



ANNEX D1.2

Water Club Changes of Source

A network diagram background consisting of a complex web of interconnected nodes and lines. The nodes are represented by small circles, some of which are larger and have concentric circles around them, suggesting a central or more significant node. The lines are thin and grey, creating a dense, interconnected structure. The background is split horizontally into a white top half and a dark grey bottom half.

Britainthinks

— Insight & Strategy —

Water Club: Changes of Source

Full report

June 2022

Contents

1. Background and methodology
2. Key findings
3. The context shaping attitudes towards source change
4. Communicating water source change
5. Key findings
6. Appendix

Guide to reading this report

This document is a **full technical report of research findings** from the Water Club: Changes of Source research.

The water companies involved in commissioning this research are: Anglian, Affinity, Cambridge, Southern, Thames and Severn Trent.

It is accompanied by a Communications Framework, which is an interactive document that can be used by communications teams as part of their development process. This includes directional recommendations on do's and don'ts when communicating specific source changes, based on the findings included in this full research report, as well as interactive activities and stimuli for workshops.

Also available is a separate summary note that provides an overview of the key findings included in this report.



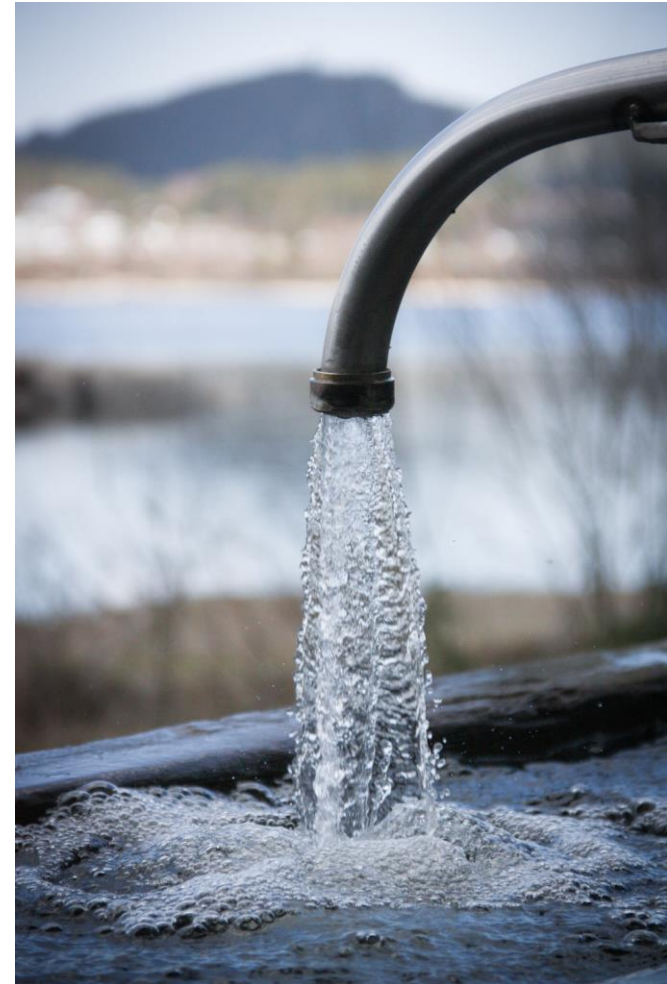
1 Background and methodology



Background

Changing the source of the water customers receive through their taps, whether through geographical redistribution, development of new sources, or recycling, is a key tool for water companies in the water stressed South East and East of England to balance supply and demand in the most sustainable and efficient way for customers.

In order to make optimum use of the RAPID framework, water companies considering Strategic Resource Options to address long-term water resource challenges water companies need to have confidence that they understand how customers interpret and respond to the different water source changes that may form part of the South East water network in future.



Objectives

While most water companies have engaged customers on one or more water source changes in the context of Price Reviews or Water Resource Management Plans there is to date no comprehensive synthesis of evidence on which companies can base their future customer communications and plans.

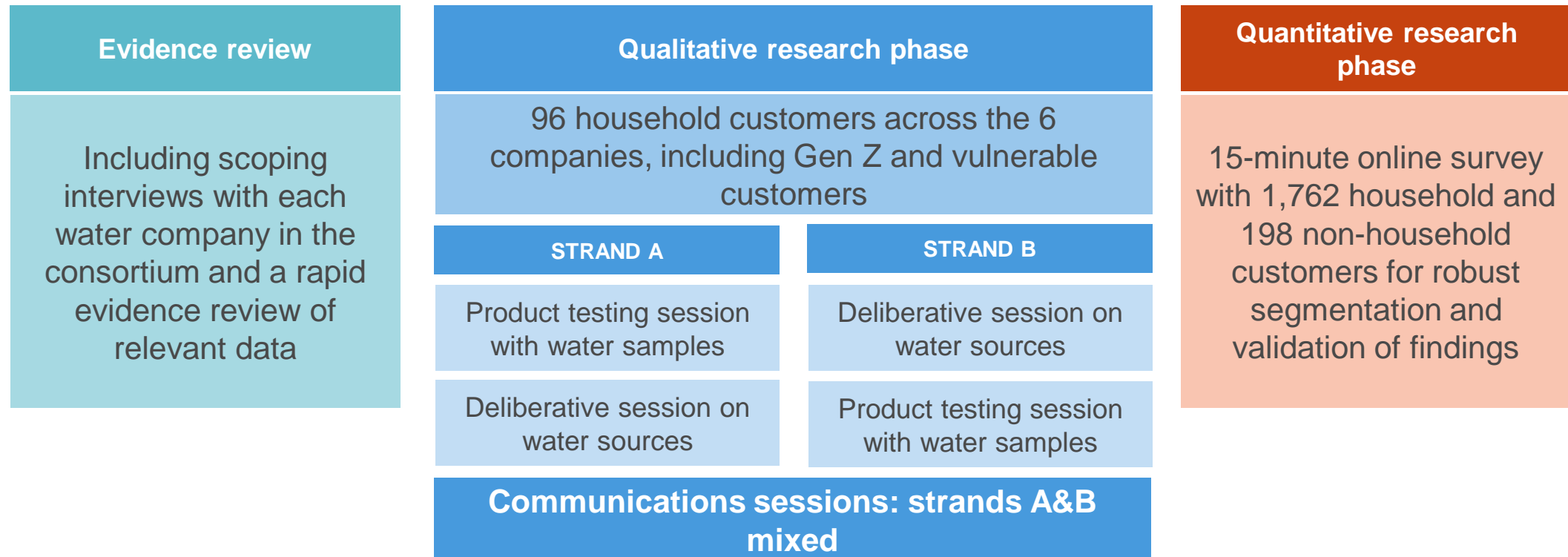
This research for the Water Club, therefore, sought to:

- Review existing evidence.
- Identify and fill knowledge gaps about attitudes towards water source change.
- Provide a clear and actionable framework for water companies to use when communicating water source changes in future.



Methodology overview

This report has been developed based on three stages of research, focused on understanding customer attitudes towards water source changes and the implications for communications:



Methodology in detail

Evidence review

- An evidence review of 50 documents and stakeholder interviews with each of the water companies.
- Evidence was included in the review based on the following criteria:
 - Publication date (prioritising data published since 2018).
 - Topic (focusing on customer attitudes towards and experiences of water source change).
- The majority of documents were gathered directly from the 6 water companies and included research commissioned by the companies and regulatory bodies, as well as academic research (sourced via water companies or Google Scholar).
- Each of the documents was reviewed and key findings were captured in an evidence grid, allowing for systematic selection of the most relevant evidence.
- The evidence was then synthesised to identify consistent findings (which were triangulated to assess their strength / wider verification), as well as areas of limited evidence.

In this report, data that is sourced from the evidence review is denoted with the following icon:



Methodology in detail

Qualitative research phase

We conducted in-person workshops with participants in the following locations in early 2022:

	Household customers		Non-household customers
Strand A: These workshops started with the Deliberative Session, followed by the Product Testing	London 19th February 8 x informed customers; 8 x youth customers; 16 x general public; 4 x vulnerable	Norwich 26th February 22 x general public; 2 x vulnerable	London 22nd February 6 x small businesses; 6 x medium businesses
	Peterborough 5th March 8 x youth; 14 x general public; 2 x vulnerable	Southampton 26th February 20 x general public; 4 x vulnerable	Peterborough 10th March 6 x small businesses; 2 x medium businesses

We then brought all participants together for a two hour 'communication workshop', which was held on Zoom on 16th March.

Methodology in detail

Qualitative research phase

What we did

Deliberative Session

We informed customers about a range of water resource challenges, and specific water source options, exploring contextual information and identifying areas of comprehension, appeal and preference.

Product Testing

We conducted blind taste tests with participants tasting samples representing a range of source options, followed by a reveal and discussion of the importance of different product characteristics.

Communication workshop

We conducted a deep dive on how change should be communicated for each water source option including content, tone of voice, timing and format.

Why we did this

Half of participants (strand A) did the product testing first, then the deliberative session, while the order was reversed for the other half (strand B). This allowed us to account for any ordering effects that might influence the findings, and explore where customers respond differently when thinking about source change from an individual customer (product-focused) perspective, or to a wider water system (context and source information) perspective.

We then followed up our in person sessions with an online communications workshop. This allowed us to understand participant recall of the water source characteristics discussed, and have a more practical conversation about how water companies should communicate change for the different source options.

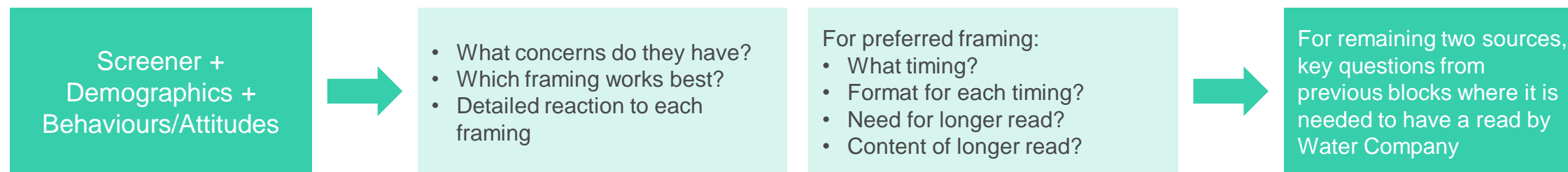
Methodology in detail

Quantitative research phase

What we did

- We conducted a quantitative survey of 1,762 Household Customers and 198 Non-Household Customers, all were customers of the 6 water companies in the Water Club.
- We tested communications using three different framings: Environmental, Human and Practical.
- We focused on the two source changes (Water Recycling and Desalination) which raised the most concern among customers during the qualitative phase, with Reservoirs included for comparison as a source change that elicited little concern.
- Quantitative questionnaire was designed with feedback from CCW, who had oversight of the questionnaire development process.
- Quantitative fieldwork was conducted between 26th May and 17th June 2022, with two separate surveys for household and non-household customers. The survey flow was as follows:

All respondents



All respondents

1/3 respondents explore communications examples and different 'framings' of the issue for each source option: Desalination, Water Recycling, Reservoir

Framings of water source change tested in quantitative research phase

Environmental

- Longer, more detailed explanation of the change, and the reasons why a water source change is being made.
- Environmental focus, explaining more of the context and benefits from a move away from a chalk water source.
- **Hypothesis:** customers want to know why a change is being made, and once satisfied by the rationale will be happy with the impact.

Human

- Focused on the impacts of the change and the reasons why the change is being made.
- Provides information about the new source being selected and the practical consequences of the change to that source.
- **Hypothesis:** customers want to know how they will be affected and have little interest in the rationale for change.

Practical

- Shortest of the three communication formats.
- Containing just the essential information about the water change and practical details about impact.
- Does not include background information on sources and/or detailed information on the source.
- **Hypothesis:** customers have little or no interest in source change beyond the acknowledgement that they are happening.

Methodology in detail

Quantitative research phase

Why we did this

The quantitative research was designed to provide us with data that could be analysed in two ways:

By Water Company

- Understanding of preferred ways to frame the communication of water source change (practical, environmental or human) across different sources.
- Understanding of if knowledge, understanding and engagement with water companies and source change varied significantly by region.
- A robust sample of at least 200 responses by water company to demonstrate customer consultation.

Across Water Club Area

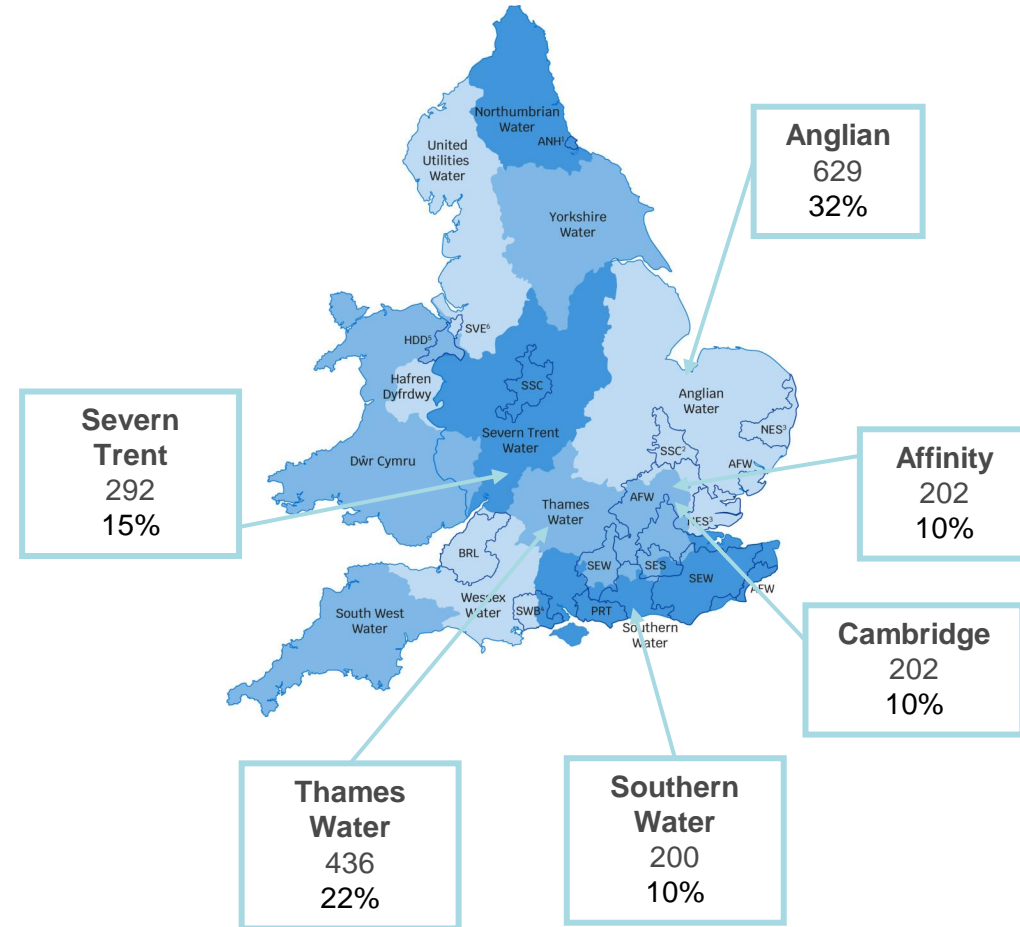
- Understanding of demographic and/or attitudinal/behavioural differences and how those affect preferences across framings and sources.
- Understanding the strength and limitations of each framing for each source.
- Understanding the preferred length, channel, and timing of communications for each source.

The data has been weighted by age, gender and SEG to be nationally representative of the general population.

Quantitative sample

- The quantitative sample is collected to be broadly representative of customers across the Water Club area.
- Household customer data is weighted to be nationally representative by Age/Gender/SEG.
- Data was allowed to fallout naturally from sampling for each water company (representation shown on right) and not weighted by region in order to ensure good representation from all water companies within the overall sample of responses.

Total customers by water company



D6. How would you describe the area you live in? Base: All respondents Household (n=1762). Non-Household (n=198)

2 Key findings



Key findings

1.

Water is a low salience topic, with customers indicating a low level of awareness and understanding of issues relating to it. This in part is driven by general satisfaction with the customer experience of water in terms of taste, smell and hardness.

2.

Customers also have low awareness of water scarcity, and whilst all take steps not to 'waste' water, most are not actively trying to reduce their water consumption. Information on the topic is easily understood, however, this is not always enough in to unseat long-standing perceptions that water is abundant in the UK.

3.

Customers believe that water companies should be taking steps to respond to the issue of water scarcity now, and recognise that a mix of demand and supply-side solutions are required. However, there is a general desire to see water companies implement demand-side options first, including fixing leaks and educating customers.

4.

When prompted, customers assess water source options by balancing efficacy (including reliability) and the cost and time commitments associated with the change. There is also an expectation of water companies to evaluate options through this lens.

5.

Customers say they are unlikely to engage with communications on source change, and taste tests indicate that most are not able to detect differences at the level that might be expected in a source change. However there is still a need to communicate to explain the rationale for the change, alleviate taste concerns and provide clear guidance on impact.

Key findings

6.

In terms of communication, overall the human frame best combines the qualitative and quantitative findings together. Quantitatively environmental and human framings are slightly preferred to practical framings of a water source change, however in qualitative sessions environmental framing is felt to lack impact indicating that overall human is best.

7.

Most household customers want to be first notified three to six months in advance of the change, although non-household customers are more likely to want a closer notification of a change. Most customers then want to be reminded again of the change at a point closer to the time, but generally only once. When a change is temporary, 49% would like to be notified every time their water source changes.

8.

E-mail and a letter separate from the water bill are the preferred forms of communication about source changes, consistent across sources. The majority of customers claim they would click through to look at additional information. Whilst in reality this number may be lower, providing comprehensive information to those who may want it is key.

9.

Of those who are more inclined to visit a website for further detail on the change, there is an expectation that this would include a wealth of comprehensive information. This includes detail on bill impacts, taste, the process, the reason behind the change, safety, environmental impact and information from an independent source.

10.

Whilst there is a need to communicate on any source change, Water Recycling and Desalination in particular need more engagement due to a higher level of spontaneous concerns. For Water Recycling these concerns are centred around taste, hygiene and safety. Desalination also generated concerns, which tended to be around taste and price

Key source-specific findings

WATER RECYCLING

Key concerns for Water Recycling centre on safety, quality and the environment, with many customers being particularly focused on the 'yuck' factor of the source which can be hard to overcome. When given more information on the process customers express concerns around carbon emissions and energy intensity of the processes involved. In terms of communications, customers indicate an equal preference for either environmental or human framings.

DESALINATION

Desalination is a less well-known and understood source compared to others. Although praised for its reliability, Desalination is ultimately judged to only be suitable in emergency scenarios given the 'intense' construction and running process. In terms of communications, customers indicate a preference for the human framing.

WATER TRANSFER

Concerns about Water Transfer stem from comprehension issues and worries about quality and the environmental impact, however, generally customers are favourable towards it as a source option, seeing it as a logical solution to regional water scarcity. Communications should address environmental and taste concerns directly. Customers do not generally have high comprehension of water transfer schemes and so do not express strong preferences for pipe or canal based schemes

RESERVOIRS

Reservoirs benefit from their familiarity in the UK, with attitudes being generally favourable to them. However, customers do raise concerns in terms of costs, lead times and the impact of construction. In terms of communications, customers indicate an equal preference for either environmental or human framings.

3 The context shaping attitudes towards source change



3.1 Overall attitudes towards water



Water is a low salience topic for customers, who show low levels of concern about water-related issues

Customers cite three key factors as rationale for their low levels of concern:

Wet climate

As found in previous literature and research, there is a widespread assumption that **water in the UK is abundant**. The UK is seen as a wet country, and reports of flooding in recent years add to the impression that water is plentiful.

Good infrastructure

Compared to other countries, water in the UK is felt to be **easy to access and safe to drink**. Many feel water is taken for granted, especially when compared to countries where tap water is not safe to use.

Strong regulation

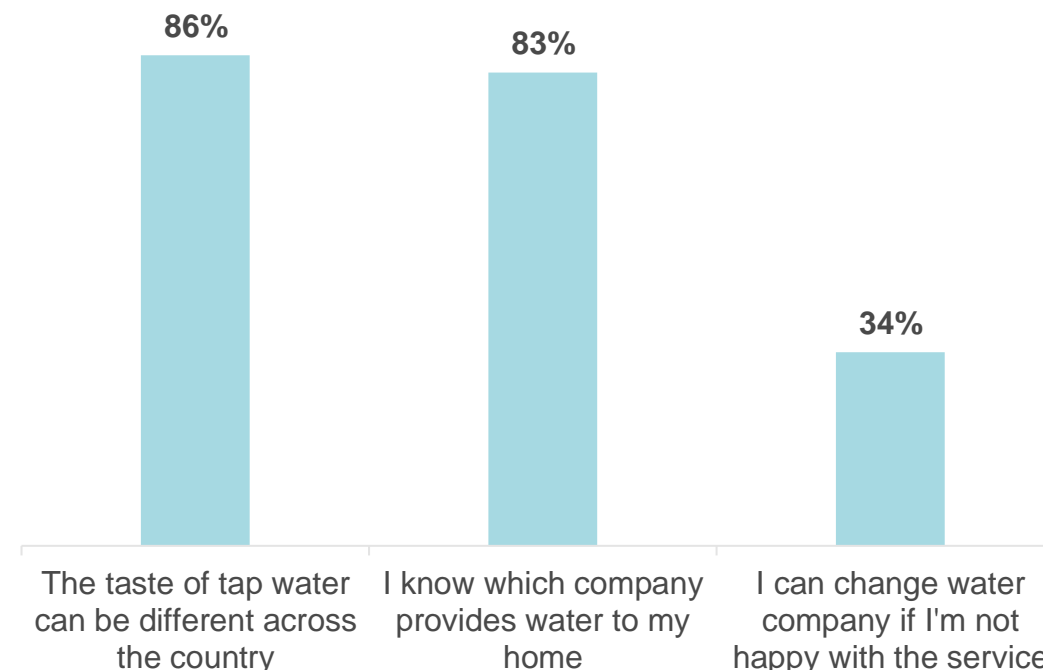
Water companies are **trusted to provide clean, safe water**. While knowledge of the water industry is limited, there is an assumption UK regulation is in place to provide safe drinking water.

A third of respondents believe they can change water company, illustrating the low level of sector knowledge

- Across both strands of research, particular audiences demonstrate lower levels of sector knowledge and will need to be particularly borne in mind when designing communications, which may need to be specifically targeted to them.
- Younger audiences, (who are less likely to be direct bill payers) demonstrate the lowest levels of sector knowledge. 43% of 18-34yr olds agree with the statement 'I can change water company if I'm not happy with the service'.
- There are also lower levels of understanding in general from customers in urban areas, and those from ethnic minority backgrounds. 41% and 47% agreeing respectively with the statement 'I can change water company if I'm not happy with the service'.

