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Saving Water via Behaviour Change
A co-created agenda for research and action

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Context
Water scarcity is an urgent crisis. England faces a daily deficit of 5bn litres of freshwater by 2055, and supply cuts may be needed. The Environment Agency's 'National Framework for Water Resources 2025' aims to recover 60% of the deficit through demand management. Smart meters have been proposed as a key strategy but will not fully address the deficit. Further behavioural science is needed to cut domestic use. **We collaborated with 107 individuals from 60 stakeholder organisations, including industry and consumers, to identify key questions blocking progress on domestic water behaviour change.**
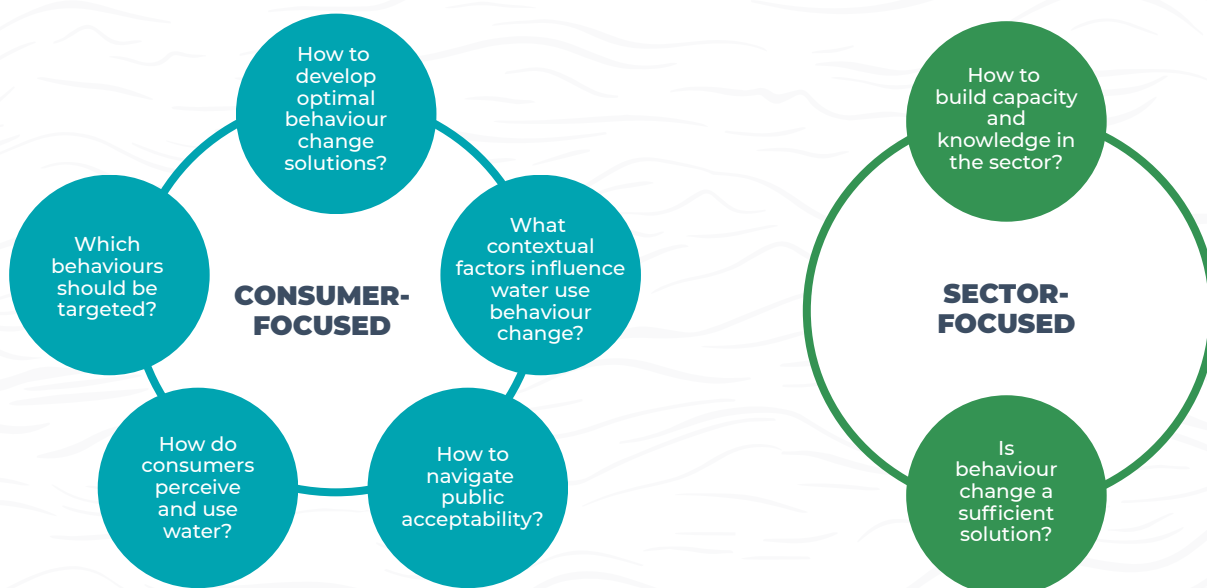
Findings
24 key questions emerged, representing seven areas of uncertainty.
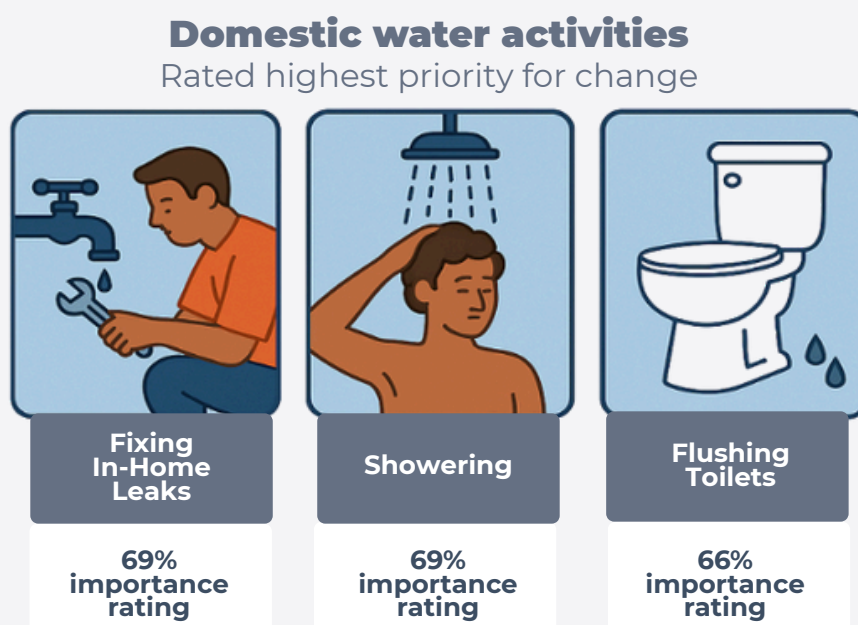
Recommendations
To tackle these questions, the sector must work with behavioural scientists to understand how and why people use water – and break down silos to share knowledge across the sector.

How to promote domestic water efficiency?
Seven areas of uncertainty

CONSUMER-FOCUSED
- How to develop optimal behaviour change solutions?
- What contextual factors influence water use behaviour change?
- How to navigate public acceptability?
- How do consumers perceive and use water?
- Which behaviours should be targeted?

SECTOR-FOCUSED
- How to build capacity and knowledge in the sector?
- Is behaviour change a sufficient solution?

Methods and key findings

- We identified key questions via three collaborative activities with UK water stakeholders: an in-person workshop (Oct 2024), survey (Oct 2024-Jan 2025), and webinar (April 2025).
- Organisations involved included 9 water companies – seven in England, one in Wales, one in Scotland – three manufacturers, seven innovators, six government departments or agencies, and others.
- The workshop and webinar produced key questions, which we sorted into core areas of uncertainty.
- Survey responses revealed which behaviours the sector sees as most important to change:

Domestic water activities
Rated highest priority for change

Fixing In-Home Leaks	Showering	Flushing Toilets
69% importance rating	**69%** importance rating	**66%** importance rating

Recommendations—An agenda for action

- **Collaborate with behavioural scientists.** Partnering with behavioural scientists can improve the sector's understanding of water use and choice of behaviour change tools. A behavioural science advisory committee could help the Environment Agency meet its targets.
- **Boost knowledge sharing.** The water sector already holds valuable insights – but poor sharing slows progress. Policymakers should incentivise knowledge exchange within the sector. Behavioural scientists can guide on communicating insights to accelerate learning.
- **Use smart sensors.** Bathroom behaviours are poorly understood due to unreliable self-reports. Smart sensors provide an accurate, unobtrusive way to study water use behind closed doors.

Work with us

The Surrey Water Efficiency Behaviour Change Lab combines Dr Pereira Doel's expertise in technology-assisted behaviour change with Prof Gardner's world-leading insights into the psychology of real-world habit change. To work with us, contact Prof Benjamin Gardner (**benjamin.gardner@surrey.ac.uk**).