



Identifying value in the market from the UK water sector



PROJECT SUMMARY

Executive Summary

It is thought that the 200,000 highest non-household users of water in the non-household market consume about 30% of available non-household potable water (valued at £100 million). MOSL hypothesised that if these high consumers could reduce their consumption then the water availability will increase, and the value generated from the conserved water can be shared with key UK water sector stakeholders.

Isle investigated this hypothesis by examining MOSL's baseline assessment and assessed this alongside available literature. Isle concluded that the hypothesis was based on sound foundations and that further investigation was required to formulate a use case to test whether these top users could sustainably reduce their consumption and that the value of the water saved could be redistributed.

To formulate the use case, Isle created two frameworks; one to identify a wholesale region that would particularly benefit from interventions and a second framework that identified a particular Water Resource Zone (WRZ) within that wholesale region. Based on this framework, Isle identified the Hampshire Southampton East WRZ within the Southern Water wholesale region as being a suitable use case.

Isle presented its methodology and to both wholesalers and retailers during two workshops and explored how the concept could be progressed into reality. The outcome of the workshop was a willingness from Southern Water and Business Stream to set up a pilot in the HSE WRZ whereby the top 5 consumers would be approached and their willingness and suitability for water efficiency measures could be explored. On the basis that the top 5 consumers were interested to collaborate, Southern Water and Business Stream will offer site audits and plan to make an application to the Ofwat Innovation Fund for any interventions that could be used to reduce water consumption. It is suggested that the progress of the pilot is monitored through existing channels such as the RWG Group.

Formulation of a Use Case

1. Wholesale area selection framework

Based upon 5 key areas (water resources, investment plans/cost projections, customers, anticipated impact, anticipated engagement)

Anglian Water and Yorkshire Water also considered at this stage

2. Selection of Southern Water (SW) wholesale region

3. Southern Water data gathering

For each WRZ within SW: (a) water availability (as per SW WRMP), (b) total and average consumption of high users (provided by MOSL), (c) the proportion of NHH consumption against total consumption (as per SW WRMP) and (d) leakage data.

4. Prioritisation of Hampshire Southampton East (HSE) WRZ

5. Industry segmentation of HSE WRZ

6. Assumptions around how much water efficiency interventions could save

7. Identification of SW capital schemes that could be offset

8. Identification of specific high consumers

Workshop Outputs

Does the amount of water saved represent an opportunity in the HSE WRZ?

The process used to identify the WRZ was sound. It was successful in identifying a WRZ that represents an opportunity for water saving amongst high consuming NHH customers and the process can be used for prioritising WRZs in other wholesaler regions.

What needs to be in place for the value to be shared? I.e. What mechanisms in the market to enable any value created to be shared?

There was agreement that a new mechanism was required for sharing value, covering the flow of money from wholesalers to retailers to ensure the risks associated with water efficiency were shared.

What are the challenges?

In addition to risk sharing (i.e. retailers being financially compensated for water efficiency and wholesalers being assured of water saving before paying out), there was a consensus that the highest consumers may not represent the greatest value and approaching lower-level consumers was key.

How to progress the concept into reality? How would the high users be approached? What are the practical next steps?

Southern Water and Business Stream would jointly approach the top 5 consumers identified within the HSE WRZ. Beyond this initial approach, there was a reluctance to establish another group and it was thought that the RWG was a good home for NHH water efficiency initiatives in the future.

What further incentives can be put in place to increase water efficiency if there is value in the saved water?

De-risking any initiative was essential so that wholesalers, retailers and customers could all realise some benefit. External funding was seen as a good option in order to facilitate this.

Is there a role for MOSL? If so, what is it?

It was agreed that MOSL were not responsible for delivering water efficiency. The extent of MOSL's involvement should be one of facilitation of water efficiency and encouraging retailers and wholesaler to collaborate and providing them with the tools (e.g. data) to do so.

Southern Water / Business Stream Pilot

Make contact with top 5 consumers

- Initial work required to understand the customer in more detail, how they use water and what could be feasibly saved (e.g. Prysmian Cables & Systems Ltd and CooperVision may use lots of water that go into the product, the Ports Authority use water to fill ships so there is perhaps a limit to water efficiency, Hampshire County Council could be interested from a good news/political angle and could be expanded to multiple sites).
- Approaching BS customers with a proposition was key. Ideas included conducting a 'free' water audit, provision of smart meters (funded by SW) and appealing to wider carbon benefits that water efficiency measures have.

Conduct site audit

- Funded by SW, site audits will be conducted to fully assess water consumption across the top consuming sites, with recommendations on the most appropriate interventions.
- SW will obtain quotes from their contractors for a full audit service, as well as information on the audit process and likely outputs so BS can communicate this with their customers during their initial conversations.
- The SW contractors who will undertake the audit are not in the field until March at the earliest due to Covid restrictions; similarly BS's customers are unlikely to allow a site audit until it is safe to have externals on site.

Make application to Ofwat Innovation Fund

- Once the site audits have been completed a series of recommended interventions will have been suggested.
- SW and BS will then jointly make an application to the Ofwat Innovation Fund for to fund the necessary interventions.
- The timeline of the Ofwat Innovation competitions will dictate the timing of the pilot. The smaller £2 million Innovation in Water Challenge (IWC) round 2 opens in November 2021 (max funding £250k)
- The Main Competition is designed for larger projects so it may be that the scope of the pilot needs to be extended for it to be suitable.

Planning phase (present day to March)

Site Investigations (Spring/ Summer)

Funding application (late 2021)

Conclusions, Recommendations and Next Steps

The following key points can be drawn from the project:

- The 200,000 highest non-household users of water in the non-household market consume about 30% of available non-household potable water; MOSLs hypothesis that if some of this water could be saved then the value the saving creates can be shared across the stakeholders across the UK water sector is robust.
- The level of the value created is unlikely to offset large capital investment schemes in the case of Southern Water (e.g. expensive desalination plants for instance) but it can contribute to creating headroom, offsetting smaller initiatives such as hose pipe bans or river restoration work and protecting against pressures from population growth and climate change.
- A framework for both selecting priority wholesale areas and WRZs within the wholesale region has been created and successfully implemented in identifying a use case.
- For any successful use case to be implemented, an element of risk sharing (or transfer of financial compensation from wholesaler to retailer (and perhaps on to customer) is required to ensure retailers are financially compensated for water efficiency measures. However, wholesalers have to be satisfied that a water saving will be secured before allocating money to NHH water efficiency schemes.
- The exact financial implications of water efficiency need to be understood within the current framework but it is thought that under the current regulatory framework retailers are not incentivised to provide water efficiency because:
 - Retailer margins are squeezed, and;
 - Upfront compensation from wholesalers to retailers is not forthcoming unless a water saving is guaranteed.
- Examples of where wholesalers have looked to compensate retailers include that by Severn Trent whereby in April / May 2020 they piloted a scheme with £1 million of funding made available for water efficiency schemes, but no schemes were funded as the cost to fund the schemes was greater than the value of the water saved.

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- External funding would overcome these challenges and potential sources identified include the Ofwat Innovation Fund.
 - MOSL's role is one of facilitation of water efficiency, whether that be the provision of data or even funding for pilots.
 - Southern Water and Business Stream are working together through a use case to target the top 5 consumers within the priority WRZ; it is recommended that the RWG is a good place for this pilot to be carried forward.
 - Depending on how conversations go with the top 5 consumers, a future line of investigation could be to target lower-level NHH water consumers; there was acknowledgement that this may present a better opportunity for water efficiency.

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