

Waterwise appears to be making a credible case for saving water despite being funded substantially by the UK water industry

To describe Waterwise simply as a lobby group for the UK water industry would be a calumny on an organisation that is committed to decreasing UK water consumption by 2010 and promoting the increase of water efficiency. It is a not-for-profit organisation whose independence from the water industry nonetheless allows it to challenge the water companies and their activities. At least that is the view of Jacob Tompkins, the executive director of Waterwise.

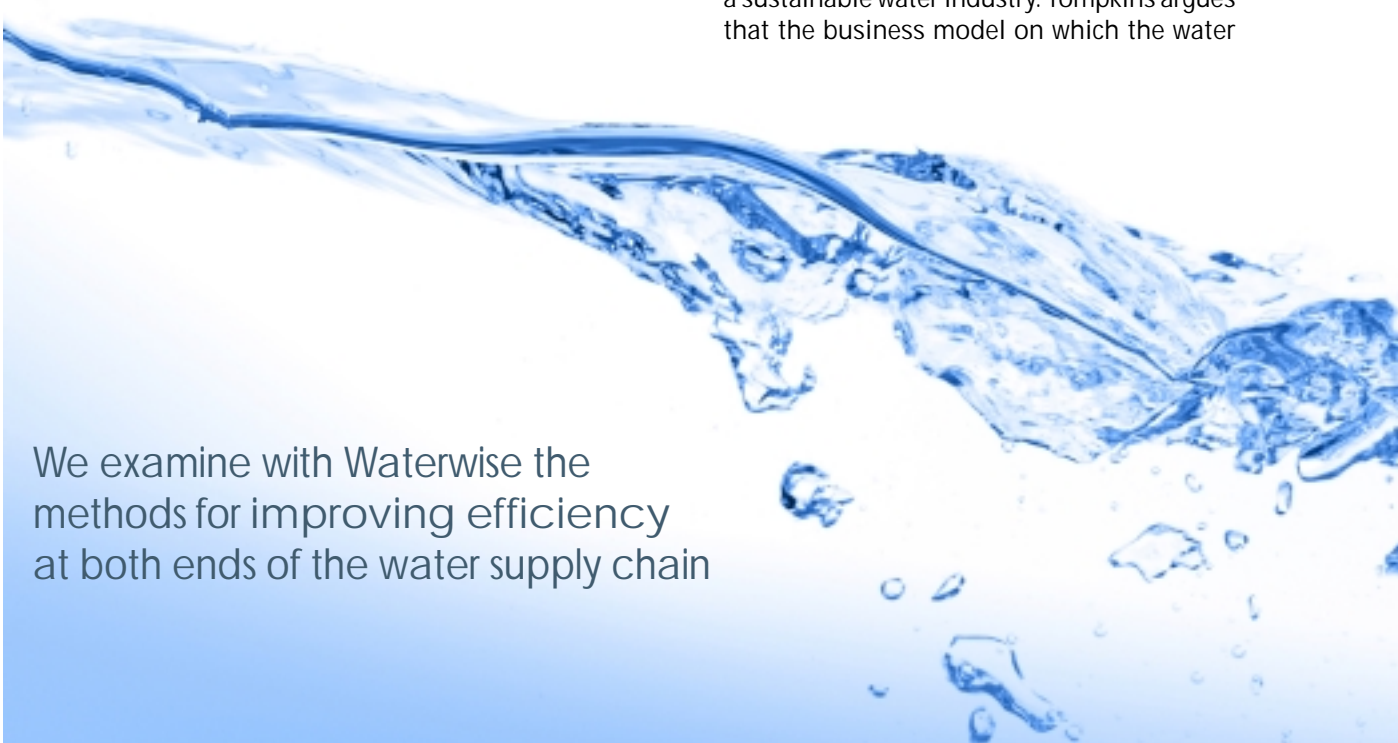
Ask him how this NGO is financed, and you discover that about half of its total annual income is generated as subscriptions from the UK's water vendors. These commercially astute enterprises would not be spending stakeholders' money if they did not feel there was a benefit in their doing so: they appear to be getting something of value for their £0.3 million a year.

