Target 100: Understanding the value of water to achieve ambitious demand reduction

Roundtable note

Context

The South East of England is water stressed – but the challenges aren't limited to there. The prolonged dry summer of 2018 proved that. We, collectively, need to take ambitious action to secure a resilient water future and avoid the "jaws of death".[i]

Demand management is an integral part of this. The National Infrastructure Commission estimates as much as 1,300 megalitres – a third of the extra water we need – will come from widespread metering and water efficiency.

In this context, and building on our Target 100 ambition, Southern Water organised a roundtable to bring voices from the water sector, housebuilders, environmental NGOs and think-tanks together to further the conversation around demand management and develop evidence and recommendations for politicians and policy makers.

The recommendations in this note do not necessarily reflect the positions of all the organisations that took part in the roundtable.

Key findings & recommendations

- Water is **cheap but valuable –** and most people **don't know how much they use**
- **Action is needed** from water companies, government, regulators, manufacturers and NGOs
- It's important to articulate **why** people should change their behaviour by linking water shortages to something **they have an emotional connection with**
- **Politicians should be bold** when considering action including:
    - Allowing for **compulsory metering** across the country
    - Implementing **labelling of water using products**
    - Setting a **per capita consumption target** across the sector
    - Introducing tighter water efficiency standards for new homes and for water using equipment installed in both new and existing homes
- More work needs to be done to understand:
    - Acceptability of **water recycling** – at infrastructure, neighbourhood and household level
    - How to measure and articulate **embedded water**
    - How **variable tariffs** could be introduced to encourage reduced consumption
    - How **incentives** can be used to encourage sustainable behaviour change
- Customers need to be **protected from volatile prices and shortages** – but they also need to **understand the potential impacts of shortages**
- **Best practice examples** include Los Angeles, Melbourne, Cape Town and Singapore

Target 100

Target 100 is our industry leading ambition to reduce average per capita consumption to 100 litres per person per day by 2040. It is also a modern social contract – it enshrines a participative relationship between companies, customers and all water users for the benefit of people and the environment.

We will support, educate and incentivise our customers to manage their use and reduce waste while simultaneously dramatically reducing our leakage.

We're also asking policy makers, politicians, regulators and others with an impact on water to make changes, such as implementing universal metering, water labelling and making new homes water efficiency. We believe these will help increase understanding of the value of water and support ambitious demand reduction. All our asks can be found here

Roundtable summary

The roundtable was held in Parliament on 13 March 2019. It was chaired by Angela Smith MP, co-chair of the Water APPG, member of the Efra Select Committee and Independent Group transport, local government and housing, energy and environment spokesperson.

The organisations represented were; the 100 Resilient Cities Foundation, Barratt Homes, Blueprint for Water Business in the Community, Green Alliance, Policy Connect, South East Rivers Trust, Sussex Wildlife Trust, Waterwise[ii] and the Wessex Chalk Streams and Rivers Trust.

Participants discussed the issues under four broad headlines. A summary of the main points under each headline is below.

How do we articulate the value of water? How do we encourage customer to take more of an interest in their consumption?

- Participants agreed that water is "cheap but valuable" and that most people – including those around the table – don't "really know what we use". Comparatively low metering penetration means
    - "It's difficult if you don't have a meter. Also, it's difficult if it doesn't impact you financially"
    - "You need people to be aware of where they start and where they go"
    - Customer research after the dry summer of 2018 found most customers, even those taking part in research projects had to guess their consumption
- Linking water consumption to environment impacts was identified as a way of increasing appreciation of the value of water and helping consumers understand the impact they can have
    - "We need to re-educate customers on the value of water without putting a commercial enhancement on it"
    - "It's about connecting water to other things customers value in order to nudge people into behaviour change"
    - "People need to understand the impact of excessive water use on the actual environment"
    - "Linking water use to what you might not have…would be a good method"
    - "…making people recognise water isn't just there when you turn on the tap"

- Organisations need to do more work together, recognise the role they can play and encourage systemic change
    - "It's very much not about one organisation, it's about whole systemic change"
    - "There's a whole cycle, and we each fit into that"
- This includes looking at the way products and infrastructure are designed
    - "It's finding easy solutions so customers don't have to find solutions themselves"
    - Water labelling could be "the single most important thing the government could do relatively cheaply"
    - Labelling is "quite simple but an effective way to improve resilience"
    - A report by the Energy Saving Trust[iii] found a mandatory water label, linked to modernised regulations, was the most cost effective labelling option and would reduce per capita consumption by 31 litres per day over 25 years

What challenges need to be overcome to improve understanding and appreciation of the value of water?

