



## Summary

This report provides a summary of a study commissioned by the Drinking Water Inspectorate to understand public attitudes and public acceptability towards water recycling (water reuse) as a source of drinking water. The study had the following objectives:

1. Develop a literature review summary of current published social science studies on public acceptance of water recycling.
2. Undertake a social science study of public perceptions of water recycling for both indirect and direct concepts.
3. Determine the influence of public acceptability of water recycling if environmental buffers or engineered storage are in place.
4. Determine the influence of terminology on public acceptability of water recycling.
5. Establish if demographic or social factors have an impact on the public perception of water recycling.
6. Establish the impact of information and education with respect to public acceptability of water recycling. Assessing the journey from uninformed to informed.
7. Provide a final report including recommendations and strategies to inform the public on water recycling; present models and approaches to engage the public and media.

Through a literature review and mixed-methods social research, this study addresses these objectives and summarises the status of public perceptions of water recycling in the UK. Drawing from the literature and empirical research, the report makes recommendations for engaging with the public and the media on water recycling schemes.

An online survey and in-depth, online interviews were undertaken between July and September 2022. The online survey had 1,618 respondents with demographic representation broadly consistent with the UK adult population. Survey respondents were randomly allocated to groups so that the impact of two manipulated variables (relating to water recycling scheme design and to terminology) could be investigated. Overall, the survey showed that there was a relatively high

level of support (79% agreement) for the utilisation of water recycling to supplement drinking water supplies. The survey results also showed that terminology has a stronger influence on levels of support for water recycling than scheme configuration (e.g. the presence of environmental buffers).

Follow-up, in-depth interviews were undertaken with a small selection of survey respondents (n = 15) to further investigate perceptions of water recycling and to contextualise the survey results. Interview results highlighted how individuals could change their views about water recycling after considering additional information. Simple diagrams were used in the study, and these were found to be useful communication mechanisms, and potentially impactful when respondents were re-evaluating their initial views.

The findings underpin several recommendations for informing the public and other stakeholders about water recycling to augment drinking water supplies. Similar recommendations can be found in customer research undertaken by water companies in the UK as well as in guidelines produced in other countries. In summary, the success of water recycling schemes is partially dependent on public confidence and trust, and this can be supported with clear communication and transparency. From the results of this research, we make the following recommendations:

- Simple diagrams (either static or animated in short videos) accompanied by simple explanations should be used to help communicate the concept of water recycling for drinking water production.
- Communications should highlight current drinking water standards and monitoring methods, and be as transparent as possible about any existing water quality data from water recycling schemes (e.g. from demonstration sites and trials).
- Consistency of language is recommended, along with accurate and neutral terminology (e.g. 'advanced water purification') that avoids unnecessarily emphasising a link with wastewater or sewage.
- Develop common guidelines to support joined-up messaging and approaches between government, regulators and water companies.
- Communications should situate water recycling within a range of diverse solutions that aim to increase the resilience of water resources.
- Engage directly with a wider set of potentially influential stakeholders – strategies in other countries include: commissioning panels of independent experts (e.g. academics) to review proposals and trials; involving celebrities or politicians in proposed schemes; asking local food and beverage businesses to use recycled water in promotional products (e.g. brewing beer with recycled water); and outreach to schools.
- Develop a strategy for media engagement – strategies in this vein include: leading the conversation; building positive relationships with journalists; developing clear and consistent narratives that promote key messages; and evaluating of media performance and audience responses to media stories to inform institutional learning.