Waterwise generates the remainder of its income from sponsorship and the sale of services to the organisations in the sector rather than their customers. In the least confrontational terms, Waterwise holds a watching brief

on water, sitting on the Environment Minister's Water Saving Group alongside the water industry and regulators.

Whatever else it might be, Waterwise is no apologist for an industry which the private customer – and most business users of water – believe are charging them too much for a service supported by too little investment and which is reputedly haemorrhaging water through elderly pipes. Its analysis of the water scene in the UK should therefore have more than an element of credence.

A highly pertinent question is whether the industry has been investing sufficient resources to ensure that the UK will end up with a sustainable water industry. Tompkins argues that the business model on which the water



We examine with Waterwise the methods for improving efficiency at both ends of the water supply chain

industry has delivered since its privatisation some 15 years ago has generally been fit for purpose up to this point – in terms of the economics, the people it has served and the environment.

“It has invested about £70 billion over that time without too much pain, building infrastructure and water treatment works and waste water treatment systems. And yet prices have gone up. We have to look ahead and see what the water industry requires over the next ten years to meet all of the demands placed upon it.”

Involvement at both ends

According to Waterwise, the future lies in a combination of centralised and decentralised infrastructure: not just investment in new water treatment plants, for example, but in a greater involvement both with water catchment processes and directly at customer level.

To achieve those goals will require a change of culture about investment within the water industry and amongst

the regulators when they deliberate over the next round of price controls.

Mr Tompkins illustrates his point with the intercept sewer under the Thames, that is designed to take the combined sewer overflow from the region.

“The cost is running at an estimated £20 billions. Of course, this system should be built now as there is a current need for it. But our contention is that, in the past, we should have constructed every new building in London with rain harvesting.

“It would have taken the peak off the flood hydrograph, while supplying water for new buildings. But that did not happen. As a result, London is going to find itself in the same position in another few decades, when another one of these huge systems may have to be built.”

Investment outside the network

The other issue which has a bearing on the future financing of the industry is that investment has to be made in parts of the water supply network that are seen

as being outside the control of the water industry. An example there is Sustainable Catchment Management Programme (SCaMP) implemented by United Utilities and Natural England in the South Pennines.

SCaMP is part of the company's £2.9 billion investment programme to improve water quality and the environment across the North West between 2005 and 2010. (This major project was featured in the previous Energy edition of the magazine.)

The multi-million pound project set out to restore and ‘refresh’ some 4200 hectares of moorland in Greater Manchester and the Peak District. The area is a Site of Special Scientific Interest known for its heather moorland, breeding birds and peat bogs – which are now in a serious state of decline.

The project will support climate change programmes by protecting those peat bogs, which are important natural carbon stores.

More specifically, it will achieve a balance between protecting and enhancing



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the environment, and safeguarding water supplies. When the work has been completed, it will provide a sustainable future for local farmers and cleaner water running off the moors into the reservoirs. As part of the SCaMP project, United Utilities has been working with its tenant farmers to erect fencing that will keep sheep away from over-grazed areas.

Improved water quality

As a result of SCaMP, water quality should improve: water treatment starts on the catchments, the gathering grounds for the reservoirs operated by United Utilities.

As one of that company's management observed at the time, getting the catchment process right avoids having to add expensive engineering solutions at its treatment works.

There is an equally strong case for improving water efficiency at the user end of the chain. That ranges from helping customers to monitor consumption and take the appropriate corrective measures, to retro-fitting homes with water meters as a matter of policy.

Universal water metering was an inevitability according to the report of the All Party Parliamentary Water Group released in April 2008 (See the feature on page 40 of this edition), so there is widespread agreement on this point.

Creating virtual assets

Jacob Tompkins of Waterwise identified a common factor in all those 'peripheral' activities. "The difficulty with harvesting rainwater, looking after the uplands peaks, and encouraging people to become more efficient in their use of water is that none of those activities creates a real asset for the water industry: they create a virtual asset. Unfortunately, the



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way in which the funding mechanisms work, and investment in the industry is structured, water companies need a tangible asset on their books. They make more money from capital expenditure than they do from operational expenditure.