Knowledge of water supply and companies

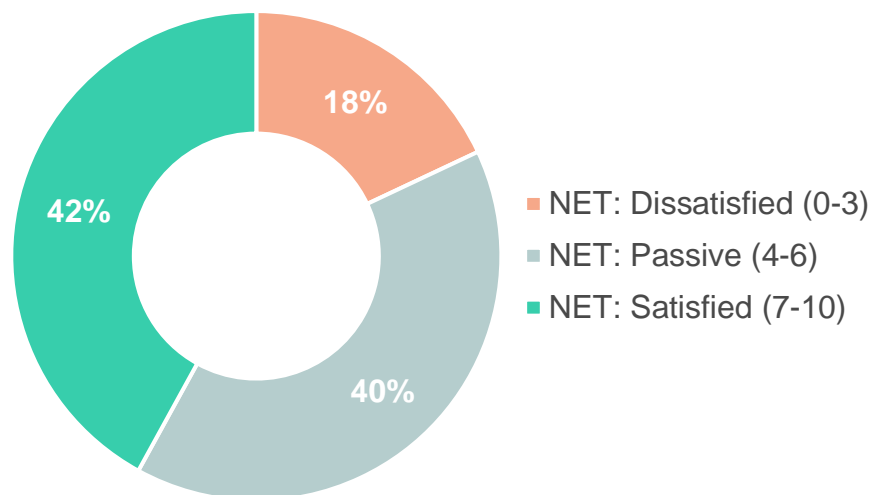
Showing % Agree (Strongly + somewhat)



B4.1-3. To what extent do you agree with these statements? – 'I can change water company if I'm not happy with the service or cost'; 'The taste of tap water can be different across the country'; 'I know which company provides water to my home'; '.'. Base: All respondents, HH (n=1762)

Customers are generally tolerant of their water, and it is rarely the subject of complaints

How satisfied or dissatisfied would you say you are with the taste and smell of your water?
Rated on a scale of 0-10



Safe, clean water is a fundamental customer expectation, but unless there is a tangible impact on their everyday life, few actively consider their water. Safety and/or health are rarely mentioned as concerns when thinking about their current water supply.¹ When concerns do arise, particularly when taste and appearance change, this is assumed to be the fault of water providers rather than in-house plumbing.²

B6.2. How satisfied or dissatisfied would you say you are with the following aspects of your water supply? Please use a scale of 0-10, where 0 = extremely dissatisfied, 5 = neither satisfied nor dissatisfied and 10 = extremely satisfied – The taste and smell of your water. Base: All respondents, HH (n=1762)



1- Shed Research Consulting & Fasttrack Squared | WRW Regional Plan Customer Research | 2021 (SS and Cambridge Water)

2 – OPM | Customer Research and Engagement Synthesis | 2019 (Anglian Water)

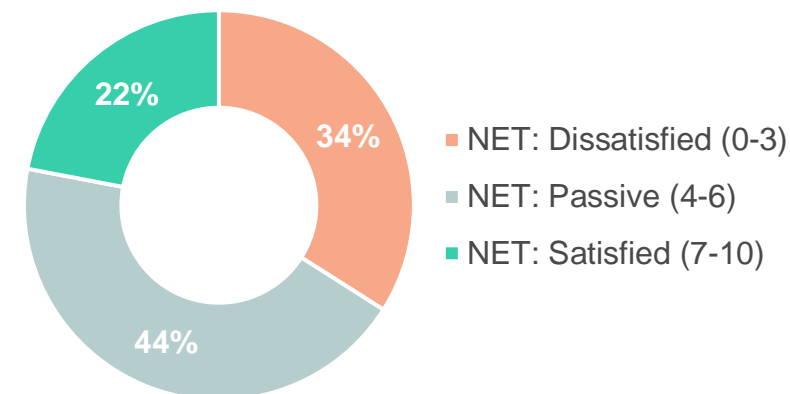
Hardness is the most commonly cited ‘water issue’ experienced by customers across most regions

Hardness, and associated cloudiness, of water is often the top-of-mind concern about water characteristics, though few anticipate this changing how they use water.

- People often describe the differences in the characteristics of water as differences in “quality”: quality is used interchangeably to refer to both the hardness, taste and smell of water, as well as how clean/safe it is.
- Severn Trent customers are more likely than those in other water company areas to be satisfied with the hardness of their water, with only 19% dissatisfied and 81% satisfied or passive.
- There is some awareness of local variation in water, with hardness, pressure and then taste the most common differences noticed by customers e.g. when visiting the North vs. South of England or other countries.
- However, the reasons for local variations (i.e. different sources/treatment of water) are rarely considered or understood.

How satisfied or dissatisfied would you say you are with the hardness of your water supply?

Rated on a scale of 0-10



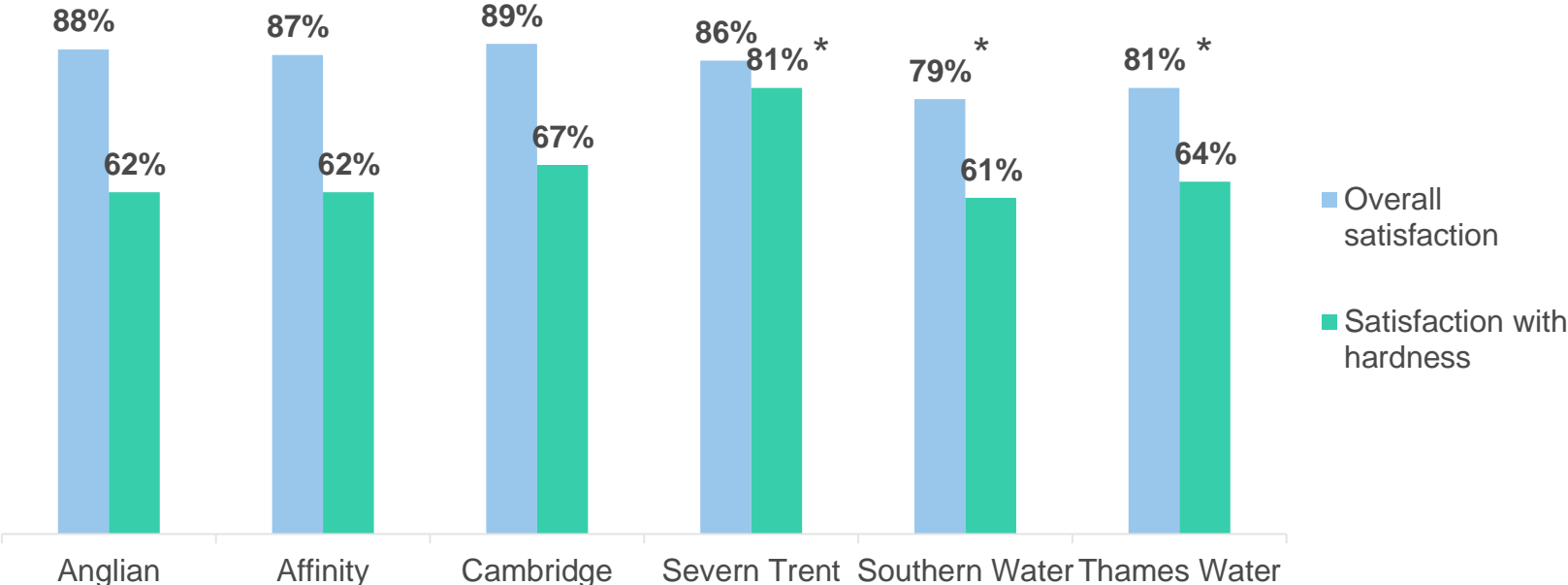
“
When we go to visit family down in Cornwall their water tastes soft. It tastes lighter and different in your mouth when I drink it out of the tap for some reason.
 ”

Household customer,
 Peterborough

B6.3. How satisfied or dissatisfied would you say you are with the following aspects of your water supply? Please use a scale of 0-10, where 0 = extremely dissatisfied, 5 = neither satisfied nor dissatisfied and 10 = extremely satisfied– Hardness. Base: All respondents, HH (n=1762)

Severn Trent customers are more satisfied with water hardness, overall satisfaction was directionally in line with C-Mex

Satisfaction with water company overall & hardness of water supply
(% of rating aspect of supply 4-10/10)



Although satisfaction with existing supply and water hardness/quality varies across water companies, this does not correlate with the level of concern about a potential change of water source. This is explored in more detail in section 4.3

* = Statistically significant difference at 95% confidence level

B6.1.3. How satisfied are you with the following aspects of your water supply?: Your water company, taking everything they do into account , The hardness of your water supply

Base: All respondents, HH (n=1762)

However, a (significant) minority of customers actively seek to change or improve their water at home

In this research, only a minority mention issues with the taste, smell or appearance of their water that affect their water use.

- For example, only a minority mention drinking bottled rather than tap water, or using a filter at home

Customers in **London** are more likely to filter their tap water before drinking it.

Customers in **Norwich** are more likely to take steps to manage hard water, as it is felt to be particularly problematic in this region e.g. filtering water, drinking bottled water, installing filters to soften household water supply.

Wider literature suggests a significant minority of people drink exclusively bottled water, though data varies between sources.

- Recent data from YouGov suggest that 15% of the British public do not drink tap water at all¹
- A 2017 report for Keep Britain Tidy found most people, 69% usually drink tap water, 18% usually drink bottled water and 13% usually drink filtered tap water².
 - London had the highest levels of bottled and filtered water use (24% and 18% respectively), while Yorkshire and the Humber have the lowest levels (13% and 8% respectively)
- In 2016, the CCW³ found that 67% of people usually drink tap water at home, though 27% believe bottled water is healthier than tap water

1 - YouGov | [Part Five: Drinking habits and preferences](#) | 2022 (Publicly sourced)

2 - Centre for Social Innovation & Keep Britain Tidy | [Understanding provision, usage and perceptions of free drinking water to the public in the UK](#) | 2017 (Publicly sourced)

3 - BMG research and CCW | [Attitudes to Tap Water and Using Water Wisely Survey](#) | 2016 (Publicly sourced)



WHAT THIS MEANS:

Communication must work hard to cut through and engage customers

Water is a low salience topic, driven by the perception from customers that it mainly works as it should. This means that few are considering problems relating to water, and water companies must work hard to bring customer attention to the topic of water through their communications.

Water companies should avoid causing alarm or raising concerns

Customers are generally satisfied with their current water supply and do not spontaneously recognise significant problems that they would like to see be addressed. Water companies should therefore tread carefully in this landscape, being sure not to raise alarm or concern where there currently are none, whilst still providing the necessary information to customers.

3.2 Understanding of water scarcity



Understanding water scarcity is key to source changes. Currently, there is low awareness of the topic

Water scarcity is important because it drives source change. Understanding this issue may make people more engaged and therefore receptive to source change.

However currently, only 10% of customers strongly agree with the statement 'I worry about the amount of water available for use in my local area'.

Many customers struggle with the concept of drought in the UK, finding it difficult to imagine what a severe drought would look like in the UK.

For most, drought is associated with other countries such as South Africa and Australia, which do not share the UK's wet climate.

Experiences of drought in the UK are primarily limited to hosepipe bans and low water levels in reservoirs. However, these are believed to be precautions to prevent a drought developing rather than evidence of drought itself.

B4.8. To what extent do you agree with these statements? 'I worry about the amount of water available for use in my local area..' Base: All respondents, HH (1762).

This – along with views of water being cheap and widely available - means reducing water consumption is rarely considered

50%

Of people agree with the statement 'I do more to save energy than I do to save water in my home/business'.

31%

Of people agree with the statement 'I don't think much about saving water, I just take it for granted'.

“

I've got a water meter and I'm aware. It doesn't stop me doing anything but I wouldn't just leave a tap running. In the summer I wouldn't water the grass because I think that's a waste of resourced water.

Household customer,
Southampton

”

Customers aged 18-34, those from urban areas and those from ethnic minorities are most likely to say they take water for granted. In addition, NHH customers show significantly higher agreement with both statements, a sentiment that was reflected in qualitative discussions due to a view that cutting back could negatively impact the running of their businesses.

B4.7. To what extent do you agree with these statements? 'I do more to save energy than I do to save water in my home.' Base: All respondents, HH (n=1762). NHH (n=198)

B4.9. To what extent do you agree with these statements? 'I don't think much about saving water, I just take it for granted.' Base: All respondents, HH (n=1762). NHH (n=198)

Where water-saving behaviour does happen, it is motivated by finances and a sense of responsibility, not water scarcity

Motivation to save water		
<p>Moral responsibility¹</p>	<p>People have a sense of responsibility to be mindful of their water use, with wasting water often discussed in moral terms as 'bad'. This motivates people to refrain from behaviours of wasting water (e.g., shorter showers, turning off taps).</p>	<p>“ I was raised to turn the light off, turn the taps off, save water. ”</p> <p>Household customer, London</p>
<p>Financial pressures²</p>	<p>Broadly, water is seen as a cheap resource. However, people who are more financially constrained and at risk of experiencing hardship with even small increases in monthly costs are more likely to be conscious of and reduce their water usage, motivated by the need to keep bills down.</p>	<p>“ If people pay exactly for what they use, than they would be encouraged to consume less. ”</p> <p>Household customer, Peterborough</p>



1 – Eftec | Customer Preferences to Inform Long-term Water Resource Planning - Supply-side solutions workshop | 2020

2 – Southern Water | Affordability Concerns and Diverse Cultures | 2021 (Southern Water)

Whilst information on water scarcity does raise concern, personal urgency remains low

The idea of running out is surprising for most, and seen as a “scary” prospect – particularly given the amount of water needed per person per day.

The basic concept of demand vs supply is well understood and recognised across other resources, and so is key information to include to explain the issue.

Furthermore, describing water in ‘real terms’ (e.g. bathtubs, number of minutes showering) rather than practical measurements helps to convey quantities and therefore increase understanding and impact.

However, this information does not always unseat long-standing perceptions that water is abundant.

This is exacerbated by a perceived lack of communication on the topic from water companies, which for some is felt to undermine the urgency of the situation.

Whilst engagement with information does help educate customers, ultimately most admit that it does not significantly change their overall perceptions towards the topic.

This is strongest amongst non-household customers, who feel their usage is often key for them to operate their business effectively and therefore are often quite unwilling to make any kind of change.

Customers note that they would only be likely to make behavioural changes if there was a greater financial incentive for doing so.

Customers expect water companies to manage water scarcity by reducing waste and demand before increasing supply

Leak management and reduction

Education and support in reducing usage

Exploring new supply-side options

To be implemented immediately

To be implemented in the longer-term

Leak management is a basic expectation of water companies, which some customers feel is currently not being met



59% of customers do not agree with the statement 'water companies are doing more to find and fix leaks than they used to'.

Customers see leak management as being a **key part of addressing water scarcity**, noting that failure to do so can make other solutions obsolete. It is therefore seen as **an urgent requirement** and for some, even a hygiene factor.

Customers also see leak identification and reduction as **a fundamental responsibility of water companies**, particularly if customers are being asked to alter their behaviours.

Overall, customers indicate that water companies **are not always doing enough to fix leaks** and to **generally improve their infrastructure**.

However, customers do also **acknowledge that leak management can be complex and difficult** for water companies, and **strongly dislike the disruption it can cause to local areas**.

B4.4. To what extent do you agree with these statements? 'Water companies are doing more to find and fix leaks than they used to. Base: All respondents, HH (n=1762)

Customers also acknowledge their role in reducing water consumption, but expect support from water companies

Customers recognise the need to reduce water demand and use.

However, there is scepticism about the impact that individual customers can have.

Customers want to see water companies drive change to ensure collective impact.

Household customers **expect to receive information or equipment to improve their water efficiency at home**. They note that this is not something that they are currently receiving.

I once got sent a bath dam to use less water when bathing babies – but I only heard about it from Facebook.

Household customer,
Norwich

Non-household customers **report even greater challenges in reducing their water consumption**. They would therefore require **targeted support** from their water company to be able to change.

I need to be able to get the job done, I can't compromise on that in order to save water.

Non-household customer,
London

Supply-side solutions are less well understood, however, customers do believe companies should explore all options

Customers lack awareness and understanding of supply-side options. When given some information about them, they are often initially cautious:

Even after learning about water scarcity issues in the UK, for some customers solutions that require heavy infrastructure are deemed **too drastic and unnecessary**. They can be considered 'last resorts' once demand-side solutions have been exhausted.

“

What's the point in building a multimillion-pound reservoir if you're then going to pump it through a system that leaks. You sort the problem out first, and then build from that!

Household customer,
Norwich

”

However, there is also support for **taking action now** in order to safeguard the future, with a 'rationalised' acceptance that disruption due to infrastructure development in the short-term will be necessary for longer-term gains.

“

I know it's a long drawn-out process, but overall I think it is worth it in the end

Household customer,
London

”

OPM | Customer Research and Engagement Synthesis | 2019 (Anglian Water)

Britainthinks | Water Resources Management Plan: Stage 1, Research with Household and Non-Household customers | 2016 (Thames Water)

Eftec | Customer Preferences to Inform Long-term Water Resource Planning - Supply-side solutions workshop | 2020

Verve | Water Trading Report | 2018 (Thames Water)



WHAT THIS MEANS:

There is a need to educate more broadly on water scarcity

Given that water scarcity is driving water source changes, understanding and acceptance is key to receptiveness about proposed changes. Currently, knowledge on the topic is low, but understanding is easily improved with basic explanations about supply/demand. Using this can therefore help ensure source changes are perceived more positively.

Water companies should demonstrate that they are implementing both demand and supply side options

As well as communicating on source change, water companies should also be sure to explain to customers the other solutions that are being put into place to address water scarcity, in particular leak management and education, which are felt to be urgent solutions to be implemented in the short term.

4 Communicating water source change



4.1 What do customers think about the idea of water source change?



Currently, customers are not actively thinking about their water source, and do not know what their own source is

With high levels of satisfaction with water, **customers rarely question where their water comes from** or consider an improved or preferred water source option.

Water providers are understood to be responsible for supplying water, and **customers do not feel they have any say over where it comes from.**

As a result, **most customers are unaware of where their own water supply is sourced from** or about water source options in general.

Young people in particular have **limited existing knowledge of how water is sourced** or even the most common sources (i.e., rivers, lakes or groundwater), and regional and national variation often comes as a shock.

“

The percentage of water we get from the environment, that was a surprise. I didn't expect that because it was so high. I didn't think of it before.

Non-household customer,
London

”

“

I've never really thought about where our water comes from – you sort of take it for granted.

Household customer,
Norwich

”



OPM | Customer Research and Engagement Synthesis | 2019 (Anglian Water)

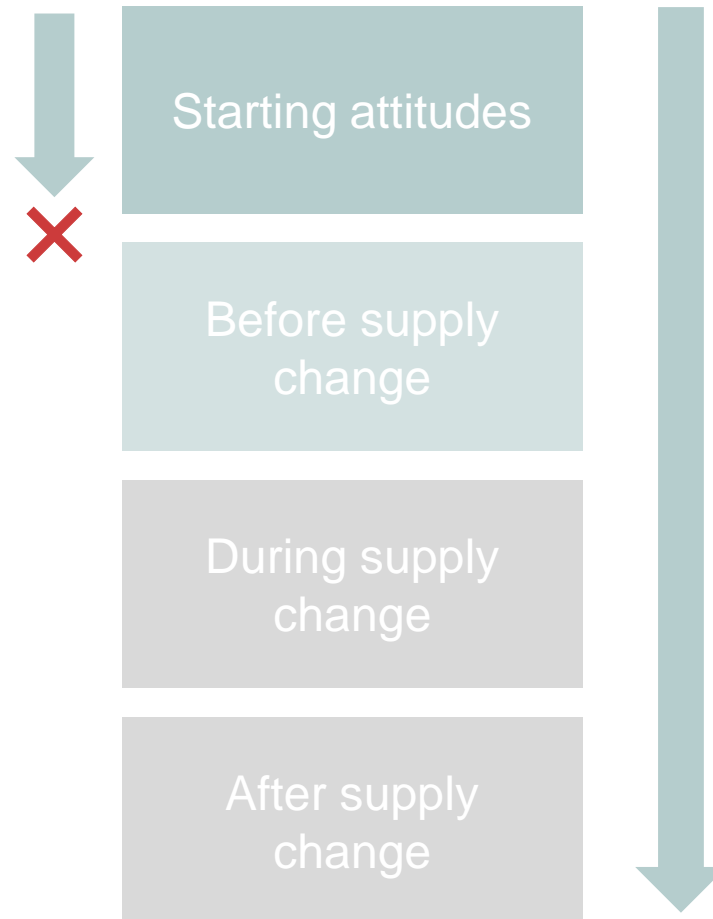
Populus | Hard Water Qualitative Research | 2012 (Thames Water)

Shed Research Consulting & Fasttrack Squared | WRW Regional Plan Customer Research | 2021 (SS and Cambridge Water)

There has also been a lack of exploration of customers' views during or after a supply change

Research so far has focused on attitudes to water sources, rather than experiences

- Across all research so far, customers have primarily been asked to evaluate sources in theory, rather than grounded in the reality of their lives.



There has not been a comprehensive longitudinal study to explore how views change over time and how concerns were addressed/ alleviated

- Consultations before construction tend to be the main form of engagement, but do not continue to explore whether concerns were addressed either during or after the change.
- This creates challenges in assessing any real changes in customer views and experiences.

When prompted, there *are* certain aspects that customers are interested in understanding about their water

Factors of interest in relation to extraction of water

- Cost/bill impact
- Environmental impact
- Carbon implications
 - *And whether renewable energy could be incorporated*
- Deliverability
- Water yield
- *(in some instances)* Lead time
- Long-term sustainability and suitability

Factors of interest in relation to properties of water

- Water quality
- Hardness of water
- Aesthetic characteristics (e.g., taste, smell and appearance)



In practice, efficacy vs cost is the core assessment made by customers when examining water source options*

Customers focus on the **efficacy** of the water source option, in terms of how much water it can deliver and how **reliable** it is in what it can provide.

They balance this with considerations on **cost** – both in terms of construction and operations - **and lead times** of creating the water source.

“

It's most important to have reliability, so that there will always water there, even during a drought.

Household customer,
Peterborough

”

“

It should be quite easy to implement, cost effective and quick, with no impact on the environment.

Household customer,
Norwich

”

*Please see Appendix for all materials shown

Additionally, there is an expectation of water companies to consider the environmental impact

When considering their own behaviour in relation to the environment, **customers admit that it is often de-prioritised by cost and convenience.**

However, **given the scale of any water source**, there is a strong expectation of water companies to be **actively assessing and trying to reduce the environmental impact of water source changes**, both in terms of the carbon impact of construction and potential damage to eco-systems and habitats when thinking about the long-term viability of options.



“

We're a lot more aware these days of the impact we have on the environment – we need to think about what we leave behind. It could be a great option for now, but you need to think about the long-term. There's a knock-on effect, some of [the source options] will affect the habitats, the oceans and the fish that we eat – there's a bigger cycle you have to think about.