- Understanding, measuring and articulating embedded water in food, drink and consumer products
    - It would be useful to complement information on household consumption with statistics on, for example, the amount of water it takes to produce a bottle of water
    - Embedded water is more challenging to measure than embedded carbon. Water used in a water stressed region has a different impact than where water is plentiful
    - However, it's difficult to articulate and there's a challenge around how effective this kind of labelling would be
    - "Getting people to pay attention to nutritional labels is difficult even now. If the aim is to get buyers to make a point of purchase decision, I think it's a no-go"
    - It is also a very big ask for companies to develop a water footprint for all their products
- There's confusion around what constitutes a drought and underappreciation of the potential impacts
    - Customers often struggle to appreciate the impacts of water shortages because they are – rightly – protected from the worst impacts
        - "There's a contradiction of wanting to protect people but if we never expose people to problems then they'll never see that there's an issue"
    - "Confusion between the messaging on what politicians say is a drought, what water companies say is a drought, and what people think is a drought"
- Increased metering – despite potential political unpopularity – is a necessity
    - "There is no other valuable commodity that we consume that we estimate the price for, so why not go for universal metering and solve the problem?"
    - Southern Water found most customers' bills fell as a result of universal metering – and that it is vital to ensure potentially vulnerable customers are protected
- Metering would allow for variable tariffs – but there are challenges
    - Companies could charge more for water above a certain per capita consumption target when the weather is drier – but customers could expect prices to fall during wetter periods when they see water as plentiful
    - Tariffs might not be effective because studies have found "people don't act in an economically efficient way". Tariffs also rely on trust and "a lot of people feel that water companies will try and scam them somehow"
    - However, tariffs have worked overseas and "we need to stop comparing ourselves with ourselves and start looking elsewhere to shape our future"
    - Metering also allows for financial incentives and giving people accurate information about the amount of water they use

What should our level of ambition be? What are the priority asks for politicians, policy makers and the water sector?

- Many water companies are doing good work and encouraging greater collaboration across sectors would secure wide benefits
    - "There's brilliant initiatives and learnings that can be shared…that, to me, is the aim: set the ambition high across water companies"
    - "There's a massive systems of systems opportunity where we look to other stakeholders and influencers and we all start working together"
- There is a case for bolder action and ambition – and looking again at the regulatory system
    - "We need a steer from government and regulators to push the boundaries a bit more on water efficiency", similar to the "step-change on leakage ambition"
    - At privatisation, the regulatory system was designed to keep prices low and customers happy – this doesn't necessarily reflect the value of water or the situation we are now in
        - "I think politicians need to make bolder decisions which are not technically so nice to people" – actions supported by warnings that, without change, the UK risks a situation similar to Cape Town or parts of the US
        - "The ambition is great but you also need to move in a different direction from incentives" to increased tariffs to encourage better water management – using international success as examples
        - "The essential part is that people consume less, pay less and people who consume a lot pay a lot"
        - However, due to water being relatively cheap those "who are generally well off are not bothered and they'll just pay the bill"
- Companies still need to address leakage – but there has to be "honest" dialogue about fixing leakages not always being the most economical way of securing water
- Building regulations should be re-examined to make homes water efficient and as "future-proof" as possible
    - "We can make a step-change on using greywater on independent systems…so there's not a chance of cross-contamination"
    - One of the first actions Cape Town took was to change their by-laws for new developments
    - Legislation too often requires "consideration" of measures rather than taking action
    - There's a challenge around encouraging installing water efficient devices in rented homes – should responsibility be with the renter or the landlord?
    - The Committee on Climate Change recommends tighter standards for new homes and retrofitting existing homes[iv]

Where should we look for best practice – both across sectors and internationally?

- International examples of best practice mentioned include: Cape Town, Melbourne, Los Angeles, Orange County (California (Tariffs)), Singapore and Australia
    - There is also "some merit in looking back in time" at the role of the waterboards who had "more of a comprehensive control of the water cycle"
    - "Necessity drives innovation" – identifying places that have had to adapt quickly to overcome serious challenges, such as Cape Town
- The UN Sustainable Development Goals provide a "a very useful internationally cohesive platform from which to launch more local initiatives"

Further Reading

Southern Water – Target 100 – Act today, save tomorrow
Committee on Climate Change – UK Housing: Fit for the future?
Energy Saving Trust – Independent review of the costs and benefits of water labelling options in the UK
Green Alliance – Cutting the Cost of Water
National Infrastructure Commission – Preparing for a Drier Future
Sir James Bevan – Escaping the jaws of death: ensuring enough water in 2050
Waterwise – Water Efficiency Strategy for the UK
Westminster Sustainable Business Forum – Bricks and Water

[i] Speech by Sir James Bevan, Environment Agency CEO on 19 March 2019
[ii] Blueprint for Water and Waterwise were represented by the same person
[iii] The report was undertaken by the Energy Saving Trust on behalf of Waterwise and The Collaborative Fund and supported by Defra
[iv] Committee on Climate Change – UK Housing: Fit for the future?