"There is therefore an issue over whether we should incentivise operational expenditure. Should we measure their operational efficiency in a different way, perhaps, so should they be praised and rewarded for creating these catchment projects?"

Change of regulatory regime

The answers to those and most other questions that the water sector is facing lie in the regulatory regime. Should it be changed to accommodate both upstream

and downstream improvements in the supply chain? The companies would be keen to argue that investment in catchment systems addresses a major problem and would reverse trends that would otherwise affect the long term future of water.

The SCaMP project is probably the ultimate example of that principle, reversing some of the problems created by 200 years of industrial pollution – including heavy metals and sulphur – from factories that once dominated the towns surrounding the Pennines.

The counter argument is that, while all of those projects are intended to generate benefits for the water industry in the medium term, the scale of their 'deliverables' is less certain in the short term.

As Jacob Tompkins observed, "This contrasts with building conventional water plant. Before you build it, you can calculate exactly how much water will be treated, or waste water purified – there is a direct financial relationship.

"But the moment that investment moves away from core activities, it becomes increasingly difficult to quantify the monetary returns. That would require a new regulatory regime, which could be more relaxed about projects such as reed beds for tertiary water treatment."

Making the polluters invest

If the regulatory process were to come under the microscope, a case could well be made for passing more of the onus for investment on to those who cause the pollution that needs to be treated. Industrial users of water do pay both for the water they take and a contribution to the cost of its subsequent treatment, depending on the amount of treatment required.

But there are many types of users who operate below the industrial threshold yet still pass pollutants back into the treatment chain.

balancing responsibilities

Where water costs are above the national average, as in South West England, consumption is moderated. But the local water companies have not set out to maximise profits: they have a higher cost base due to the long coastline and a terrain that needs localised treatment plants or pipelines, and water to be pumped over longer distances.

Tompkins cites the example of high street dentists who seem quite happy for silver waste to be flushed down the drain to the local treatment plant, where it is notoriously difficult to remove. "They should be persuaded to use active filters as the cost of the processing falls on the treatment companies. It would be cheaper for the water companies to pay for a silver trap in the dentists' surgeries but it is difficult to see how the regulators would see that as a valid use of customers' money."

Dentistry might only account for a small part of the demand on treatment systems, but the principle is established. The water regulator Ofwat should be more flexible over investments by water companies in what can be termed 'distributed assets'.

How such investment would be incorporated in the companies' asset management plan for the Periodic Review is a question that still needs to be answered. Tompkins again: "Ofwat asks why a customer should be expected to pay for 'benefits' such as improved biodiversity. What they are not doing is realising that water customers and taxpayers are the same people."

Valuing water as a scarce resource

For all the claims that water charges have risen without respite while service quality is believed to have become more patchy, water as a commodity would need to be significantly more expensive – comparable to the cost of fresh milk, for example – before the level of consciousness about water increases to the point where customers fully valued it as a

scarce resource. In reality, the economic, social and health implications of allowing water prices to rise to anything like that level would preclude such a course of action.

Even in parts of the UK where water prices are materially above the national average, there is evidence that water consumption is significantly lower, to the detriment of the socially disadvantaged.

Where water costs are much above the national average, as in the South West of England, there is evidence that consumption is moderated.

Prices dictated by topography

But the local water companies have not set their prices vicariously to maximise profits: they have a higher cost base due to the long coastline and hilly terrain. That requires localised waste water treatment plants or pipelines, and water to be pumped over much greater distances.

There is also the fact that the area has a large transient visitor population that uses water while there, but a disproportionately small fixed population that has to stand the full costs of the water supply. The higher water pressures needed for pumping bring with them higher leakage rates than in flatter parts of the UK where pressure is lower.

As this regional example illustrates and as 'off network' developments come to play a more important role in water supply issues, the UK water industry appears to be as much in need of an overhaul as some of the infrastructure it is obliged to maintain. §