Household customer,
London

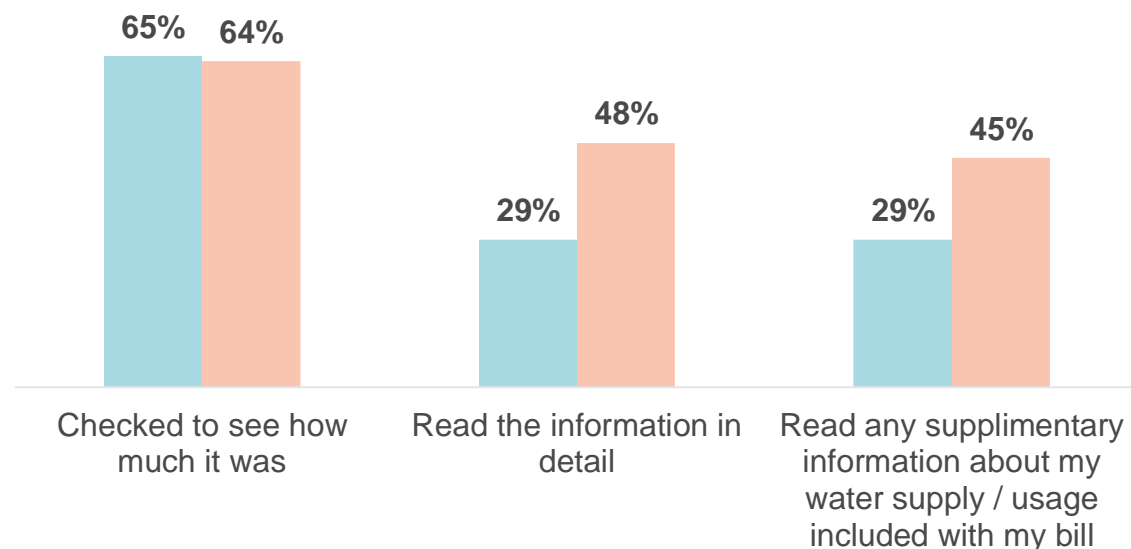
”

Many customers acknowledge they are unlikely to engage with source change, even when made aware of it

Customers doing each with their water bill

Showing % selecting each

■ Household Customers ■ Non-Household Customers



Overall, most customers do not read any supplementary information about their water supply when they receive the bill, although the number of non-household customers that do is much higher than household customers.

Some, therefore, question the needs to communicate these changes at all – particularly given the lack of customer choice over their water supplier, and the perception that changes ‘will happen regardless’ of public opinion.

“

You could ask if the public even need to know that their water source is changing – especially if it's not something they'll notice when they turn on their tap. They're probably using a lot of these [water source options] now anyway, and we don't know about it.

”

Household customer,
Norwich

B7. When you received your last household water bill, which of the following did you do? Base: All Bill paying respondents, Household (n=1477), Non-household (n=198)

Alongside this, evidence suggests customers are generally not able to identify different water sources themselves



Case Study: Thames Water TGWTW study *Customer research*

Objectives: to understand what issues (if any) customers may have with desalinated water entering the supply

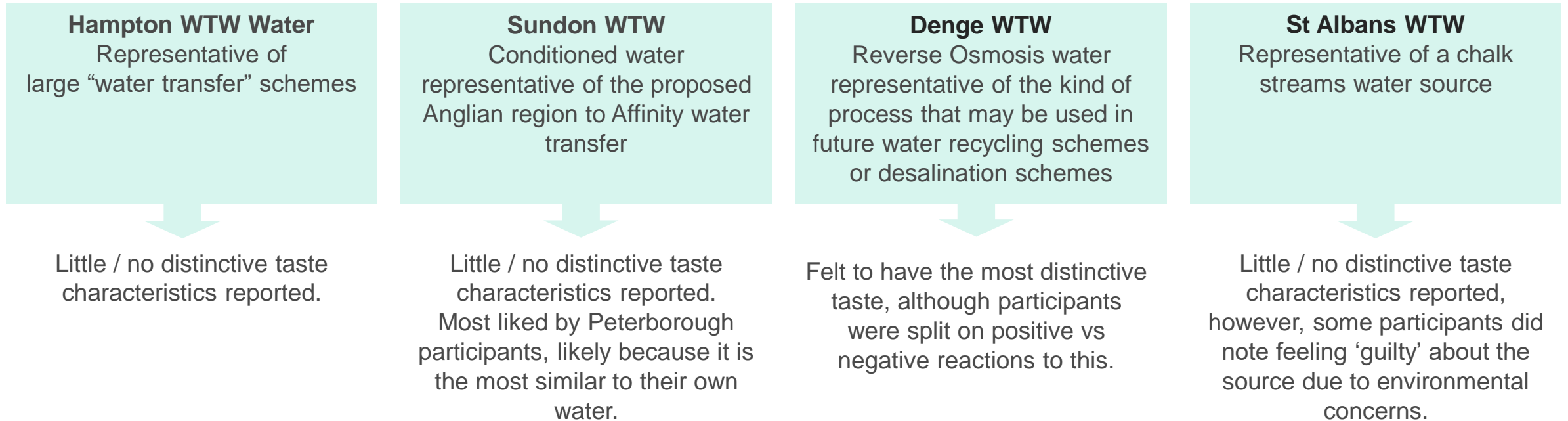
Findings:

- Most customers identified some taste differences between the three samples (current source, desalinated water and a mix of both).
- However, throughout the research the majority of participants were unable to accurately identify the different types of water they tasted.
- The majority were happy with the taste of desalinated water, and the minority who were not said they would use bottled water (due to taste preference, rather than concerns about the source itself)



This was generally confirmed in our own taste test as part of this research

As part of our research we conducted a blind taste test with customers using the below sources.



Whilst some minor differences were picked up by participants, all agreed that overall, they could easily adapt to all sample options.

Despite this, customers feel it is still important for water companies to communicate changes

To fulfil a responsibility

Customers generally feel that water companies have a responsibility to communicate changes to infrastructure and supply to the public, even if they feel they are unlikely to engage with these communications personally or in-depth.

To demonstrate transparency and openness

The potential damage in terms of customer satisfaction and brand reputation that could come from purposely withholding information on water source changes is seen to outweigh the downsides of communicating on a low engagement topic.

To inform those who are more engaged

Although in the minority, there are some customers who are more heavily engaged with this topic. Therefore, there is a need to ensure that this group's needs are met in communications even if they do not represent the masses.

To reduce complaints

While it may be unlikely that source changes will noticeably impact the water that comes out of customers' taps, notifying them of these changes can pre-empt complaints that they might make should they notice any differences.

There are instances of a difference in taste being detected – creating problems as the change had not been communicated



Case Study: Horley Cross, UK¹ *Addressing myths*

Issue: Customers reported concerns after the taste of their water changed. This followed increased chlorine in the supply to tackle bacteria in Horley Cross, which had not been communicated.

Comms approach: Response statements were disseminated by the water company and local government, but were written and declared by public health bodies

Impact: Timely communication and partnership with (credible) public health bodies helped to settle the scare



Case Study: Copeland, UK² *Communicating in advance*

Issue: After a planned change in supply (which was not communicated publicly), customers noticed a change in hardness and taste when their water source supply changed, leading to complaints, safety concerns and customers switching to bottled water.

Future learnings: After their investigation, DWI recommended: informing customers about changes and possible effects in advance, ensuring call centres are fully briefed to field queries, and including changes to aesthetic characteristics in risk assessments



1 - Affinity Water | 20 Day Report on Consumer Contacts following the planned increase in chlorine residual from Horley Cross WTW | 2018 (Affinity)
2 - DWI | Copeland area: Consumer concern about drinking water | 2017 (Publicly sourced)

In other cases, insufficient communication can even halt water source plans altogether



Toowoomba, Australia

Overcoming psychological barriers

Issue: Plans to launch a water recycling scheme were met with heated opposition by concerned residents who gained public traction

Comms approach: The water company failed to get ahead of the outcry which evoked the 'yuck' factor, and residents felt they were an experiment.

Impact: The water company failed to launch a water recycling scheme



San Diego, USA

Communicating rationale + need

Issue: The development of a new water recycling plant failed to gain public support

Comms approach: The water company did not make sufficient efforts to raise awareness of the project or provide alternative solutions

Impact: The public felt like guinea pigs, without the information they needed to understand the rationale and impact of this source change



Communications should therefore explain the rationale and allay concerns

Ultimately, communications need to pre-empt potential public and media responses by:

Explaining the rationale of the water source change

Communications need to clearly explain both **why the change is being made on a broad level** (i.e. to maintain water supplies, to respond to water scarcity issues) and **specifically why that source has been chosen**.

Alleviating concerns, particularly regarding taste change

Communications **should directly address any known challenges or barriers that customers have about water sources**, in order to reassure them of the change. Across any water source change, communicating that there will be no noticeable change to the taste is particularly key.

Providing clear information on impact

Communications should also contain **practical information for customers about any potential impact on them** in terms of the construction or change beyond the experience of the water itself.

The timing of communications should also be a key consideration

Customers are aligned in their belief that they should be given advance notice of a water source change. However, communication too far in advance can:

Indicate that there is a danger or issue when there is not one.

Make customers less likely to engage in the subject letter.

Create problems or confusion if the change is ultimately not carried out.

Specific timing requirements vary by water source change and also by individual household and non-household customers (i.e. their proximity to construction). The following section will explore this in more detail.

WHAT THIS MEANS:

Communication on water source change is necessary

Although many customers are unlikely to engage with communications relating to source change, the potential risk of *not* communicating is much greater. Water companies should therefore communicate to explain why the water source change is happening, give reassurances on what this will mean and also provide any practical detail relevant to customers e.g. on construction.

Water companies should have a clear rationale for selecting one source over another

When prompted, customers do recognise the different impacts that water source options can have both in terms of their extractions and the properties of the water. As such, they expect that a decision to change water source is driven by careful analysis of the effectiveness (including reliability) against the cost and timings of the source.

4.2 Attitudes towards water source options



We explored four key water source options with participants during the qualitative research

Reservoirs

Water Recycling

Water Transfer

Desalination

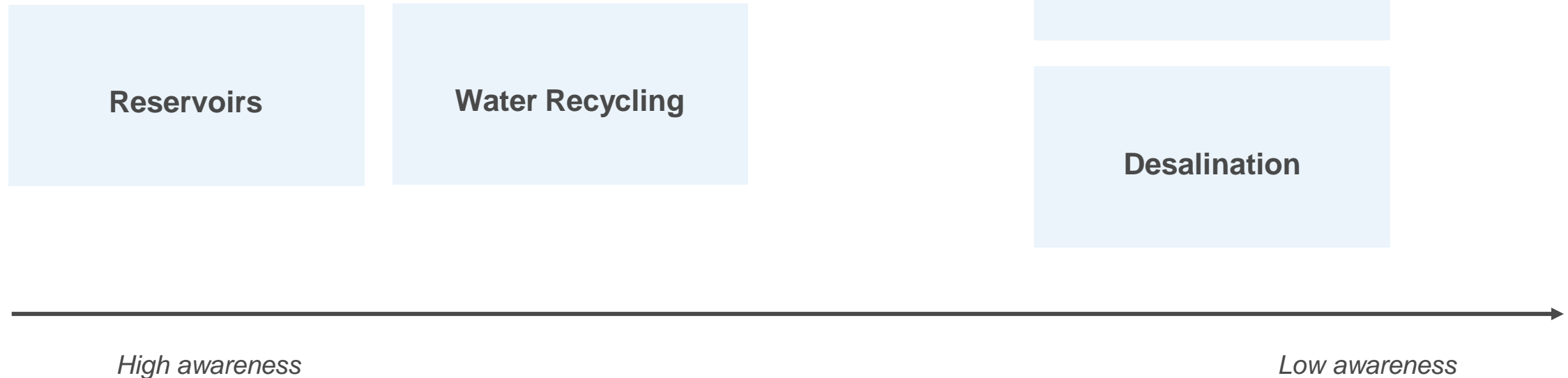
For each water source option, customers were provided with information about:

- **What it is** – a brief summary of the process involved as part of this source option
- **Is it already used** – a brief statement of how prevalent this source option is currently in the UK
- **Case study** – an example of how this source option (or a proposed option) is used in the UK, detailing the upfront and running costs, water production volume and construction timeframes
- **Performance assessment** – an overview ‘traffic light’ rating for this source option across specific criteria (amount of water, lead time in years, cost, reliability under drought, resilience to other hazards, energy use/carbon, positive/negative environmental impacts)

*The **quantitative survey** explored communications examples for Water Recycling and Desalination, as these were the source options that raised the most concern for customers during the qualitative stage (detail on this can be found in the following slides). Reservoirs examples were also included in the survey to provide a change option that is currently more familiar to customers. Water Transfer examples were not included as this source option raised fewer concerns, and provoked a more neutral response from customers in the qualitative research; this made it a lower priority to test in the survey.*

Spontaneous awareness and understanding of water sources varies between the different options

Existing knowledge of different water source options is low, particularly of those less commonly used in the UK at the moment. Desalination is often the least known, and where there is awareness, it is often associated with other countries with drier climates than the UK e.g. Canary Islands, the Middle East. Reservoirs on the other hand benefit from a sense of familiarity due to their commonness across the country.



For the majority of customers, Water Recycling is the source option that spontaneously raises most concern

Highest concern

Water Recycling / Reuse

Water Recycling evokes the strongest negative response from customers, largely driven by safety concerns.

Desalination

The perceived complexity of Desalination and Water Transfer presents a barrier to engagement with these source options.

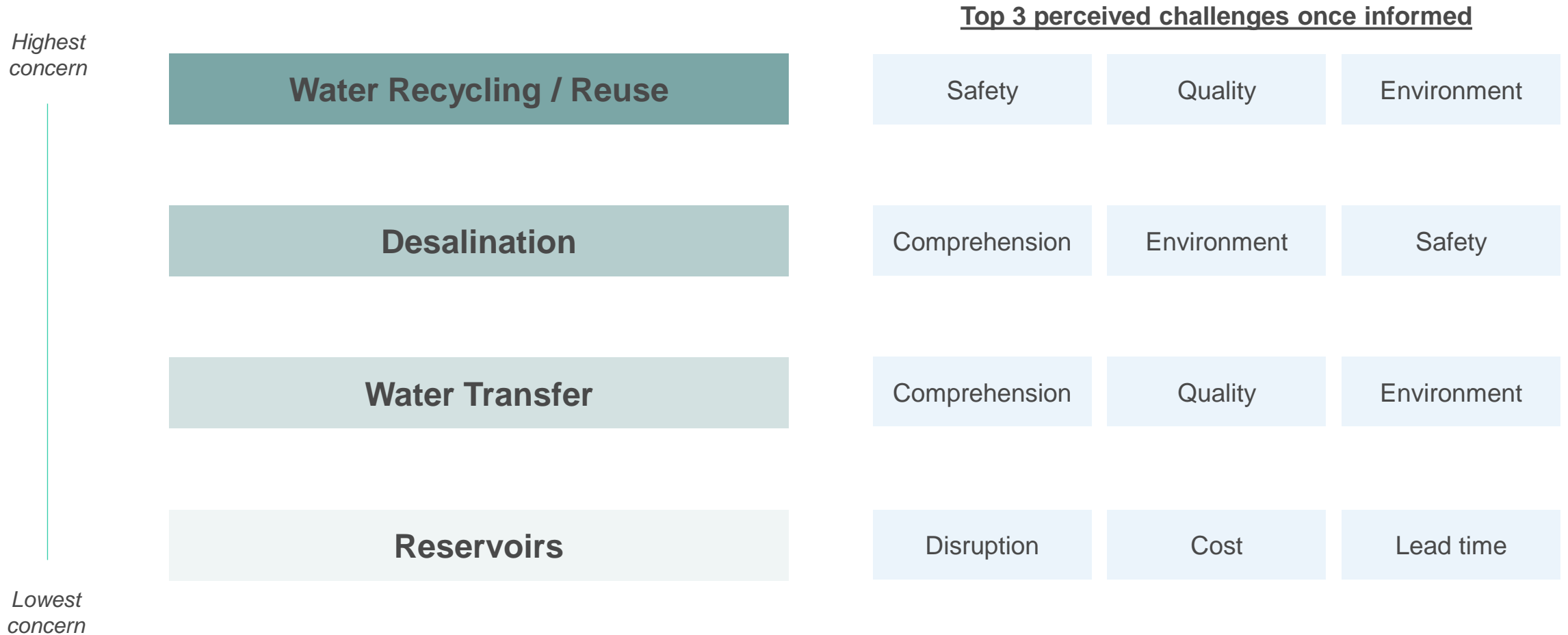
Water Transfer

Reservoirs

Reservoirs are the most appealing of the source options, with the perceived benefits seen to outweigh the, relatively few, concerns.

Lowest concern

While common concerns do exist across source options, each faces specific challenges that present barriers to engagement



4.3 Overall considerations for communicating source change



In communicating source change, key concerns centre on any potential differences in the water itself

Given **low engagement** with the topic of water stress, participants are more likely to engage with information about source change when it relates to the **impact on them as customers** i.e., on the quality, taste, characteristics and properties of the water coming out of their tap.

Communications will therefore need to **frame water source changes** as relating to a **'customer product'** context in order to feel relevant and informative, and to succeed in alleviating customer concerns.

Key information customers see as necessary to include as part of this:

- Why the change is necessary
- Detail on the tangible impact on them as customers (bills, quality and characteristics of water from their tap)

Further detail on the processes involved in new source options is not seen as particularly necessary unless these will have a tangible impact on the water they receive at home.

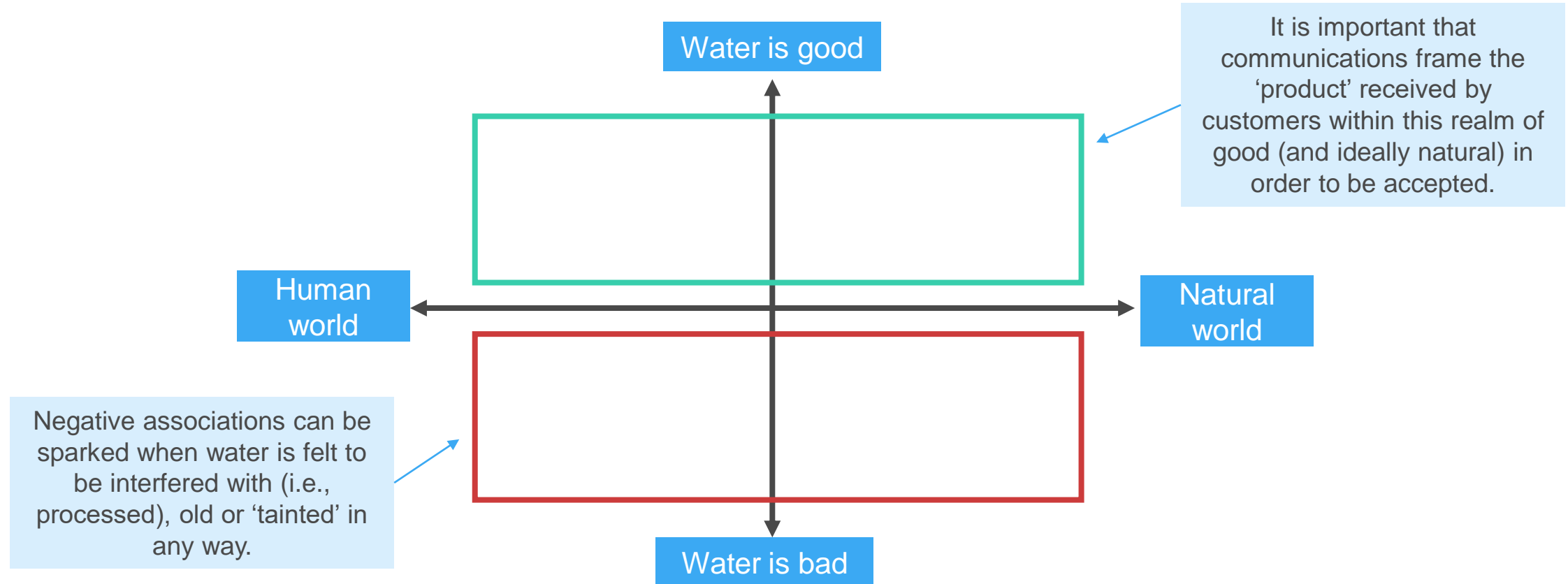
The only time I log on to Anglian water is if I have a problem with my bill or something has gone wrong.

Household customer,
Norwich

I would want to know how it affects the cost, why this source is better, what happens to the water...For any change we want to know why we need the change.

Household customer,
London

Existing research points to customer perceptions of water as something that should always be 'good' and 'natural'



There are 5 key factors that should be considered when communicating water source changes in this context

Language

- Simple and 'to the point' language is important for both explaining this topic and capturing customers' attention.
- Technical language can feel confusing and risks raising more questions, with a preference for 'lay' terminology (e.g., terms such as 'reverse osmosis').

Tone of Voice

- Communicating with a sense of neutrality and 'business as usual' feels appropriate for this topic (i.e., source change is not considered a 'big deal' for customers).
- This can feel reassuring, and avoids raising alarm or concern about source changes.

Channel

- Shorter, concise information works well for initial communication, streamlined alongside other comms (e.g., emails, bills).
- Customers can then be directed to further, more detailed additional information (e.g. weblink, contact numbers).

Timing

- The timing of communication (i.e., how far in advance of the source change) is aligned with the anticipated level of disruption to the customer (e.g., getting in touch earlier if construction is planned).
- Providing a timeline of future key communication points offers a sense of consistency and clarity to projects.

Messenger

- Water companies are seen as a logical key messenger on this topic.
- Some external, neutral, voices can offer relevant endorsement and reassurance (e.g., planning authority).
- However, this is not always necessary and can risk raising alarm (e.g., involvement of Public Health, regulator).

Taking this into account we tested three distinct framings of water source change in the quantitative research:

Environmental

- Longer, more detailed explanation of the change, and the reasons why a water source change is being made.
- Environmental focus, explaining more of the context and benefits from a move away from a chalk water source.
- **Hypothesis:** customers want to know why a change is being made, and once satisfied by the rationale will be happy with the impact.

Human

- Focused on the impacts of the change and the reasons why the change is being made.
- Provides information about the new source being selected and the practical consequences of the change to that source.
- **Hypothesis:** customers want to know how they will be affected and have little interest in the rationale for change.

Practical

- Shortest of the three communication formats.
- Containing just the essential information about the water change and practical details about impact.
- Does not include background information on sources and/or detailed information on the source.
- **Hypothesis:** customers have little or no interest in source change beyond the acknowledgement that they are happening.

Detailed analysis of responses to the three framings for each of the water source options that were tested can be found later on in this section.

Across all source options, there are commonalities in how the framings are received

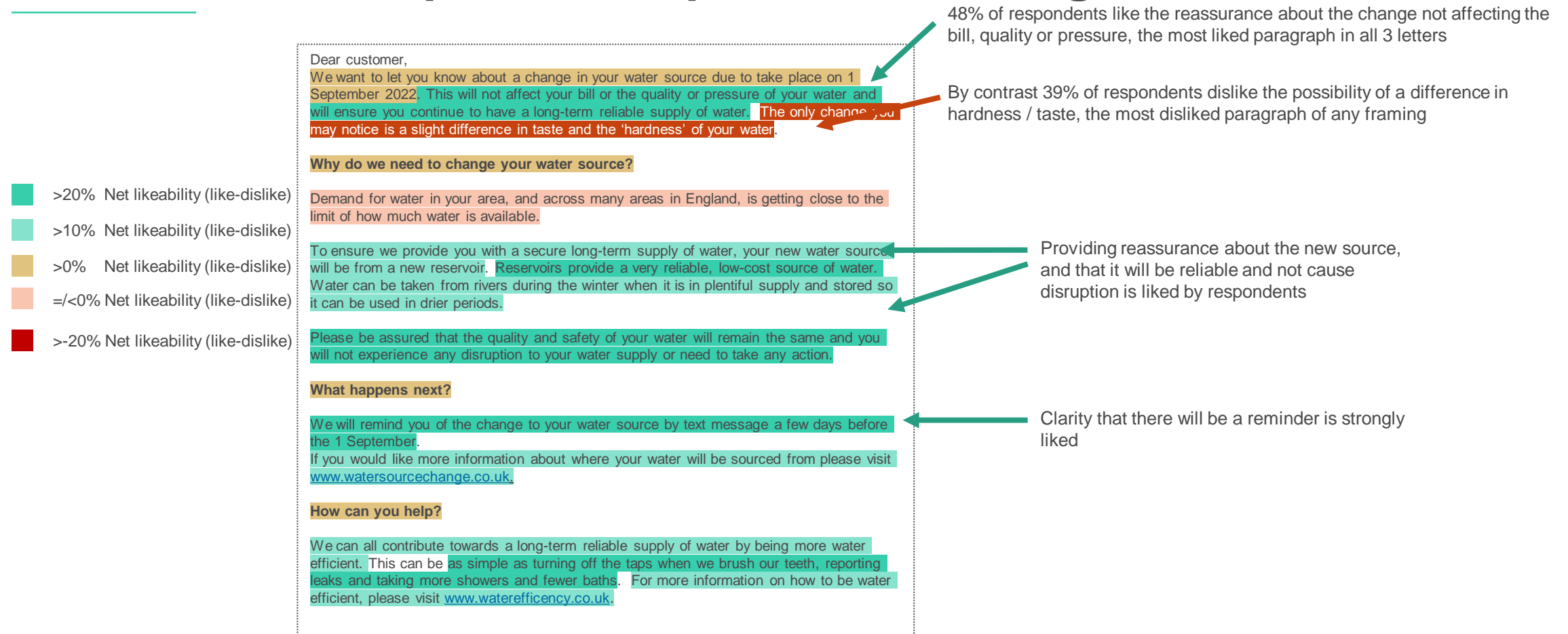
What worked well

- The fact that “you don’t need to do anything” is received positively by customers.
- A common theme is “this is beyond my control so I’m not worried about it”.
- In general customers find the letters relatively easy to understand and appreciate a straightforward tone and the reassurance that the letters provide.
- Emphasising that the change would be minor and safe, and that customers would not see major changes to their supply is cited as a positive.
- The fact there would be a reminder is cited frequently as a positive aspect of the letter.

Watch outs and additional information to consider

- In general, those who find the letters more difficult to understand are evenly split between those who feel the frames don’t give enough information and those who feel there was too much information.
- Across all source options, customers struggle to understand the context about demand and supply.
- For both Recycled and Desalinated Water, there is a frequent request for more information about the water source. For Reservoirs, there are occasional requests for more information on where the reservoir will be located.
- Customers are frequently concerned about mentions of hardness / taste changing, and seek more information on this impact.
- Being clear about the dates for any upcoming changes up front is cited as important across frames and water sources.
- If an impact on bills is not mentioned, as in the environmental frame, customers commonly mention wanting information on this. Even where it is stated there will be no impact, customers express scepticism about this and ask for more information on price impact.

Example of findings: Reassurance about what will *not* change is the most liked part of the practical framing



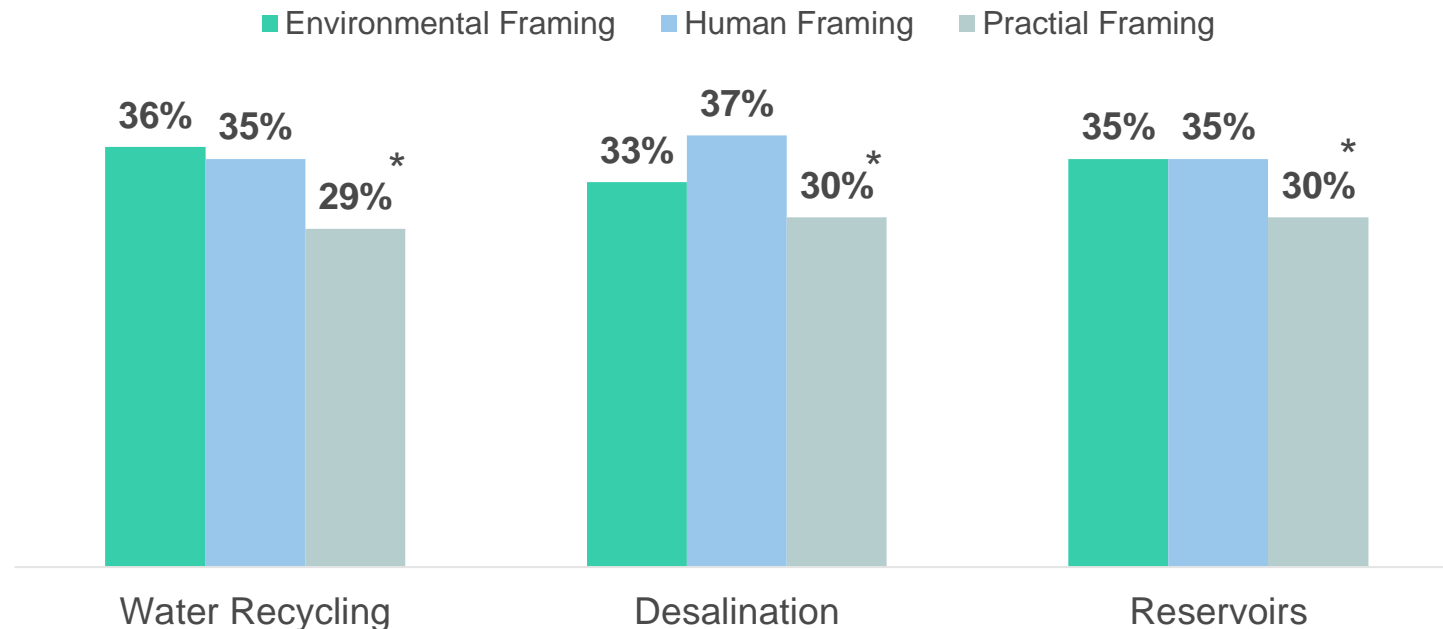
S5 Please read the following letter, which sets out a hypothetical future change in the supply of the water. When you have finished reading it, please show us which parts you like or dislike by clicking

Base: All respondents seeing reservoirs, HH (n=605)

Overall, the environmental and human framings are slightly preferred to the practical framing

Household customer framing preference

Showing % selecting each



* = Statistically significantly lower at 95% confidence level

Whilst specific communications examples were not tested within a qualitative setting, customers generally indicate a preference for some form of 'practical framing' in communications that focuses on the impact on them ahead of 'environmental framing', which feels important but lacking in personal relevance and impact.

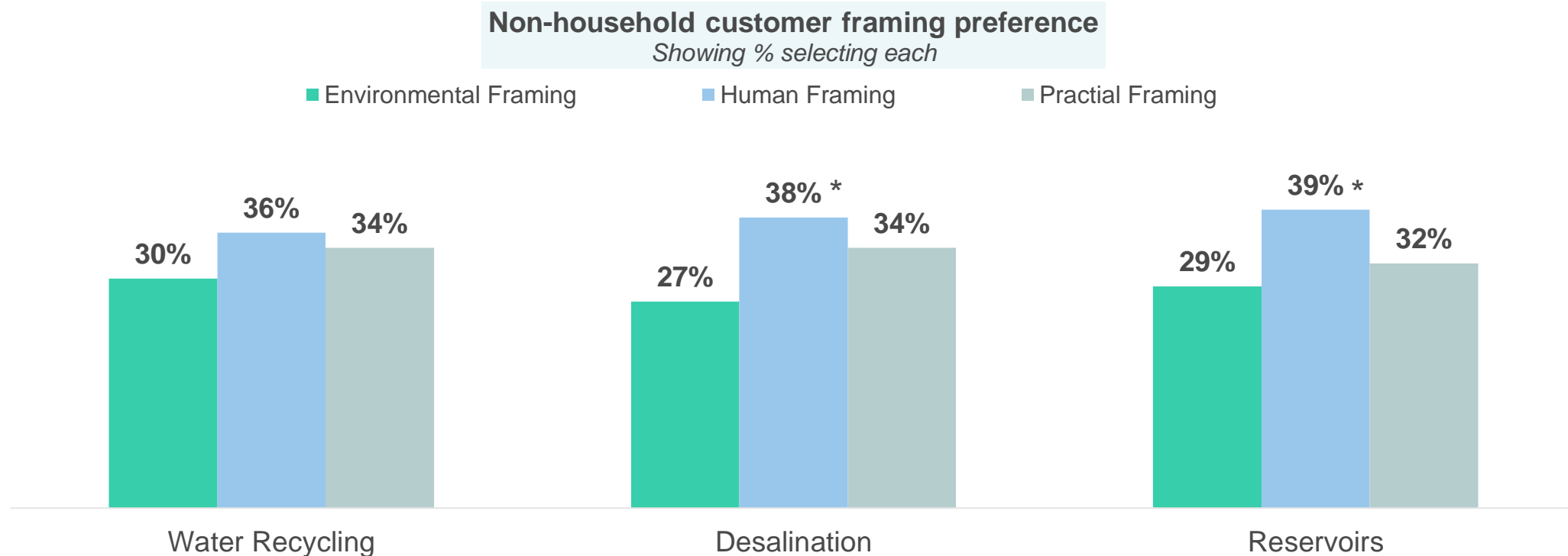
However, in a quantitative setting, the environmental lens emerges as being more important. The added length and reassurance of the environmental frame is helpful quantitatively, while the human frame does a better job of addressing the practical concerns about the source change.

Preferences did not show significant differences by water company area

F1+S6. Thinking about the three ways of communicating this change to your water supply, overall, which of these do you prefer?

Base: All respondents, HH (n=1762 Water Recycling, n=1762 Reservoirs, n=1650 Desalination)

For non-household customers, the environmental frame is seen as less relevant



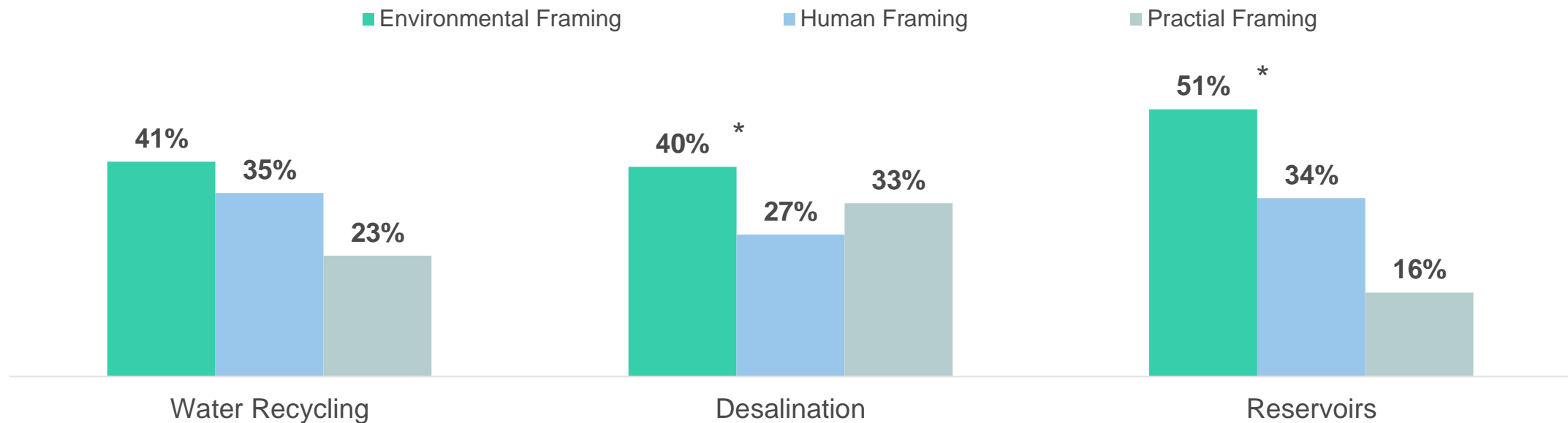
* = Statistically significantly lower at 95% confidence level

S6+F1 Thinking about the three ways of communicating this change to your water supply, overall, which of these do you prefer?

Base: All NHH respondents (n=198)

Among subgroups, only environmentally aware individuals show a consistent preference across sources

Highly environmentally aware individuals framing preference
Showing % selecting each



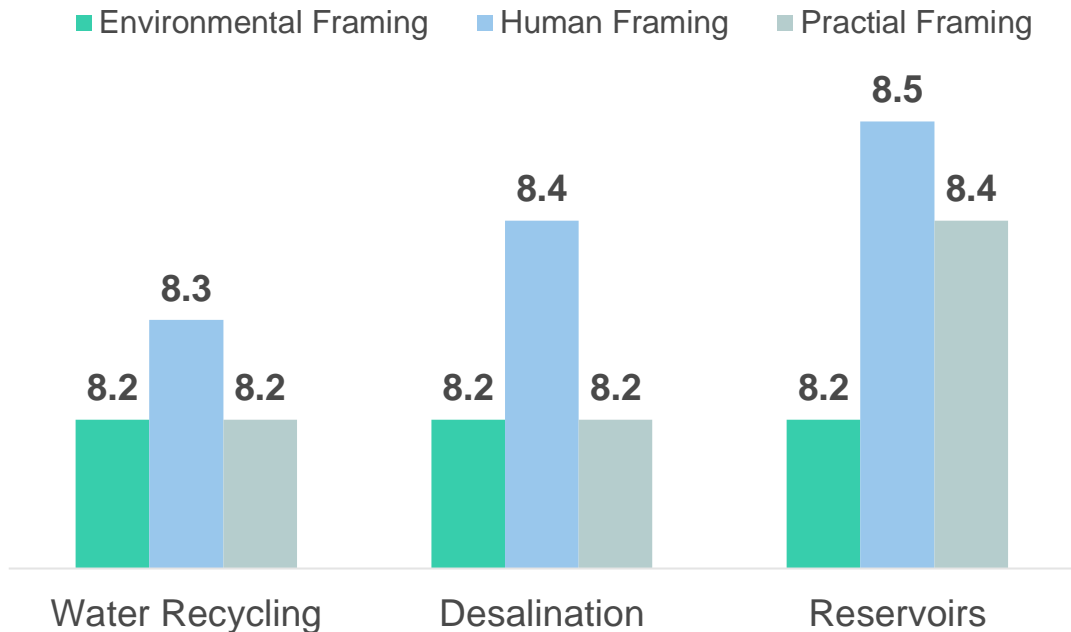
* = Statistically significantly lower at 95% confidence level

S6 Thinking about the three ways of communicating this change to your water supply, overall, which of these do you prefer?

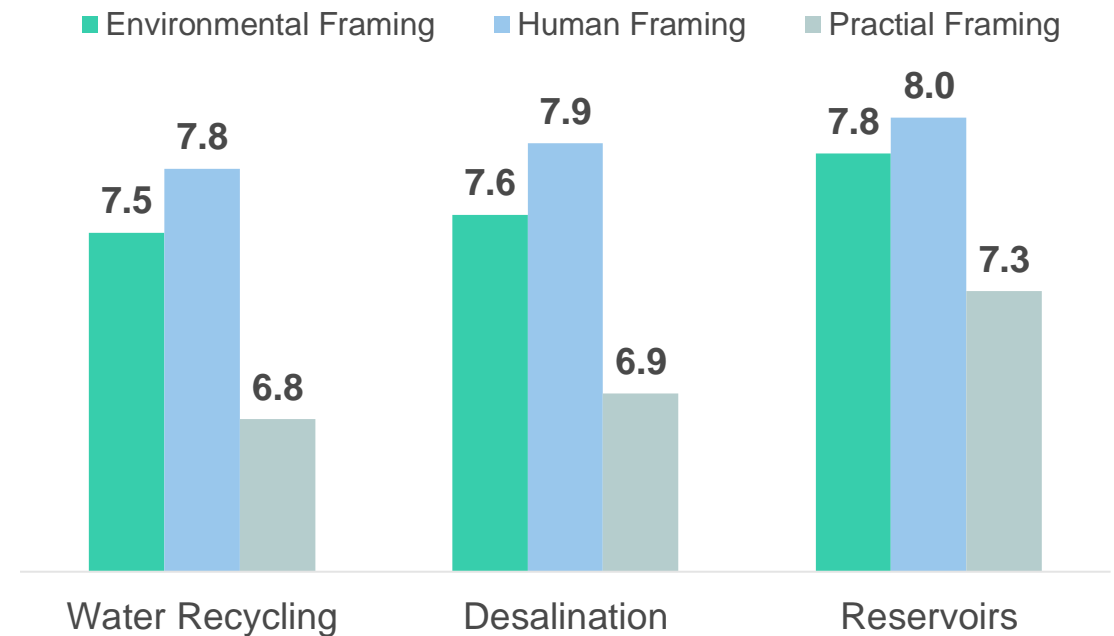
Base: HH Highly Environmentally Aware (Those with strong agreement with the statements "Protecting lakes, rivers, reservoirs, fish and other aquatic plants and wildlife is really important to me and I am concerned about the impact of climate change on the natural environment in my area") (n=269)

Household customers see the environmental framing as harder to understand, and as giving marginally less information

Household customer rated ease of understanding of each framing
Showing mean score out of 10



Household customer rated information provision of each framing
Showing mean score out of 10



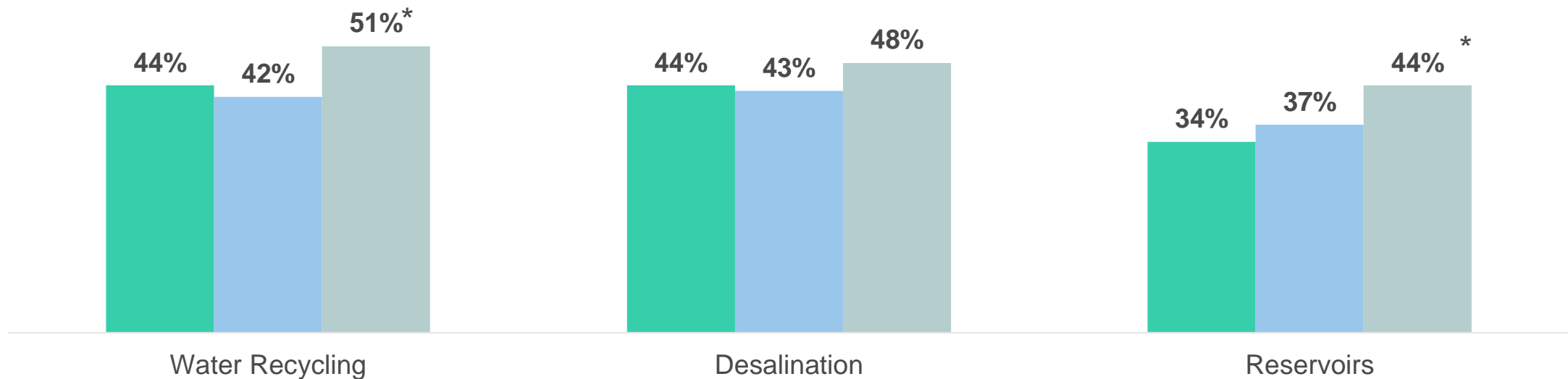
S1 - How easy is this letter to understand? S2- To what extent does this letter tell you everything you need to know about this change? Base: All respondents, HH (n=1762), (n= 605 Water Recycling, Reservoirs) (n=552 Desalination)

Household customers are significantly more concerned about the change when given the practical framing

Rated level of concern about change after seeing each framing

Showing % concerned (very + somewhat)

■ Environmental Framing ■ Human Framing ■ Practical Framing



* = Statistically significant difference at 95% confidence level

S4 - If you received this letter, how concerned would you be about this change of your water supply? Base: All respondents, HH (n=1762) (n= 605 Water Recycling, Reservoirs) (n=552 Desalination)

In general customers show similar levels of concern across customer types with the following nuances*

- Middle aged customers (35-54) and property owners report more concern about Reservoirs as a source change across framings than other customers, likely reflecting concerns about Reservoir location and construction.
- Highly environmentally aware customers consistently report more concern about source change to a Reservoir or Recycled Water, this is lower when they are given an environmental framing, but still elevated indicating that the environmental lens may need some inclusion for these specific customers to provide information to avoid possible complaints
- Customers who are *currently* dissatisfied with their water company, whether overall or in terms of the taste, reliability and/or hardness of the water **are not** statistically more or less concerned about a source change than average customers across any framing.
- Customers who report reading bills in detail and always reading supplementary information with bills report higher levels of concern across sources, reinforcing the need for supplementary information to be available as these customers are likely to always want additional detail to regular customers
- Non-household customers show slightly higher levels of concern compared to household customers, although not to a statistically significant level. Information about supply disruption is key to this group.

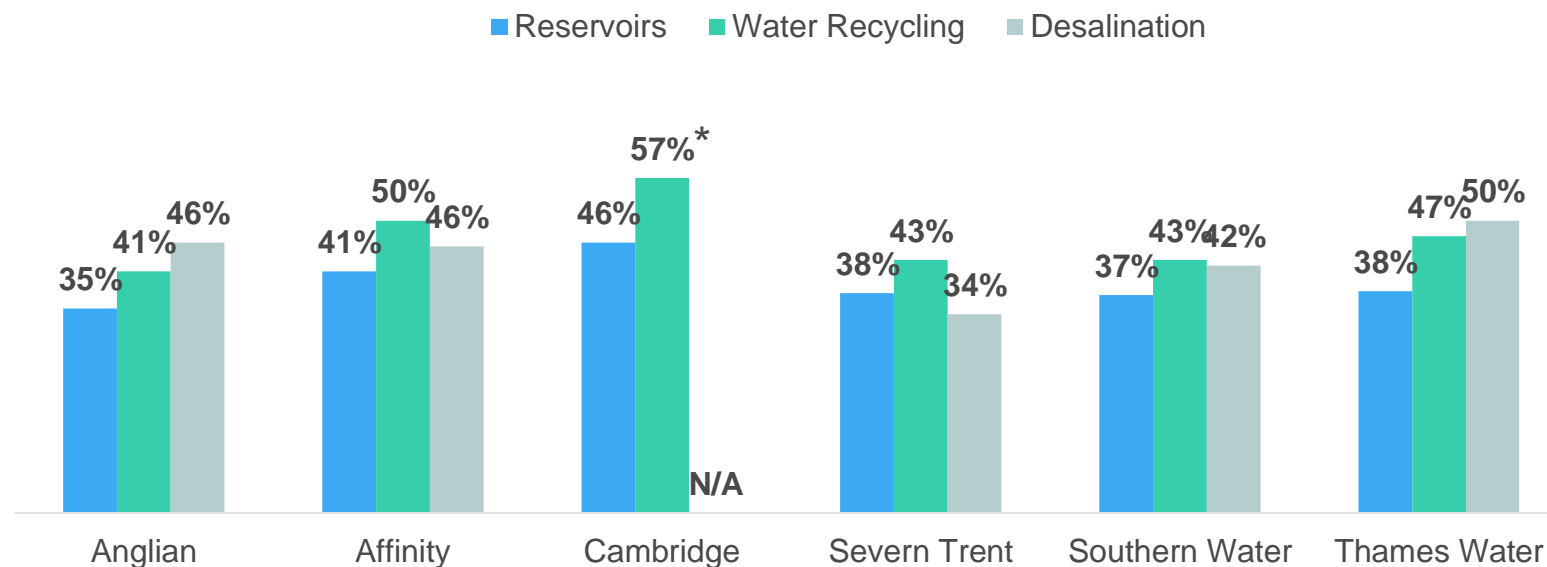
* Full data for these subgroup breakdowns is available in report appendix

S4 - If you received this letter, how concerned would you be about this change of your water supply? Base: All respondents, HH (n=1762) (n= 605 Water Recycling, Reservoirs) (n=552 Desalination)

Overall, Cambridge water customers are slightly more concerned about possible source changes than other customers

Rated level of concern about change – Average across framings by water company area

Showing % concerned (very + somewhat)



* = Statistically significant difference from other Severn Trent, Thames, Southern, Anglian Water at 95% confidence level

*Desalination not within Cambridge Water future plans

S4 Combined average - If you received this letter, how concerned would you be about this change of your water supply? Base: All respondents, HH (n=1762) Results from frames combined and averaged across water companies

Analysis of verbatims does not indicate a single consistent reason why Cambridge Water customers are more concerned than other customers about source changes.

Indicatively, for reservoirs there are a number of customers who indicated that they are particularly concerned with water hardness from a reservoir, and for water recycling a desire for more information on safety and chemicals is mentioned frequently.

WHAT THIS MEANS:

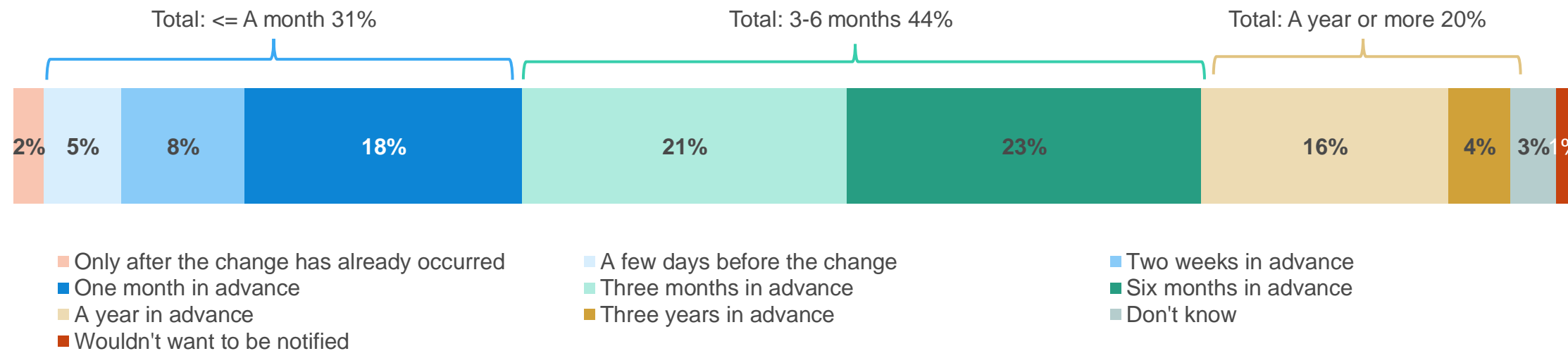
The human frame provides customers with the most information and performs best across customer groups

While both the human and environmental frames perform strongly with household customers in the quantitative research, the human framing is overall the preferred framing as it best marries the findings of the qualitative and quantitative research together, and best reflects the specific concerns that customers raise about individual sources.

The most important information to land in communication about water source change is clear information on customer impacts

Customers are **most concerned about the personal impacts of water source change** and the effect this will have on their water supply in terms of hardness, taste and the impact on their bills. Giving clear information about what will and will not change in relation to these human impacts is the most important aspect of communication around a water source change.

Most household customers want to be first notified three to six months in advance of the change

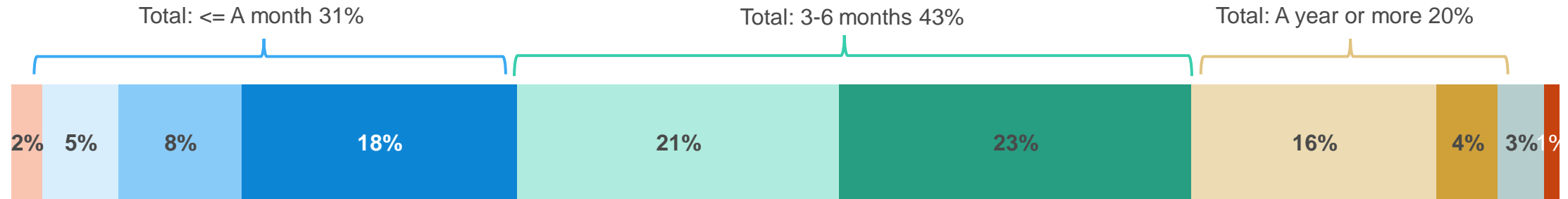


N.B This was consistent across water sources with no consistent differences observed by water source type or demographics

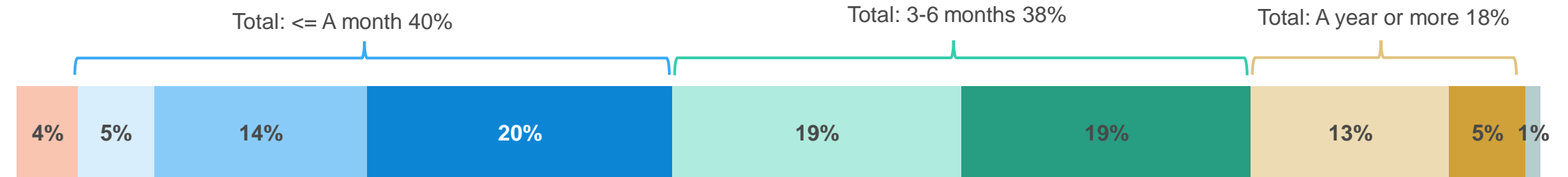
S7. Thinking about this change, how far in advance would you first want to be notified by your water company about this upcoming change to your water supply? Base: All respondents, HH (n=1762)

Non-household customers overall are more likely to want a closer notification of a change

Household customers



Non-household customers



S7. Thinking about this change, how far in advance would you first want to be notified by your water company about this upcoming change to your water supply? Base: All respondents, HH, (n=1762), NHH (n=198)

Most respondents want to be reminded again of the change at a point closer to the time, but generally only once

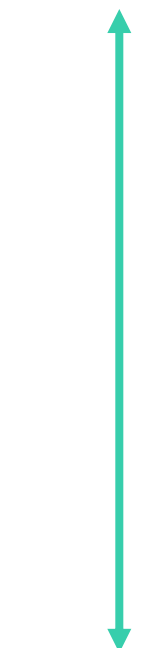
What points after the first notification customers would you want to be reminded about the change of supply?

Showing % selecting each option

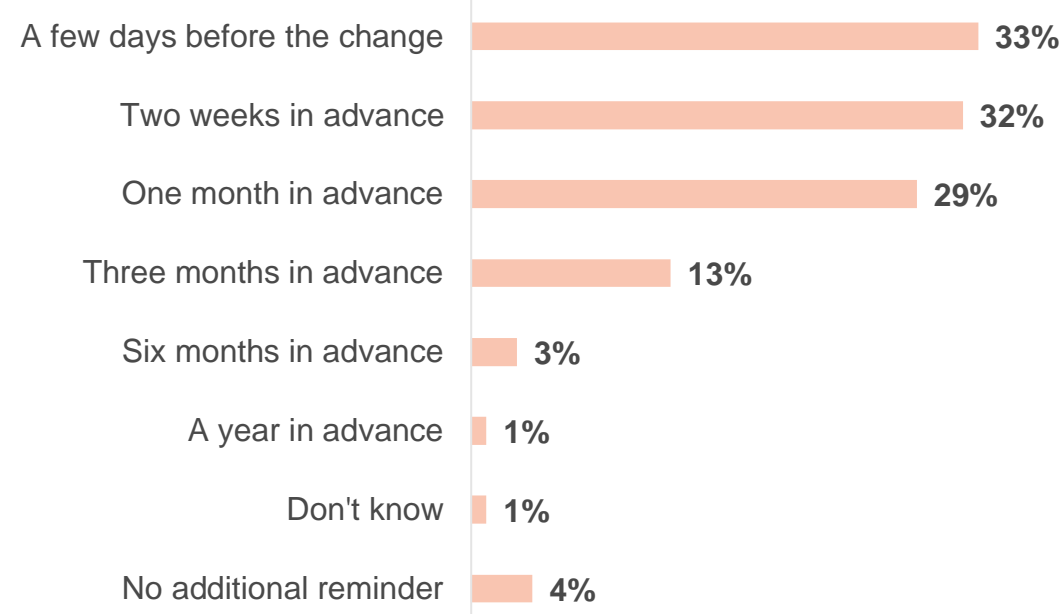
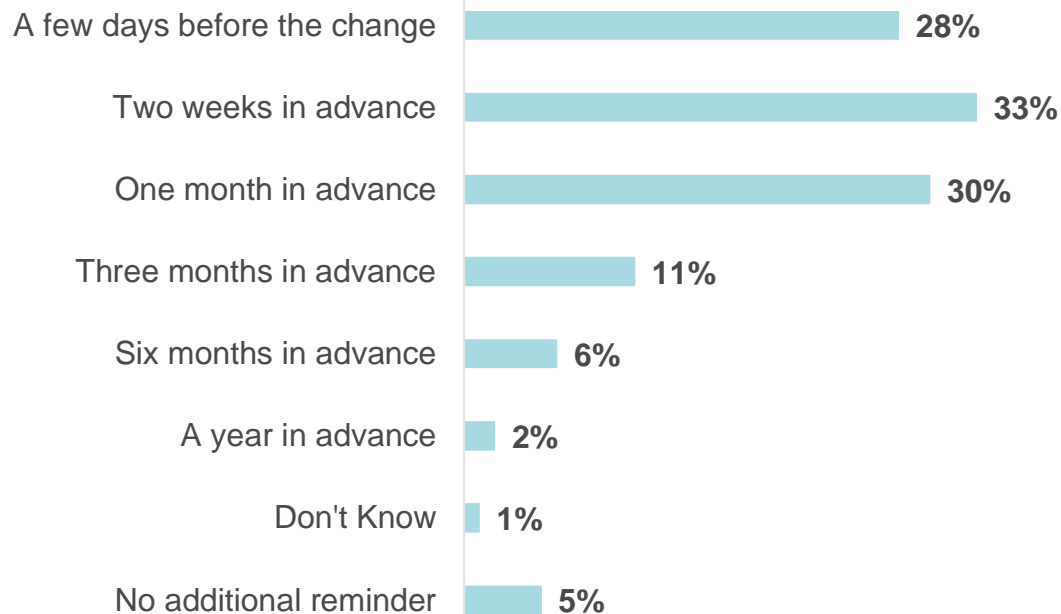
Household customers

Non-household customers

Closer to change



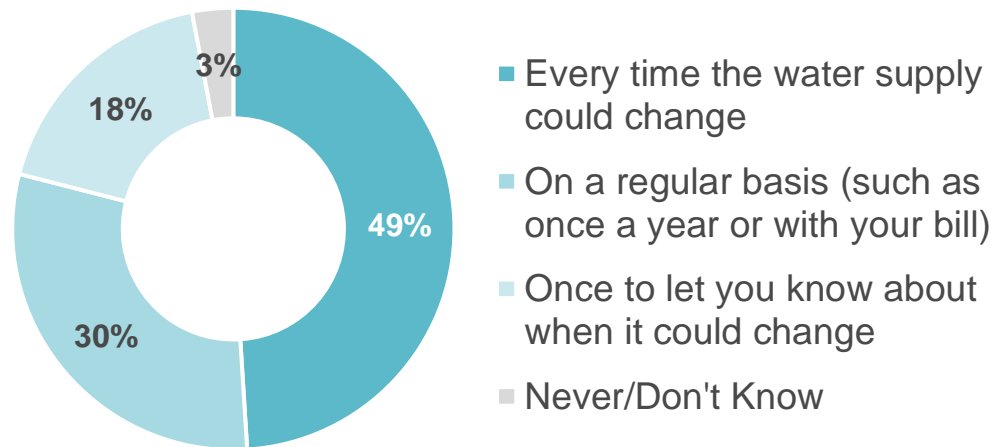
In advance of change



S8 And following this first notification, at what points would you want to be reminded about this upcoming change of supply? Base: All those who would want to be notified of a change prior to the switch, HH (n=1430), NHH (n=177)

Half of household customers want to be told of a temporary or seasonal change each time it occurs

Desired communication from water companies about seasonal supply changes
Showing % selecting each option



Highly environmentally aware customers (**59%**) and those who identify as very pessimistic about being able to afford basics (**56%**) are most likely to want to be told every time that the supply could change.

Non-Household customers exhibit similar preferences to household customers.

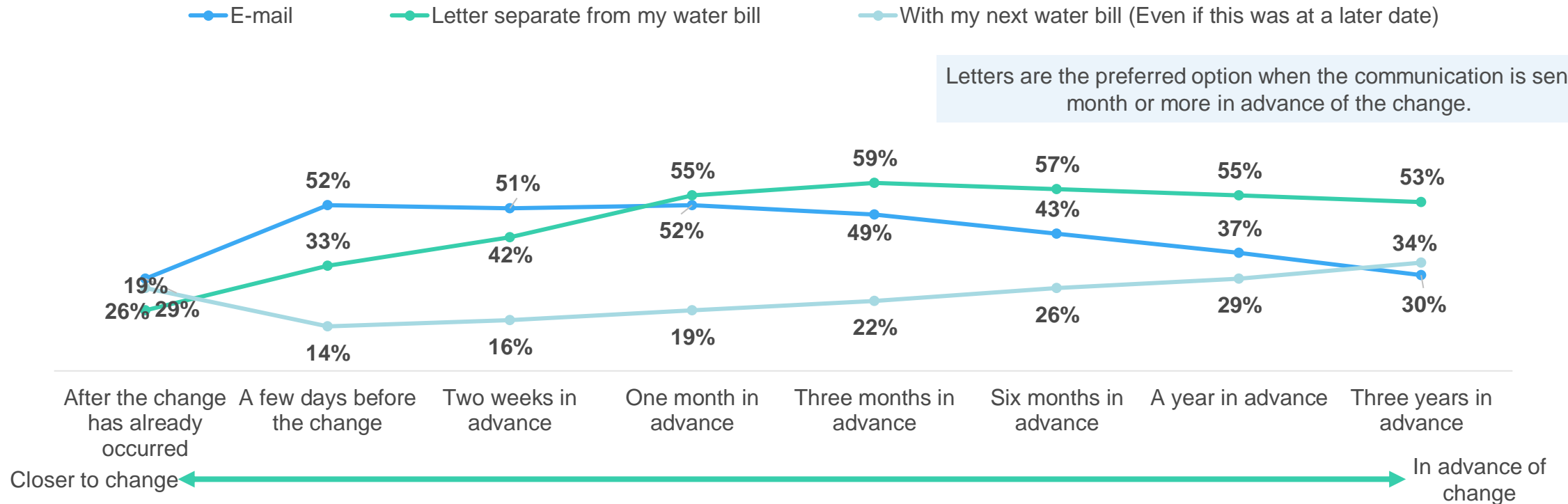
S9a. If the source of your water supply was likely to change at different times of the year (i.e. in the summer when supplies from your usual water source were lower) - how often do you feel the water company should communicate around this change? Base: All respondents, HH (n=1762)

Highly Environmentally Aware - (Those with strong agreement with the statements " Protecting lakes, rivers, reservoirs, fish and other aquatic plants and wildlife is really important to me and I am concerned about the impact of climate change on the natural environment in my area)

Customers would generally like to receive communications via email or a letter

Desired communication format from water companies about supply changes for each time period

Showing % selecting each – Top 3 comms methods only



S9. [thinking about the times you would want to be notified of a change of supply] What formats would you want to receive this information in at each point? Base: Respondents selecting each communication timing, HH (n=30-732)

A majority of customers *claim* they will click through to a website and look for more information about a change

In the qualitative research, customers are likely to say that having more information available was important, but that they are unlikely to personally click through to read it.

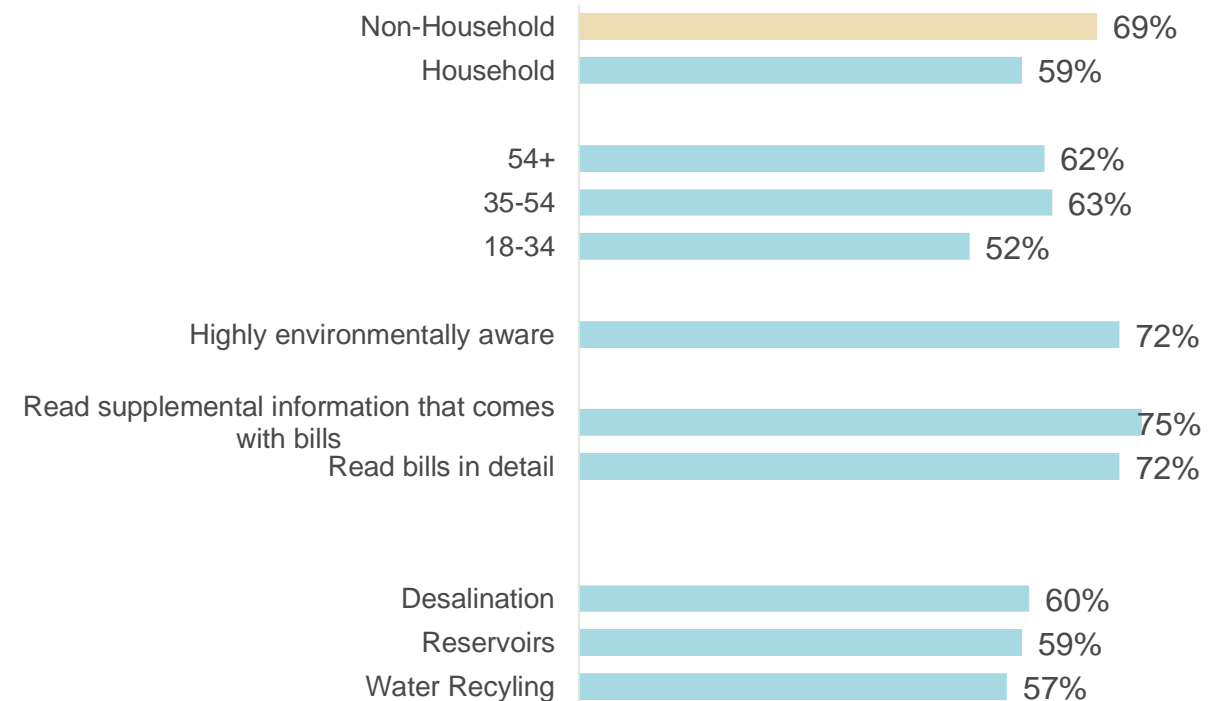
In the quantitative research however, a majority of customers say they definitely or probably would click through a link to access more information about a source change.

Given the findings from the qualitative research, and the earlier quantitative finding that only 29% of Bill payers read supplemental information that goes along with it, it is likely that there is some overclaim in this statement.

However, this does act as reinforcement that it is important to have comprehensive information available for customers to access *if needed* to provide reassurance on topics of particular interest to them (such as the environment).

How likely would you be to click through and look for more information?

% Definitely/Probably would click through



S10 Looking at the information provided, more information on this water source change is available through www.watersourcechange.co.uk. How likely would you be to click through and look for more information? Base: All Respondents HH (1762), NHH(198)

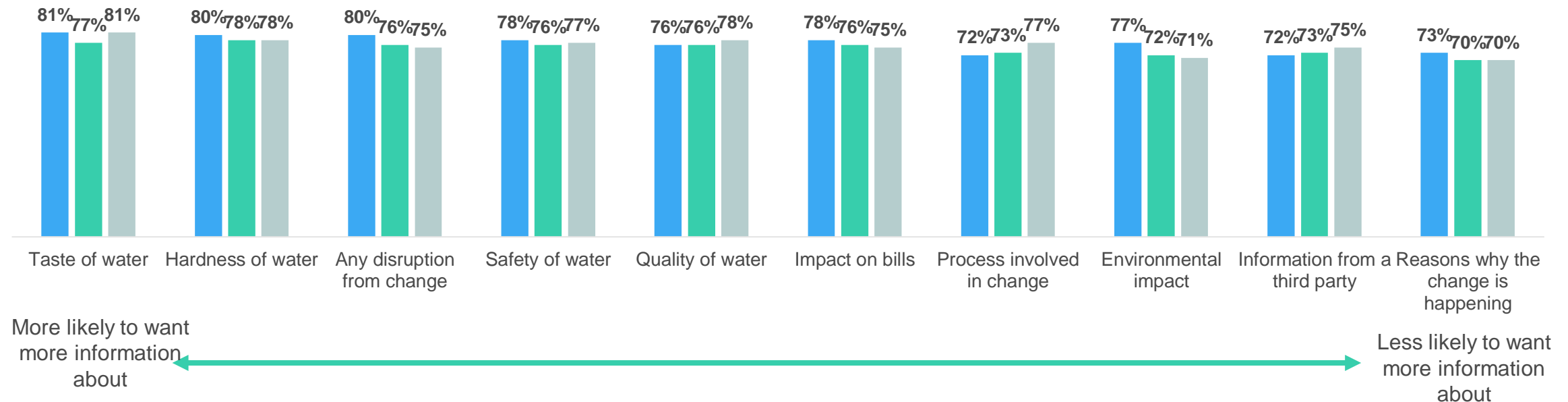
Highly Environmentally Aware - (Those with strong agreement with the statements "Protecting lakes, rivers, reservoirs, fish and other aquatic plants and wildlife is really important to me and I am concerned about the impact of climate change on the natural environment in my area")

Customers who would use such a website generally want any linked website to be a comprehensive source of information

What information would you personally want to be available on this website?

% Definitely/Probably would want to read more about this

■ Reservoirs ■ Desalination ■ Recycling



The high level of additional information customers would want reflects the low level of customer familiarity with water source change. Although customers want information on all topics, they are most interested in the practical effects of the change, mirroring the qualitative findings, and detailed readings about the aspects of the change it is most important to land with customers.

S11- What information would you personally want to be available on this website (in addition to the information shown in this communication)

Base: All Respondents HH (1762)

Implications of quantitative findings for the five key communications factors

Language

- When presenting the reasons for a change, language that explains the benefits of the change (e.g., protecting wildlife, securing a reliable long-term supply) is received more positively than language emphasising the negative consequences of not making a change.

Tone of Voice

- As part of reassuring customers, it is important to give specific details about how any practical changes to supply, pricing, hardness and taste will or will not affect customers.
- Where a water source is unfamiliar there is a particular need to anticipate possible objections and neutrally address them.

Channel

- A letter, separate from the bill or an email, is seen as the most appropriate initial contact channel, depending on how close to the water source change the communication may occur.
- Having more detailed information available on-demand is important to answer customer questions.

Timing

- Most household customers want to be first notified three to six months in advance of the change of source itself.
- Providing a reminder of an upcoming change closer to the time is valuable, and would supplement this. This could be an email reminder.

Messenger

- Water companies are seen as a logical key messenger on this topic.
- An external, neutral voice would be a beneficial addition to a website, to offer reassurance (e.g., Drinking Water Inspectorate) but customers do not ask for this unless prompted.

Customers have specific interests when it comes to the additional information that would be provided

Reservoirs

- **Location** / where the reservoirs are going to be located is a common concern not mentioned within the text. Although this would not have been possible for this test, it will be important to include in future communications.
- Beyond this, customers commonly just ask for more information on the **changes in taste and hardness** specifically.

Water Recycling

- For recycled water the mention of **wastewater** in the texts raises **concerns** amongst a minority of respondents. (Although for others it sounds like a positive, sustainable option) and prompts a desire for more information on **safety**.
- **Taste and hardness** are common concerns across all sources when customers are told they may change, but particularly a concern raised about recycled water in the human/practical frames.

Desalination

- **Price** is particularly mentioned as a spontaneous area for more information in relation to desalination, especially in the environmental frame where price is not mentioned.
- Some respondents mention **taste** as an area of spontaneous concern for Desalinated water, with a misconception that desalinated water may have a “salty taste”, reflecting the low level of customer understanding.

Verbatim analysis: All respondents HH (n=1762), NHH (n=198)

WHAT THIS MEANS:

The human frame provides customers with the most information and performs best across customer groups

While both the human and environmental frames performed strongly with household customers in the quantitative research, the human framing is overall the preferred framing as it best marries the findings of the qualitative and quantitative research together, and best reflects the specific concerns that customers raise about individual sources

The most important information to land in communication about water source change is clear information on customer impacts

Customers are **most concerned about the personal impacts of water source change** and the effect this will have on their water supply in terms of hardness, taste and the impact on their bills. Giving clear information about what will and will not change in relation to these human impacts is the most important aspect of communication around a water source change.

Simple communications at regular time periods provide the reassurance and information customers want

Customers are looking for reassuring information presented in a time frame that allows them to react to the change and seek out more information themselves if they wish. Simple communications formats such as letters and emails that are familiar ways of interacting with a water company are likely to be most successful in meeting customer expectations.

The following sections outline attitudes towards specific water source options in detail, with implications for source-specific communications outlined



Water Recycling



Overall, key concerns for Water Recycling centre on safety, quality and the environment



Safety

Aspects of the recycling process can **raise safety and hygiene concerns** e.g. the use of wastewater ('yuck' factor) and chemicals involved.

“

I'm wary of chemicals, and if it is sewers, then I immediately think will they be using chemicals?

Household customer,
London

”



Quality

Connected to the impact on safety, customers worry that recycling will **noticeably impact** the water they receive 'out of their tap' e.g., taste, smell, appearance.

“

I don't like the idea of it. It just seems dirty.

Household customer,
Norwich

”



Environment

Customers are concerned about the impact of the recycling process on **natural environments and local areas** e.g. smell from recycling plants, chemical damage to wildlife and habitats.

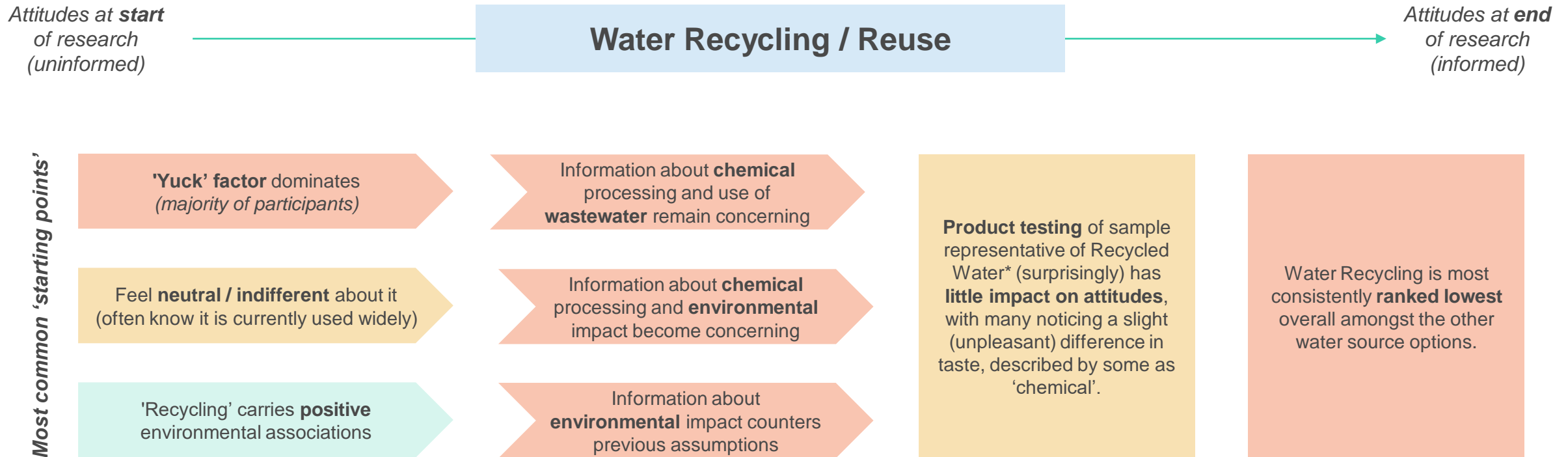
“

I can't see how it's useful for us, if it's bad for the environment and uses chemicals.

Household customer,
Norwich

”

Despite different 'starting points', attitudes towards Water Recycling at the end of the research are still largely negative



Product sample tested: **Denge WTW**: Reverse Osmosis water representative of the kind of process that may be used in future water recycling schemes or desalination schemes

It can be difficult for customers to overcome psychological barriers around Water Recycling

The majority of customers are initially uncomfortable with the notion of Water Recycling, largely driven by hygiene and safety concerns.

- These concerns centre on the involvement of 'wastewater' or 'sewage' in the recycling process - and the potential impact of this on safety and quality.
- Customers worry that this will contaminate the water, and even if they believe that regulation and safety checks are in place, they simply 'don't like the idea' of waste being involved in the process.
- For most, the 'yuck' factor associated with perceptions of 'recycling' water is difficult to put aside.

When tasting a **product sample** that reflects the type of water that might be produced from this source option, customers are surprised that the sample looks the same as their 'normal' water – and whilst some reported a slight difference, this was split between positive and negative, and all agreed they could adapt to the change. However, this does little to shift the ingrained 'yuck' factor, even when the product is revealed.

“
The idea of it makes me feel sick.
”
Household customer,
Norwich

“
Some people might wonder if it is as good as the real stuff.
”
Household customer,
Peterborough

However, a small minority of customers do feel more neutral about this source

A minority of customers have an awareness – or expectation – that a form of water ‘reuse’ is currently involved in the UK water supply.

- This is particularly expected in more densely populated areas, such as London, where it is assumed that tap water has been ‘reused’ and treated to some extent.
- In light of this, the absence of customer experience issues (e.g., changes to taste, smell, appearance) and public health issues or contamination is reassuring.

These customers generally feel more open to Water Recycling, and the **product sample** tasting reaffirms this due to the lack of noticeable differences in the sample compared with their ‘normal’ tap water.

“

I think it's so subtle. I just think if you drink it, you wouldn't notice. It's only because we are dissecting it that we're thinking this.

Household customer,
London

”

'Recycling' can carry positive environmental associations for a minority of customers

A minority of customers instinctively respond positively to the term 'recycling', associating it with other 'environmentally friendly' behaviours that they are familiar with in their day-to-day lives.

- Although quantitatively environmental concern is consistent across age ranges, younger customers are more likely to raise the environment spontaneously in qualitative sessions. They are therefore more likely to make this positive initial association.
- However, these perceptions can be countered when customers learn more about the chemicals involved in the recycling process, and the potential for environmental damage – with the impact on wildlife and natural environments particularly concerning.

“

Recycling is usually considered something positive, but it... has a negative environmental impact.

Household customer,
London

”

“

It's a reliable source and allows the reuse of a resource that would otherwise be lost – I want to like it and I feel a little bit let down, the habitat impact affected me.

Household customer,
Peterborough

”

Responses to the communication framings reflect concerns about quality and safety raised in the qualitative research



Across **all** three framings, customers respond positively to:

- Mentions of protecting **wildlife and the environment**.
- **Reassurances** of regulation and quality standards.

Across the **human** and **practical** framings, customers respond more negatively to:

- The **principle of moving to recycled water**, indicating an instinctive resistance or 'yuck factor'.
- The prospect of **changes to taste and hardness** of their water.

“
The standard required would force the water companies to produce great water.
 ”

Household customer, Quantitative survey

What this means → Positive environmental impacts of moving to Water Recycling can help to increase appeal, while safety and quality reassurances must be included in communications to help overcome 'yuck factor'.

Verbatim analysis: All respondents HH (n=1762), NHH (n=198)

Examples of each framing: Water Recycling

Environmental

Dear customer,

We want to let you know about a change in your water source due to take place on 1 September 2022. This will ensure you continue to have a long-term reliable supply of water.

Why do we need to change your water source?

Demand for water in your area, and across many areas in England, is getting close to the limit of how much water is available. This is because of increased demand from our growing population and the effects of climate change on our water supply.

Your current water source is from chalk streams or underground chalk aquifers. We need to preserve this source by limiting how much water we can take from it to protect our wildlife and our environment.

To ensure a long-term reliable supply of water, your new water source will be from recycled water.

Water recycling is a highly regulated process already used widely across the world. Wastewater is treated to extremely high standards to enable it to be safely used again as drinking water.

What happens next?

You do not need to do anything. If you would like to find out more about your water source and why it is changing, please visit www.watersourcechange.co.uk

How can you help?

We can all contribute towards a long-term reliable supply of water by being more water-efficient. This can be as simple as turning off the taps when we brush our teeth, reporting leaks and taking more showers and fewer baths. For more information on how to be water efficient, please visit www.waterefficiency.co.uk.

The environmental framing is received positively, though the explanation of demand is less compelling

- >20% Net likeability (like-dislike)
- >10% Net likeability (like-dislike)
- >0% Net likeability (like-dislike)
- =/ $<$ 0% Net likeability (like-dislike)
- >-20% Net likeability (like-dislike)

Dear customer,

We want to let you know about a change in your water source due to take place on 1 September 2022. This will ensure you continue to have a long-term reliable supply of water.

Why do we need to change your water source?

Demand for water in your area, and across many areas in England, is getting close to the limit of how much water is available. This is because of increased demand from our growing population and the effects of climate change on our water supply.

Your current water source is from chalk streams or underground chalk aquifers. We need to preserve this source by limiting how much water we can take from it to protect our wildlife and our environment.

To ensure a long-term reliable supply of water, your new water source will be from recycled water.

Water recycling is a highly regulated process already used widely across the world. Wastewater is treated to extremely high standards to enable it to be safely used again as drinking water.

What happens next?

You do not need to do anything. If you would like to find out more about your water source and why it is changing, please visit www.watersourcechange.co.uk

How can you help?

We can all contribute towards a long-term reliable supply of water by being more water efficient. This can be as simple as turning off the taps when we brush our teeth, reporting leaks and taking more showers and fewer baths. For more information on how to be water efficient, please visit www.waterefficiency.co.uk.

Speaking about demand is challenging for customers, but the reasoning of population and climate change is disliked less than the initial fact (14%/13% vs 23% dislike).

Mentions of chalk streams and chalk aquifers are received more neutrally.

Mentions of protecting both wildlife and the environment are well liked.

Information on next steps and direction to further content is received positively.

S5 Please read the following letter, which sets out a hypothetical future change in the supply of the water. When you have finished reading it, please show us which parts you like or dislike by clicking

Base: All respondents seeing recycling, HH (n=605)

Examples of each framing: Water Recycling

Human

Dear customer,

We want to let you know about a change in your water source due to take place on 1 September 2022. This will not affect your bill or the quality or pressure of your water and will ensure you continue to have a long-term reliable supply of water. The only change you may notice is a slight difference in taste and the 'hardness' of your water.

Why do we need to change your water source?

Demand for water in your area, and across many areas in England, is getting close to the limit of how much water is available.

To ensure we provide you with a secure long-term supply of water, your new water source will be from recycled water. Water recycling is a highly regulated process already used widely across the UK. Wastewater is treated to extremely high standards to enable it to be safely used again as drinking water.

Please be assured that the quality and safety of your water will remain the same and you will not experience any disruption to your water supply or need to take any action.

What happens next?

We will remind you of the change to your water source by text message a few days before the 1 September.

If you would like more information about where your water will be sourced from please visit www.watersourcechange.co.uk.

How can you help?

We can all contribute towards a long-term reliable supply of water by being more water-efficient. This can be as simple as turning off the taps when we brush our teeth, reporting leaks and taking more showers and fewer baths. For more information on how to be water efficient, please visit www.waterefficiency.co.uk.

In the human framing, customers are most positive about reassurances of quality and safety

- >20% Net likeability (like-dislike)
- >10% Net likeability (like-dislike)
- >0% Net likeability (like-dislike)
- =/<0% Net likeability (like-dislike)
- >-20% Net likeability (like-dislike)

Dear customer,

We want to let you know about a change in your water source due to take place on 1 September 2022. This will not affect your bill or the quality or pressure of your water and will ensure you continue to have a long-term reliable supply of water. The only change you may notice is a slight difference in taste and the 'hardness' of your water.

Why do we need to change your water source?

Demand for water in your area, and across many areas in England, is getting close to the limit of how much water is available.

To ensure we provide you with a secure long-term supply of water, your new water source will be from recycled water. Water recycling is a highly regulated process already used widely across the UK. Wastewater is treated to extremely high standards to enable it to be safely used again as drinking water.

Please be assured that the quality and safety of your water will remain the same and you will not experience any disruption to your water supply or need to take any action.

What happens next?

We will remind you of the change to your water source by text message a few days before the 1 September.

If you would like more information about where your water will be sourced from please visit www.watersourcechange.co.uk.

How can you help?

We can all contribute towards a long-term reliable supply of water by being more water efficient. This can be as simple as turning off the taps when we brush our teeth, reporting leaks and taking more showers and fewer baths. For more information on how to be water efficient, please visit www.waterefficiency.co.uk.

Customers respond positively to assurances that their water bills, quality and pressure will not be affected by the change.

By contrast, they are much more negative about the suggestion of noticeable changes to the characteristics of their water, with 37% disliking this statement.

Customers are less positive about the fact that they will be moving to recycled water.

However, information about regulatory processes is received more positively, and assurances of quality and safety are particularly well received.

S5 Please read the following letter, which sets out a hypothetical future change in the supply of the water. When you have finished reading it, please show us which parts you like or dislike by clicking
Base: All respondents seeing recycling, HH (n=605)

Examples of each framing: Water Recycling

Practical

Dear customer,

We want to let you know about a change in your water source due to take place on 1 September 2022. This will not affect your bill or the quality or pressure of your water and will ensure you continue to have a long-term reliable supply of water.

Your new water source will be from recycled water. You will not experience any disruption to your water supply or need to take any action.

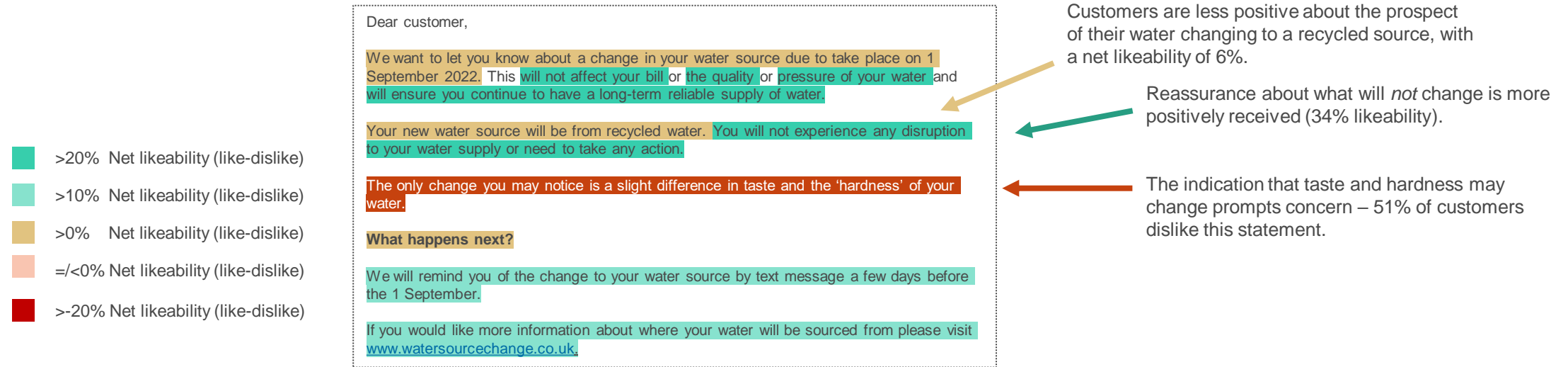
The only change you may notice is a slight difference in taste and the 'hardness' of your water.

What happens next?

We will remind you of the change to your water source by text message a few days before the 1 September.

If you would like more information about where your water will be sourced from please visit www.watersourcechange.co.uk.

Though in the practical framing, customers are most resistant to the prospect of changes to taste and hardness



S5 Please read the following letter, which sets out a hypothetical future change in the supply of the water. When you have finished reading it, please show us which parts you like or dislike by clicking

Base: All respondents seeing recycling, HH (n=605)

Concerns and watchouts for communicating source change to Water Recycling

What works well


- Customers appreciate the clear steer that recycled water is safe to drink.
- In general, the human and environmental frames are seen to give a good amount of information in a clear fashion. Customers presented with the human frame do not spontaneously ask for more environmental information.
- The tone of each communication is generally seen as reassuring, and it was important that supply is unchanged.


Watch outs and additional information to consider


- A significant number of customers want to know more about the recycled water process across all of the frames. Water companies should therefore consider including a weblink to an online explainer that goes into more details specifically about the recycling process and reassurance that they are not “drinking sewage”.
- When told that the hardness of their water may change, this is frequently cited as a concern by respondents, and more information on whether the water would be harder or softer is important. Customers are also concerned about possible changes to taste for recycled water.
- The practical frame in particular is seen as lacking detail for recycled water.

Water Recycling | Key implications for communications


WHO


 **Water companies** are seen as a logical key messenger on this topic.


 **References to 'quality control' processes** (e.g. high standards) offer reassurances of safety and the implicit involvement of a regulatory body / appropriate safety protocols.

 **Specific external voices**, such as Public Health bodies or Regulators, should be mentioned with care as these can actually raise alarm.


WHAT


 **Offer reassurances**, particularly in relation to drinking water, to address poor safety perceptions.

 **Reiterate that water reuse is commonplace** across the UK, in order to help to normalise this source option.

 **Avoid detail** on unfamiliar and technical processes as these can be confusing, and can in fact raise further questions or concerns.


HOW


 **Adopt a calm tone of voice**, communicating in a 'neutral' manner to help convey a sense of calm and 'business as usual'.


 **Avoid alarming language**, such as terms more easily associated with 'unsafe' aspects should be avoided, such as:

- Sewage
- Waste
- Industrial products
- Chemicals


WHERE


 **Keep initial contact concise**, with shorter pieces of information working well for direct communications.

 **Direct customers elsewhere** for further, more detailed, additional information (e.g. weblink, contact numbers).

 **Streamline communication**, providing updates on source changes alongside other forms of direct contact to increase the opportunity of cutting through (e.g. emails, bills).

WHEN

 **Communicate sooner** to the time that the change will occur if local construction works are planned (e.g. building a recycling plant in customers' local area).

 **Provide a timeline** of future key communication points if a large-scale local construction is planned, in order to offer a sense of consistency and clarity to the project.

Desalination



Key concerns for Desalination relate to its comprehension, environmental impact and safety



Comprehension

Customers are unfamiliar with desalination, so **descriptions can cause confusion** when technical language is used.

“

It's hard to make an informed decision about this

Household customer,
Norwich

”



Environment

Customers are concerned about the **negative environmental impacts on coastal and marine wildlife**, caused by the heavy infrastructure and by-products produced through the process.

“

I do wonder about the sea life and how their managing

Household customer,
Southampton

”



Safety

Related to the limited comprehension, customers feel **apprehensive about the high use of chemicals**, which they fear will have impacts on the safety and taste of desalinated water.

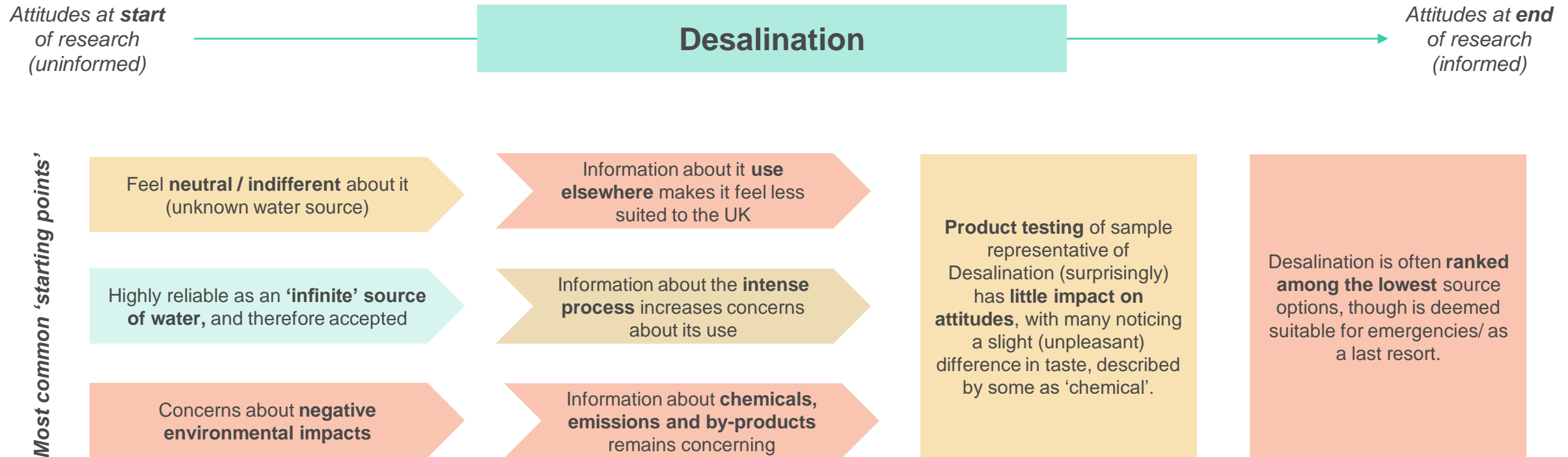
“

Would we be able to get rid of all the salt? Otherwise there could be health issues.

Non-household customer,
Peterborough

”

Although praised for its reliability, Desalination is ultimately judged to only be suitable in emergency scenarios



Product sample tested: **Denge WTW**: Reverse Osmosis water representative of the kind of process that may be used in future water recycling schemes or desalination schemes

Existing knowledge of Desalination is limited, but learning more can make it seem more suitable in arid climates

Few participants knew of Desalination before the start of the research.

- For some, the use of desalination in other countries builds support for Desalination as a 'tried and tested' solution to water scarcity.
- However, where there is awareness, Desalination is often associated with other countries with drier climates than the UK e.g. Canary Islands, the Middle East.
 - This can mean suggestions that Desalination is built in the UK seem like 'overkill', with a preference for other solutions to be implemented first.

“

I've never heard of it before, possibly because it is not widely used in the UK. I have been to Indonesia and saw desalination happening there.

Non-household customer,
Peterborough

”

The premise of Desalination is considered a 'common sense' option, but the intense process counters this assumption

Many initially feel Desalination is a logical solution to water shortage as the sea is a reliable water source, and the UK has a long coastline from which to extract seawater.

- However, learning about the high monetary and energy costs of the process raises concerns about relying on Desalination.
 - This information makes Desalination feel inefficient and more harmful than assumed.
- The need to build more infrastructure to transport Desalinated water to non-coastal water-stressed areas further adds to concerns about inefficiency.
- Despite this, participants continue to support it as a backup solution due to its reliability and flexibility, particularly during times of drought.

The **product sample** tasting reaffirms the suitability of Desalination during a time of drought - whilst some reported a slight difference in taste, this was not necessarily all negative, and all agreed they could adapt to the change.

“

It's beneficial if it's only used at certain times in the year like a drought, it's almost like an emergency supply.

Household customer,
London

”

Others express immediate concern about environmental impacts, which expand after learning more about the process

Disruption to coastal and marine wildlife is top-of-mind for other participants, who are concerned Desalination will cause irreversible harm to local ecosystems.

- There is an assumption sea life will be killed when extracting water.
 - This is seemingly confirmed after learning more, as well as when brine is released back into the environment.
- Learning more about the environmental impacts, including high carbon emissions, further confirm participant fears and increase concerns of those who previously view this option as a 'common sense' solution.
- Some suggest Desalination may become more suitable in the future if it was made more environmentally friendly though:
 - Re-purposing waste products (e.g., using salt to grit roads).
 - Powering the process with renewable energy.

“
I know we eat sea life but I don't want it to become extinct.
”
Household customer, Southampton

“
It worries me about the effect on the coastal wildlife. [We] won't run out of the sea - but when you look at some of the others, this not good for resiliency and energy use
”
Non-household customer, Southampton

Responses to the communications framings reflect the impact that comprehension has on appeal

Environmental

Human

Practical

Across **all** framings, customers responded positively to:

- Reassurances that the environment, and their bills would not be impacted.

Across **all** framings, customers respond more negatively to:

- The principle of Desalination and explanations of the process, with verbatim indicating widespread misconceptions about the impact on taste e.g., it will be 'salty' water.

“

Desalinated water always tastes salty.

Household customer,
Quantitative survey

”

What this means

While it is important to provide a concise explanation of the process in order to aid understanding, this can also raise alarm – particularly in relation to the impact of the Desalination process on taste.

Examples of each framing: Desalination

Environmental

Dear customer,

We want to let you know about a change in your water source due to take place on 1 September 2022. This will ensure you continue to have a long-term reliable supply of water.

Why do we need to change your water source?

Demand for water in your area, and across many areas in England, is getting close to the limit of how much water is available. This is because of increased demand from our growing population and the effects of climate change on our water supply.

Your current water source is from chalk streams or underground chalk aquifers. We need to preserve this source by limiting how much water we can take from it to protect our wildlife and our environment.

To ensure a long-term reliable supply of water, your new water source will be from desalinated water.

Water desalination is the highly regulated process of taking sea water and treating it to extremely high standards, including removing the salt, so it can be used safely as drinking water.

What happens next?

You do not need to do anything. If you would like to find out more about your water source and why it is changing, please visit www.watersourcechange.co.uk

How can you help?

We can all contribute towards a long-term reliable supply of water by being more water-efficient. This can be as simple as turning off the taps when we brush our teeth, reporting leaks and taking more showers and fewer baths. For more information on how to be water efficient, please visit www.waterefficiency.co.uk.

In the environmental framing, the protection of the environment is liked, but the information on demand disliked

- >20% Net likeability (like-dislike)
- >10% Net likeability (like-dislike)
- >0% Net likeability (like-dislike)
- =/<0% Net likeability (like-dislike)
- >-20% Net likeability (like-dislike)

Dear customer,

We want to let you know about a change in your water source due to take place on 1 September 2022. This will ensure you continue to have a long-term reliable supply of water.

Why do we need to change your water source?

Demand for water in your area, and across many areas in England, is getting close to the limit of how much water is available. This is because of increased demand from our growing population and the effects of climate change on our water supply.

Your current water source is from chalk streams or underground chalk aquifers. We need to preserve this source by limiting how much water we can take from it to protect our wildlife and our environment.

To ensure a long-term reliable supply of water, your new water source will be from desalinated water.

Water desalination is the highly regulated process of taking sea water and treating it to extremely high standards, including removing the salt, so it can be used safely as drinking water.

What happens next?

You do not need to do anything. If you would like to find out more about your water source and why it is changing, please visit www.watersourcechange.co.uk

How can you help?

We can all contribute towards a long-term reliable supply of water by being more water efficient. This can be as simple as turning off the taps when we brush our teeth, reporting leaks and taking more showers and fewer baths. For more information on how to be water efficient, please visit www.waterefficiency.co.uk.

As with the other source options, speaking about demand is challenging for customers.

Mentions of chalk streams and chalk aquifers are received more neutrally.

Mentions of both wildlife and the environment are well liked.

Explanations of the desalination process are less positively received, although still liked 9% more than disliked.

S5 Please read the following letter, which sets out a hypothetical future change in the supply of the water. When you have finished reading it, please show us which parts you like or dislike by clicking

Base: All respondents seeing desalination, HH (n=552)

Examples of each framing: Desalination

Human

Dear customer,

We want to let you know about a change in your water source due to take place on 1 September 2022. This will not affect your bill or the quality or pressure of your water and will ensure you continue to have a long-term reliable supply of water. The only change you may notice is a slight difference in taste and the 'hardness' of your water.

Why do we need to change your water source?

Demand for water in your area, and across many areas in England, is getting close to the limit of how much water is available.

To ensure we provide you with a secure long-term supply of water, your new water source will be from desalinated water. Water desalination is the highly regulated process of taking sea water and treating it to extremely high standards, including removing the salt, so it can be used safely as drinking water.

Please be assured that the quality and safety of your water will remain the same and you will not experience any disruption to your water supply or need to take any action.

What happens next?

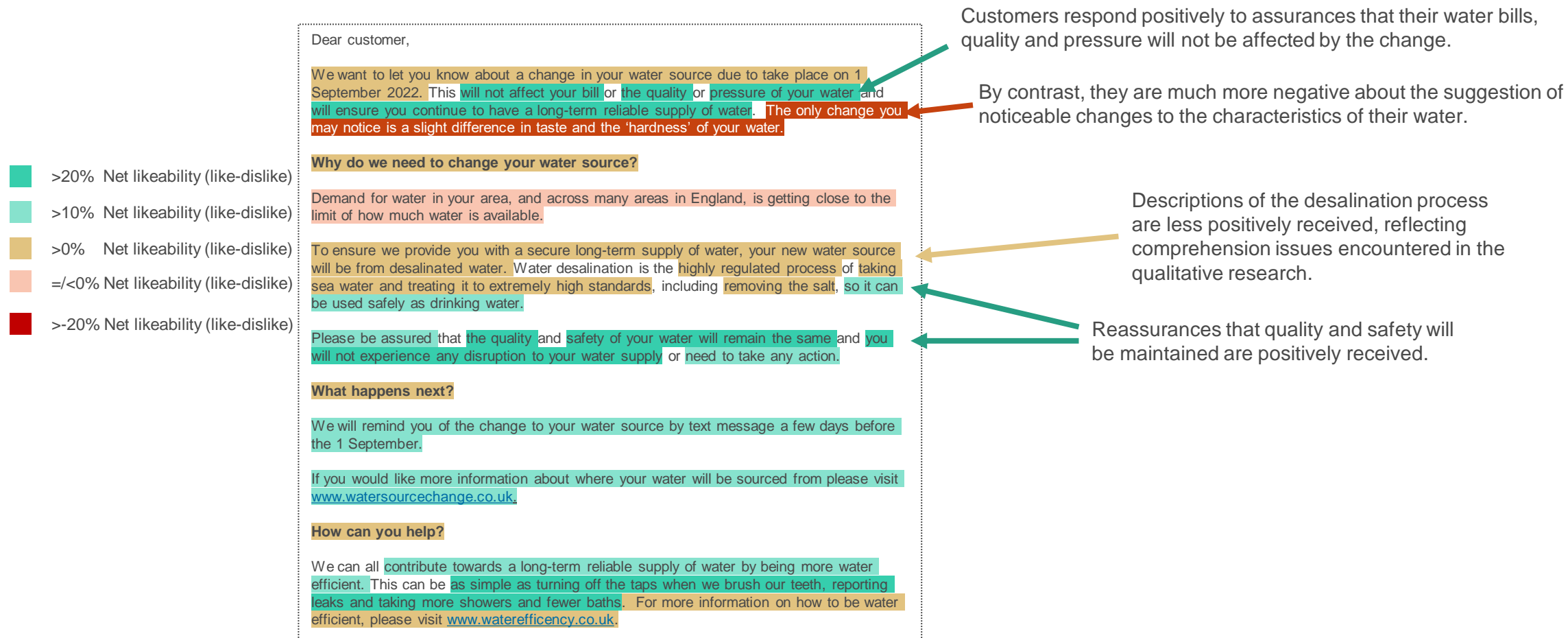
We will remind you of the change to your water source by text message a few days before the 1 September.

If you would like more information about where your water will be sourced from please visit www.watersourcechange.co.uk.

How can you help?

We can all contribute towards a long-term reliable supply of water by being more water-efficient. This can be as simple as turning off the taps when we brush our teeth, reporting leaks and taking more showers and fewer baths. For more information on how to be water efficient, please visit www.waterefficiency.co.uk.

Explanations of the Desalination process are less liked in the human framing, though reassurances of safety are positive



S5 Please read the following letter, which sets out a hypothetical future change in the supply of the water. When you have finished reading it, please show us which parts you like or dislike by clicking

Base: All respondents seeing desalination, HH (n=552)

Examples of each framing: Desalination

Practical

Dear customer,

We want to let you know about a change in your water source due to take place on 1 September 2022. This will not affect your bill or the quality or pressure of your water and will ensure you continue to have a long-term reliable supply of water.

Your new water source will be from desalinated water. You will not experience any disruption to your water supply or need to take any action.

The only change you may notice is a slight difference in taste and the 'hardness' of your water.

What happens next?

We will remind you of the change to your water source by text message a few days before the 1 September.

If you would like more information about where your water will be sourced from please visit www.watersourcechange.co.uk.

In the practical framing, customers respond most negatively to the prospect of taste and hardness changing

- >20% Net likeability (like-dislike)
- >10% Net likeability (like-dislike)
- >0% Net likeability (like-dislike)
- =/<0% Net likeability (like-dislike)
- >-20% Net likeability (like-dislike)

Dear customer,

We want to let you know about a change in your water source due to take place on 1 September 2022. This will not affect your bill or the quality or pressure of your water and will ensure you continue to have a long-term reliable supply of water.

Your new water source will be from desalinated water. You will not experience any disruption to your water supply or need to take any action.

The only change you may notice is a slight difference in taste and the 'hardness' of your water.

What happens next?

We will remind you of the change to your water source by text message a few days before the 1 September.

If you would like more information about where your water will be sourced from please visit www.watersourcechange.co.uk.

Customers are slightly negative about the prospect of their water changing to a desalinated source in this framing (-2% net)
 Reassurance about what will *not* change is positively received, with 32% liking this statement.

The indication that taste and hardness may change lacks prompts concern – 51% of customers dislike this statement.

S5 Please read the following letter, which sets out a hypothetical future change in the supply of the water. When you have finished reading it, please show us which parts you like or dislike by clicking

Base: All respondents seeing desalination, HH (n=552)

Concerns and watch-outs for communicating source change to Desalination

What works well



- The feedback on the Desalination process is mixed overall; while some customers are positive about it, a number of customers echo feedback from qualitative sessions about the solution **being more suited to other regions of the world.**
- The communications are generally seen to be simple and **to the point.**

Watch-outs and additional information to consider





- There are particular concerns about **taste**, with some customers worrying that desalinated water would taste “salty” in some way and taste different from water from freshwater sources.
- **Price** is particularly mentioned as a spontaneous area for more information in relation to Desalination, especially in the environmental frame where the price is not mentioned.
- For the non-environmental frames, a few customers express concern that Desalination might have an **ecological impact**. For the environmental frame, the cost was a significant unaddressed concern.

Desalination | Key implications for communications



WHO

-  **Water companies** are seen as a logical key messenger on this topic.
-  **Local authorities** however should be used in relation to the construction of a desalination for customers likely to be impacted.




WHAT

-  **Give a clear description of the process and why its been chosen**, to overcome comprehension barriers.
-  **Emphasise the reliability and longevity** of the water source.
-  **Provide reassurances on the taste**, highlighting that there will be no noticeable change from customer's current source.
-  **Address concerns directly**, being transparent about negative environmental impacts and sharing ways these will be offset, and explaining how salt is disposed of.



HOW

-  **Use a reassuring but factual tone of voice**, so as not to drive any new concerns.
-  **Avoid language that is overly technical in nature**, particularly in describing the process of desalination and the disposal of salt.

WHERE

-  **Keep initial contact concise**, with shorter pieces of information working well for direct communications.
-  **Direct customers elsewhere** for further, more detailed, additional information (e.g. weblink, contact numbers).
-  **Streamline communication**, providing updates on source changes alongside other forms of direct contact to increase the opportunity of cutting through (e.g. emails, bills).

WHEN

-  **Communicate sooner** to the time that the change will occur if local construction works are planned (e.g. building a desalination plant in customers' local area).
-  **Provide a timeline** of future key communication points if a large-scale local construction is planned, in order to offer a sense of consistency and clarity to the project.

Water Transfer



Concerns for Water Transfer stem from comprehension issues and worries about quality and the environmental impact



Comprehension

Many customers struggle to understand the logistics and infrastructure required for Water Transfer and so find the specifics difficult to grasp.

“

I'd want to know how it's processed and transported.

Household customer,
Southampton

”



Quality

Customers have some sense that the taste or characteristics of their water may change if it is coming from a different area of the country, and worry that this water will be 'worse' in quality.

“

You have to [get the water] and treat it [after transfer], otherwise there may be issues of contamination.

Household customer,
Peterborough

”



Environment

Customers are concerned that environmental impacts, such as the potential disruption of natural habitats, will be managed.

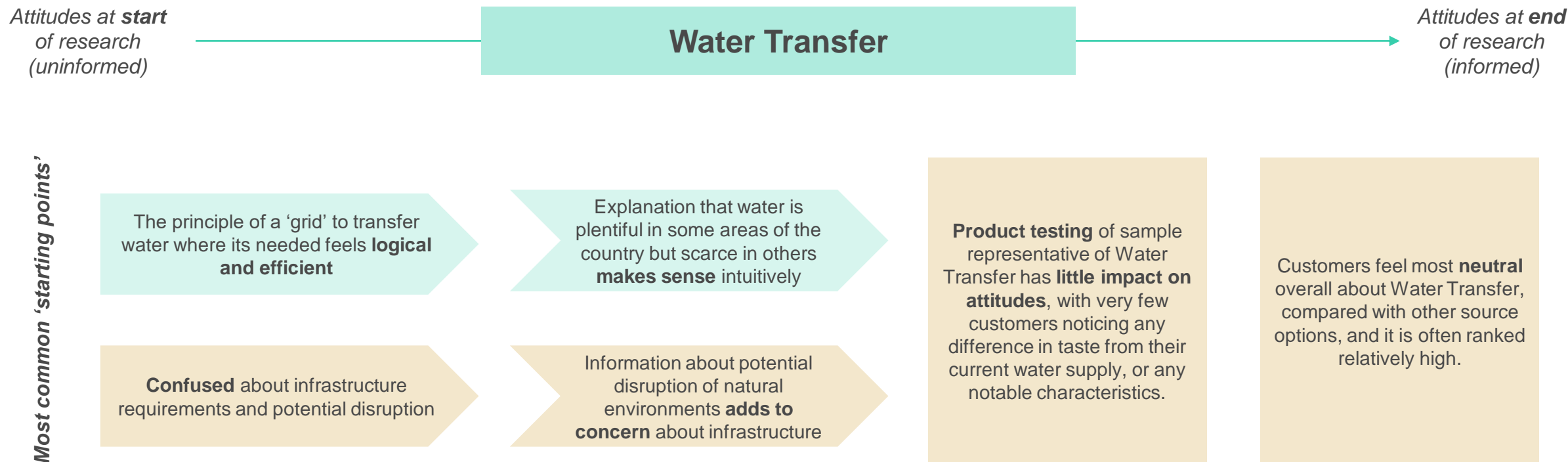
“

There is an issue of animals living in the canals used for the transfer.

Household customer,
London

”

Customers largely feel neutral about Water Transfer, though comprehension can hinder appeal for some



Product sample tested: **Hampton WTW Water**: Representative of large "water transfer" schemes & **Sundon WTW**: Conditioned water representative of the proposed Anglian region to Affinity water transfer

Water Transfer is largely felt to be a logical solution to water shortage issues

Most feel that the principle of transferring water from areas of abundance to areas of scarcity 'makes sense', and assume that this system is already in place in the UK.

- However, there are some concerns that arise when customers learn about the potential for contamination during the transfer process.
 - These concerns are also reinforced by the idea that water coming from other areas might be 'worse' than that which people are used to i.e. in quality or characteristics such as hardness.
- A minority of customers living in areas that are perceived as less water-stressed (e.g. rural areas outside London) have hesitations about sending 'their water' elsewhere.
- Despite this, Water Transfer is largely considered a sensible option.

The **product sample** tasting reassures customers that water transferred from other areas will not necessarily taste noticeably different from what they are used to.

“

Apparently some parts of the UK already use this, but I think it needs to be used more if needed. It feels like it would be an obvious [solution].

Household customer,
Peterborough

”

However, confusion about logistics and infrastructure requirements can lead to some concerns

For the majority of customers, there is a particular lack of clarity around:

- Infrastructure requirements – it is unclear what type of infrastructure will be involved (e.g., canals, pipes, rivers) and how much new infrastructure will be required.
 - This also makes it difficult to estimate the disruptive impact that Water Transfer might have on local areas and natural environments.
 - There is a concern for some customers specifically about introducing non-native species through transfer schemes which should be addressed in communications
- Funding and cost – it is unclear who will be responsible for paying for different parts of the schemes if they cross over regions supplied by different water companies.
- While these areas of confusion do not necessarily raise significant alarm, they can make it difficult for customers to engage meaningfully with this source option, leading them to remain neutral in their attitude.

“

Will we be told where the water comes from?

Non-household customer,
Peterborough

”

“

Who will pay the cost of transport?

Household customer,
Peterborough

”

Water Transfer | Key implications for communications

WHO



Water companies are seen as a logical key messenger on this topic.

WHAT



Provide a clear **description of how the process works**, in terms of the infrastructure required for transfers and when/how water is treated.



Give reassurances on taste and quality, reiterating that customers will not experience a noticeable change.



Address environmental concerns directly, reassuring of ways they can be addressed and managed.

HOW



Adopt a factual, **'business as usual' tone**, to avoid raising any new concerns regarding the change.



Avoid emphasising that water will be from a 'different' location, as this could drive concerns on taste and quality.

WHERE



Keep initial contact **concise**, with shorter pieces of information working well for direct communications.



Direct customers elsewhere for further, more detailed, additional information (e.g. weblink, contact numbers).



Streamline communication, providing updates on source changes alongside other forms of direct contact to increase the opportunity of cutting through (e.g. emails, bills).

WHEN



Little upfront communication is required, unless construction is required in local areas.

Reservoirs



Reservoirs raise concerns about the disruption caused as well as the associated costs and long lead time



Disruption

The need for large-scale construction raises concerns that local communities will face severe **disruption to their daily lives** for an extended period of time



Cost & Lead time

Customers worry about the reliability of reservoirs in drought situations (i.e., drying up), particularly due to the **high cost and lead time required before they become operational.**

“

I guess the fact that you are changing an ecosystem is quite a disruption.

Non-household customer,
London

”

“

The only negative is that it disrupts communities and ecosystems, and it's not really cost-effective.

Household customer,
London

”

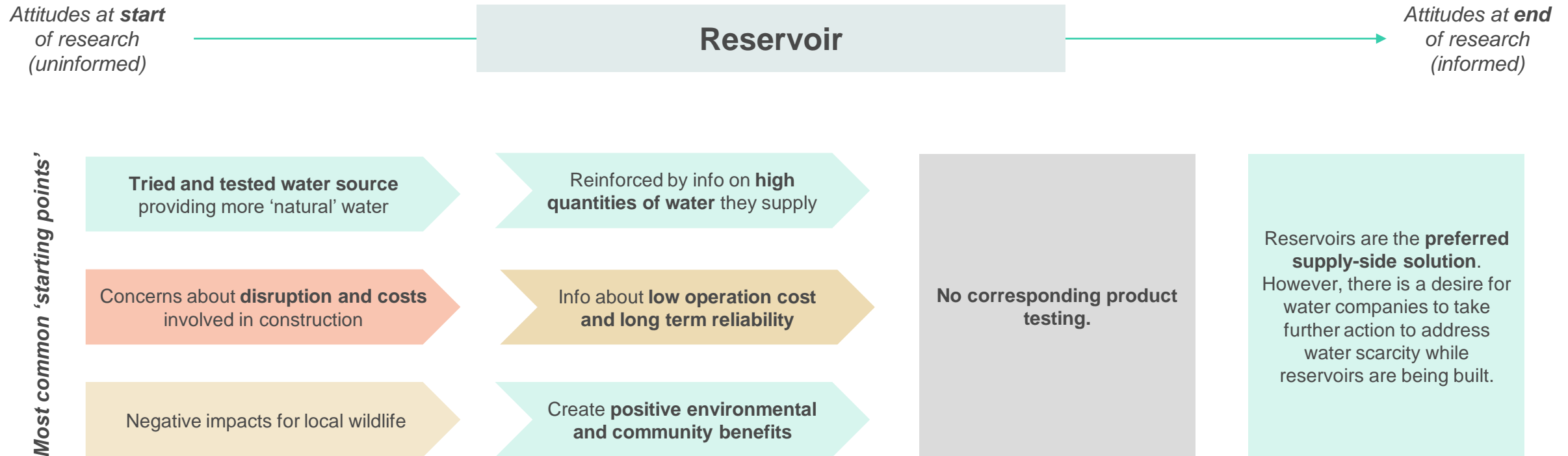
“

It does depend on where you live. In a rural area with nice views you will be more opposed [to construction].

Household customer,
Norwich

”

Positivity is driven by familiarity, the community and environmental benefits created and long-term reliability



Familiarity with Reservoirs builds positivity, which increases when learning of the amount of additional water they provide

Reservoirs are well known and considered common across the UK, driving positive attitudes for its use as a 'tried and tested solution which makes good use of the UK's wet weather.

- Reservoirs are described by some as a more 'natural' source of water compared to other supply-side solutions as the water being stored is assumed to be precipitation.
 - Furthermore, this water is assumed to be of higher quality.
 - A small minority query how water in Reservoirs is kept clean, with some concern that high quantities of chemicals are needed, though this is not a pressing concern.
- Positive assumptions about Reservoir use as a solution are reinforced when presented with further information on the additional water they provide and the variety of customers they serve.

“

The idea of a reservoir makes a lot of sense. Ecologically, we have flat land and can pump water out from the reservoirs before the rivers get to a certain [low] level.

Household customer,
Peterborough

”

Concerns about community disruption are somewhat offset by learning about the long-term reliability of Reservoirs

The disruption to daily life during the long construction period, as well as the costs required to build Reservoirs, leads to doubts about how worthwhile investment in a Reservoir is as a solution.

- There is a perception that Reservoirs are not as reliable as other supply-side options due to water loss from evaporation and an assumed reliance on rainfall. Therefore, there is concern that building a reservoir is not worth the large costs required for construction.
 - Some also question where funding would come from, and whether these costs would be passed onto customers.
- Learning about the low running costs and long-term reliability of Reservoirs once constructed increases acceptance of Reservoirs.
- However, there is a desire to know what water companies are doing in the interim to address water scarcity before new Reservoirs become operational.

“
When it's sunny and hot, the reservoirs dry up. So it seems like it's a waste of water.
”
Household customer, London

“
They take a while to build, so should be introduced first while other measures are rolled out while they're built.
”
Household customer, Norwich

Early concerns about damage to wildlife are offset by the ‘net-benefit’ Reservoirs deliver in addition to water supply

The large amounts of space required to build Reservoirs also raises concerns about the destruction of local habitats and damage to the environment.

- Learning about the creation of new habitats and green spaces in the construction of Reservoirs goes some way in addressing these concerns, leading to a perception that they have a ‘net-positive’ impact on the environment.
- Additional benefits (e.g., leisure spaces, education opportunities, aesthetic spaces) created through Reservoirs further build on this view of Reservoirs providing a net-benefit once constructed, furthering support.

“

You might have to knock something down, but then it can be used for fishing. So I think it's good to add something to a town. I'd go to a reservoir because you can run around it and sea fishing, sailing, and get people to go outside.

Non-household customer,
London

”

Responses to the communications framings reflect the importance of minimising disruption

Environmental

Human

Practical

Across **all** framings, customers respond positively to:

- Reassurances that there will be little disruption and that the source will be reliable.

In the **human** and **practical** framings, reassurances that **bills** would not change are positively received.

However, customers respond negatively to suggestions that **taste** and **hardness** may be impacted.

“

As the letter has provided details of changes, no increase or disruption and also details and they have said we can be assured

Household customer,
Quantitative survey

”

What this means

Given that customers have few concerns about this source option in principle (i.e. safety, quality), it will be important to lead with explaining what will *not* change in practice for customers.

Examples of each framing: Reservoirs

Environmental

Dear customer,

We want to let you know about a change in your water source due to take place on 1 September 2022. This will ensure you continue to have a long-term reliable supply of water.

Why do we need to change your water source?

Demand for water in your area, and across many areas in England, is getting close to the limit of how much water is available. This is because of increased demand from our growing population and the effects of climate change on our water supply.

Your current water source is from chalk streams or underground chalk aquifers. We need to preserve this source by limiting how much water we can take from it to protect our wildlife and our environment.

To ensure a long-term reliable supply of water, your new water source will be from a new reservoir.

Reservoirs provide a very reliable source of water. Water can be taken from rivers during the winter when it is in plentiful supply and stored so it can be used in drier periods.

What happens next?

You do not need to do anything. If you would like to find out more about your water source and why it is changing, please visit www.watersourcechange.co.uk

How can you help?

We can all contribute towards a long-term reliable supply of water by being more water-efficient. This can be as simple as turning off the taps when we brush our teeth, reporting leaks and taking more showers and fewer baths. For more information on how to be water efficient, please visit www.waterefficiency.co.uk

Respondents find the explanation of demand difficult, but the framing of reliability and preservation to be positive

- >20% Net likeability (like-dislike)
- >10% Net likeability (like-dislike)
- >0% Net likeability (like-dislike)
- =/<0% Net likeability (like-dislike)
- >-20% Net likeability (like-dislike)

Dear customer,

We want to let you know about a change in your water source due to take place on 1 September 2022. This will ensure you continue to have a long-term reliable supply of water.

Why do we need to change your water source?

Demand for water in your area, and across many areas in England, is getting close to the limit of how much water is available. This is because of increased demand from our growing population and the effects of climate change on our water supply.

Your current water source is from chalk streams or underground chalk aquifers. We need to preserve this source by limiting how much water we can take from it to protect our wildlife and our environment.

To ensure a long-term reliable supply of water, your new water source will be from a new reservoir.

Reservoirs provide a very reliable source of water. Water can be taken from rivers during the winter when it is in plentiful supply and stored so it can be used in drier periods.

What happens next?

You do not need to do anything. If you would like to find out more about your water source and why it is changing, please visit www.watersourcechange.co.uk

How can you help?

We can all contribute towards a long-term reliable supply of water by being more water efficient. This can be as simple as turning off the taps when we brush our teeth, reporting leaks and taking more showers and fewer baths. For more information on how to be water efficient, please visit www.waterefficiency.co.uk.

Speaking about demand is challenging for customers, the more positive framing about protecting wildlife is more liked.

Mentions of both wildlife and the environment are well liked, however wildlife scores marginally higher (29% liked wildlife v 23% liked environment).

Practical advice and simple steps for efficiency are both well liked.

S5 Please read the following letter, which sets out a hypothetical future change in the supply of the water. When you have finished reading it, please show us which parts you like or dislike by clicking

Base: All respondents seeing reservoirs, HH (n=605)

Examples of each framing: Reservoirs

Human

Dear customer,

We want to let you know about a change in your water source due to take place on 1 September 2022. This will not affect your bill or the quality or pressure of your water and will ensure you continue to have a long-term reliable supply of water. The only change you may notice is a slight difference in taste and the 'hardness' of your water.

Why do we need to change your water source?

Demand for water in your area, and across many areas in England, is getting close to the limit of how much water is available.

To ensure we provide you with a secure long-term supply of water, your new water source will be from a new reservoir. Reservoirs provide a very reliable, low-cost source of water. Water can be taken from rivers during the winter when it is in plentiful supply and stored so it can be used in drier periods.

Please be assured that the quality and safety of your water will remain the same and you will not experience any disruption to your water supply or need to take any action.

What happens next?

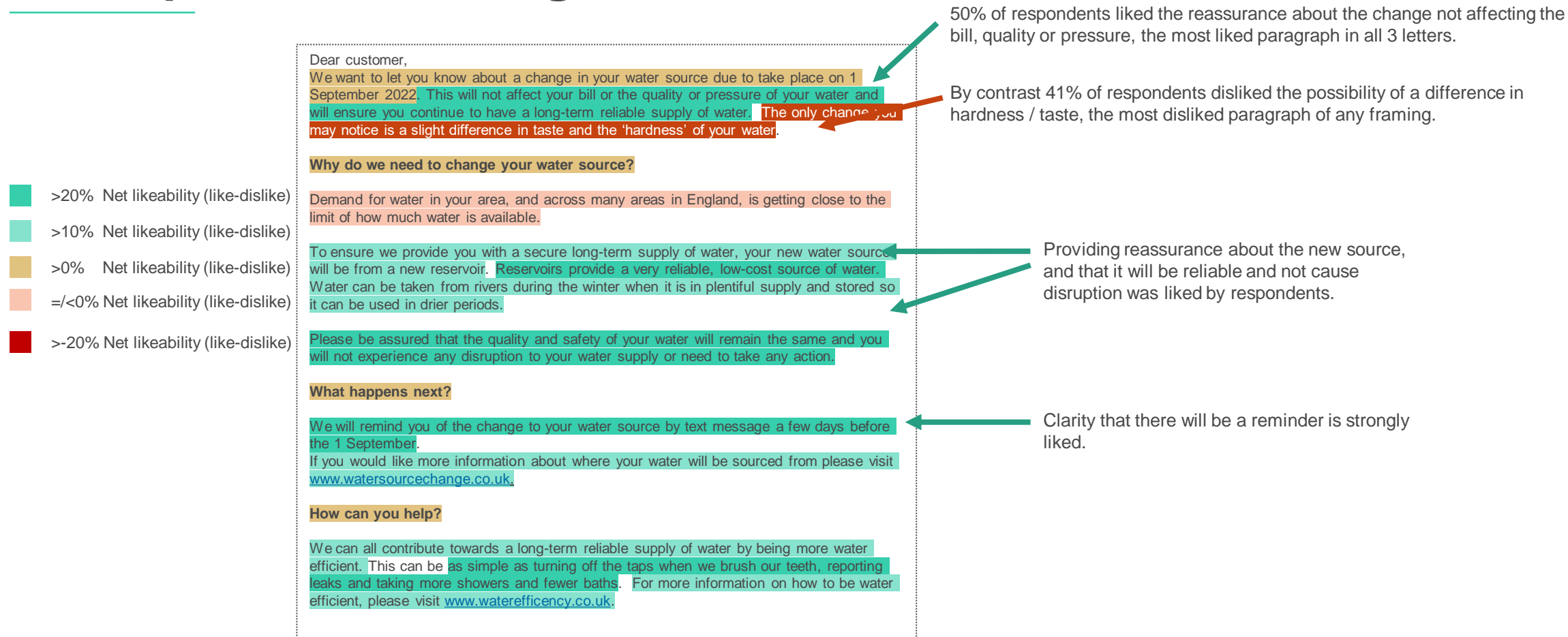
We will remind you of the change to your water source by text message a few days before the 1 September.

If you would like more information about where your water will be sourced from please visit www.watersourcechange.co.uk.

How can you help?

We can all contribute towards a long-term reliable supply of water by being more water-efficient. This can be as simple as turning off the taps when we brush our teeth, reporting leaks and taking more showers and fewer baths. For more information on how to be water efficient, please visit www.waterefficiency.co.uk.

Reassurance about what will *not* change is the most liked part of the practical framing



S5 Please read the following letter, which sets out a hypothetical future change in the supply of the water. When you have finished reading it, please show us which parts you like or dislike by clicking

Base: All respondents seeing reservoirs, HH (n=605)

Examples of each framing: Reservoirs

Practical

Dear customer,

We want to let you know about a change in your water source due to take place on 1 September 2022. This will not affect your bill or the quality or pressure of your water and will ensure you continue to have a long-term reliable supply of water.

Your new water source will be from a new reservoir. You will not experience any disruption to your water supply or need to take any action.

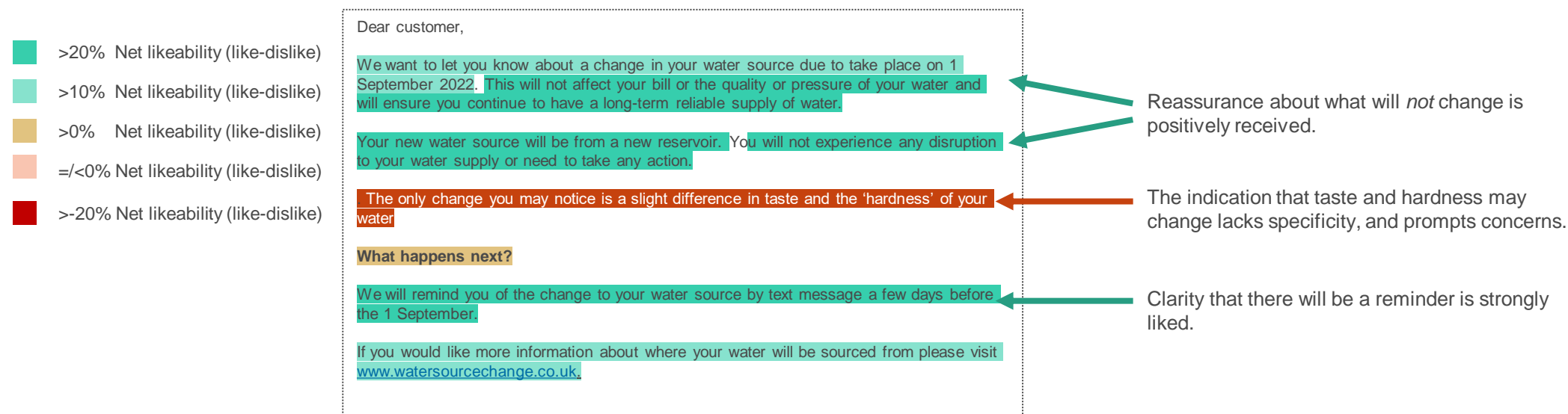
The only change you may notice is a slight difference in taste and the 'hardness' of your water.

What happens next?

We will remind you of the change to your water source by text message a few days before the 1 September.

If you would like more information about where your water will be sourced from please visit www.watersourcechange.co.uk.

Similarly in the practical frame, the statement on differences in taste and hardness receives a negative response



S5 Please read the following letter, which sets out a hypothetical future change in the supply of the water. When you have finished reading it, please show us which parts you like or dislike by clicking

Base: All respondents seeing reservoirs, HH (n=605)

Concerns and watch-outs for communicating source change to Reservoirs

What works well

- Emphasising that the change would be minor and safe, and that customers would not see major changes to their supply, is cited as a positive.
- The fact there would be a reminder is also cited frequently as a positive aspect of the letter.




Watch-outs and additional information to consider

- There are occasional requests for more information on where the reservoir is located / going to be located.
- When told that the hardness of their water may change, this is frequently cited as a concern by respondents, who feel more information on the impact of this would be helpful.
- If an impact on bills is not mentioned, as in the environmental frame, customers commonly mention wanting information on this.

Verbatim analysis: All respondents HH (n=1762), NHH (n=198)

Reservoirs | Key implications for communications


WHO

-  **Water companies** are seen as a logical key messenger on this topic.
-  **Local authorities** are seen as important messengers in providing information and reassurances around planning and construction.
-  **Open dialogue** will be necessary to manage likely strong pushback to the disruption that will be caused by the construction, and avenues for customers to voice their concerns should be provided.


WHAT

-  **Reference the familiarity and common use** of reservoirs to reinforce perceptions that it is a 'tried and tested' solution.
-  **Focus on the long-term reliability** of reservoirs to supply water for years to come, making it a worthwhile investment.
-  **Highlight environmental benefits** for wildlife and habitats, which shape reservoirs as a 'net-environmental good'. The same applies to the creation of recreational activities through reservoirs, providing a net-good for communities.


HOW

-  **High level information** is likely to be sufficient due to high familiarity with reservoirs as a way of supplying water

WHERE

-  **Long term communications plans** are likely to be helpful, as presumed level of disruption mean customers expect comms via many channels over a long period of time, including various ways to voice their own concerns.

WHEN

-  **Consistent and clear communications** will be necessary to manage concerns about local area disruption; transparent comms on when different stages are being implemented are important, including an overview of planning processes.

5 Key findings



Key findings

1.

Water is a low salience topic, with customers indicating a low level of awareness and understanding of issues relating to it. This in part is driven by general satisfaction with the customer experience of water in terms of taste, smell and hardness.

2.

Customers also have low awareness of water scarcity, and whilst all take steps not to 'waste' water, most are not actively trying to reduce their water consumption. Information on the topic is easily understood, however, this is not always enough in to unseat long-standing perceptions that water is abundant in the UK.

3.

Customers believe that water companies should be taking steps to respond to the issue of water scarcity now, and recognise that a mix of demand and supply-side solutions are required. However, there is a general desire to see water companies implement demand-side options first, including fixing leaks and educating customers.

4.

When prompted, customers assess water source options by balancing efficacy (including reliability) and the cost and time commitments associated with the change. There is also an expectation of water companies to evaluate options through this lens.

5.

Customers say they are unlikely to engage with communications on source change, and taste tests indicate that most are not able to detect differences at the level that might be expected in a source change. However customers tell us there is still a need to communicate to explain the rationale for the change, alleviate taste concerns and provide clear guidance on impact.

Key findings

6.

In terms of communication, overall the human frame best combines the qualitative and quantitative findings together. Quantitatively environmental and human framings are slightly preferred to practical framings of a water source change, however in qualitative sessions environmental framing is felt to lack impact indicating that overall human is best.

7.

Most household customers want to be first notified three to six months in advance of the change, although non-household customers are more likely to want a closer notification of a change. Most customers then want to be reminded again of the change at a point closer to the time, but generally only once. When a change is temporary, 49% would like to be notified every time their water source changes.

8.

E-mail and a letter separate from the water bill are the preferred forms of communication about source changes, consistent across sources. The majority of customers claim they would click through to look at additional information. Whilst in reality this number may be lower, providing comprehensive information to those who may want it is key.

9.

Of those who are more inclined to visit a website for further detail on the change, there is an expectation that this would include a wealth of comprehensive information. This includes detail on bill impacts, taste, the process, the reason behind the change, safety, environmental impact and information from an independent source.

10.

Whilst there is a need to communicate on any source change, Water Recycling and Desalination in particular need more engagement due to a higher level of spontaneous concerns. For Water Recycling these concerns are centred around taste, hygiene and safety. Desalination also generated concerns, which tended to be around taste and price

Key source-specific findings

WATER RECYCLING

Key concerns for Water Recycling centre on safety, quality and the environment, with many customers being particularly focused on the 'yuck' factor of the source which can be hard to overcome. When given more information on the process customers express concerns around carbon emissions and energy intensity of the processes involved. In terms of communications, customers indicate an equal preference for either environmental or human framings.

DESALINATION

Desalination is a less well-known and understood source compared to others. Although praised for its reliability, Desalination is ultimately judged to only be suitable in emergency scenarios given the 'intense' construction and running process. In terms of communications, customers indicate a preference for the human framing.

WATER TRANSFER

Concerns about Water Transfer stem from comprehension issues and worries about quality and the environmental impact, however, generally customers are favourable towards it as a source option, seeing it as a logical solution to regional water scarcity. Communications should address environmental and taste concerns directly. Customers do not generally have high comprehension of water transfer schemes and so do not express strong preferences for pipe vs canal based schemes

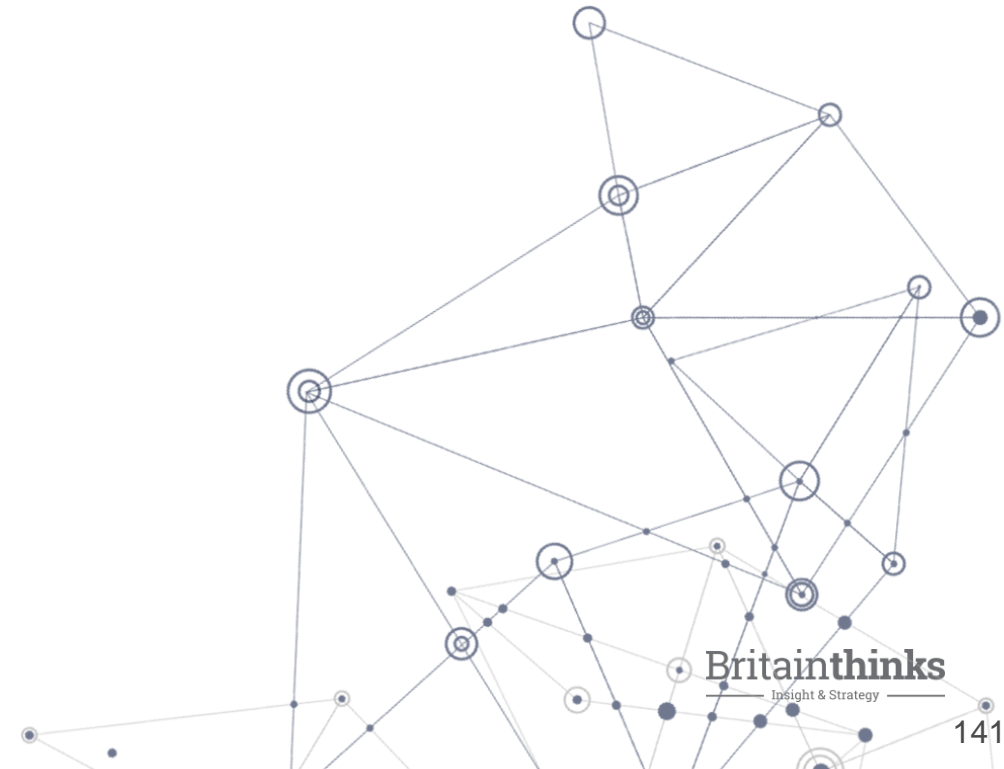
RESERVOIRS

Reservoirs benefit from their familiarity in the UK, with attitudes being generally favourable to them. However, customers do raise concerns in terms of costs, lead times and the impact of construction. In terms of communications, customers indicate an equal preference for either environmental or human framings.

Further outputs: Communications Framework

In addition to this report, a Communications Framework has been designed as an interactive document that can be used by communications teams as part of their development process.

This interactive 'toolkit' includes directional recommendations on 'do's and don'ts' when communicating specific source changes, based on the findings included in this full research report, as well as interactive activities and stimuli for workshops.



Appendix



1 Literature Review

Sources consulted as part of the literature review and fed into the final report



Sources

- Accent (2020) Water usage and behavioural change: Insights from In-Home Interviews.
- Accent (2021) Water for Life: Hampshire Customer Preferences.
- