third sector partners, Westcountry Rivers Trust, Devon Wildlife Trust and Cornwall Wildlife Trust, who have the skills to negotiate and agree win-win improvements that benefit all participants.

**THE INNOVATION**
‘South West Water serves a pretty big area’, says Susan Davy, Finance and Regulatory Director, ‘with 1.7m residents and with tourism adding 8m visitor nights a year. So we need to protect the quality and quantity of our resources’. The company relies on different water resources but, in particular, it depends on water from upland moorlands.

Water companies have conventionally relied on energy, chemicals, and expensive engineering solutions to improve quality and expand resources. This happens in treatment plants at the downstream end. South West Water has started to supplement this by investing more in collaborative work with third parties to improve the upstream catchment areas themselves. This work should avoid or defer capital investment in new plants in the future, and reduce energy use and chemical costs. ‘If we can work upstream and prevent some of this happening in the first place then there will be benefits to long-term costs’, says Davy. ‘That was the catalyst which enabled us to go forward’.

Better upstream management would create a much better long-term payback than the more conventional methods.
FINANCE FUNCTION LEADERSHIP

Having decided that this was the route to follow there were regulatory obstacles to overcome. ‘It was really challenging’, says Davy. ‘We are a regulated business and investment programmes are included in business plans and approved by Ofwat. So we had to pass the test of the regulator reviewing it’. Ofwat requires 30 year business plans including price setting for the first five years. They have to demonstrate the expected benefits to customers in terms of reduced bills over time. South West Water was the first water company to propose a project of this scale entirely on third party owned land. It is one of the first programmes in the UK to look at all the issues that can influence water quality and quantity across entire catchments.

Upstream Thinking drew upon skills across the company from financial governance, project management, legal, tax, and treasury advice. ‘Our operating costs were increasing’, says Davy, ‘and we needed to address that by the usual means of improving the technology. But, we decided to try and prevent some of that work, for example, by having cleaner water in rivers to use, through better upstream management. This would create a much better long-term payback than the more conventional methods.’ The rationale was that it was cheaper for South West Water to help farmers deliver cleaner raw water upstream than treat polluted water after abstraction. This was a complete turnaround in corporate culture brought about by the finance function input. ‘End-of-pipe solutions were very clear and defined’, says Davy. ‘We were so used to working at our assets, like treatment works for example, on our land. Instead, we started working with third parties and outside our asset base’.

The finance function work has changed the company’s viewpoint. The company is now working in partnership with charitable organisations, landowners and farmers to improve raw water usage at source. And Ofwat approved the £9.1 million plan for investment between 2010 and 2015. The estimated benefit to cost ratio was 65:1, with the project providing not only improvements to the environment, but also aiding South West Water by improving natural storage of water and reduction in pollutants, and so saving the cost of building large-scale new filtration facilities with their associated chemical and energy implications. The result should be a long-term saving that will be reflected in customer bills. ‘It was all about putting the right business case forward, which enabled us to do the work that we are now doing’, says Davy.

POSITIVE LONG-TERM IMPACT

The project has created much greater collaboration across the business and the parties involved and it will provide long-term economic and environmental sustainability through moorland restoration and improvements to farmed land. Parts of the moors had been damaged over the years by peat burning and cutting and efforts to drain them so that sheep and cattle farming could be improved. The aim is to recreate the natural wettedness of the moors which will retain the water, store it and filter it, reduce the risk of flash-floods, sustain natural river flows downstream in dry weather and promote greater biodiversity and carbon storage.

Putting a secure finance plan in place has created opportunities for farmers and others who are collaborating on the project. ‘This is another aspect which makes the project really different’, says Davy. ‘We can’t work in isolation. We have been able to work with the people managing the land. We have been able to get quite close to them and understand their long-term objectives. So we are not just using our asset base. We are working with third parties and that has enabled them to leverage additional funding from our investment. It has been invaluable to potentially unlock financial schemes for them. There is a big gain for the community’.

And there will be long-term impacts within the company. ‘It was a slow burn’, says Davy, ‘and it took some time. The business was confident the finance function could build the business case. Previously, we have relied on engineering decisions rather than decisions led by finance. So it was different to what we did in the past’.

LESSONS FROM THE CASE STUDY

Collaboration was at the heart of the project and not just with farmers, landowners and land managers. ‘A lot of the scientific work required to prove the benefits was done with universities and research councils,’ says Davy.

Do not underestimate the regulatory side. ‘We needed more time to translate what we wanted to do into the legal and regulatory framework of the water industry’, says Davy. ‘That took longer than we anticipated to make sure everyone was happy’.

Having spent time and effort creating the framework and good practice elements, ensure that they can be translated and used in other schemes. ‘Our partners and other universities are helping us to develop new collaboration systems based on Paid Ecosystem Services, or put simply, rewards for farming clean water, with support from the Technology Strategy Board and the Natural Environment Research Council’, says Davy.

Work hard on mapping the way the partnerships work across from the technical to the financial impacts. ‘The approaches and learning we have developed since 2010 will be developed for our next business plan from 2015 onwards’, says Davy.

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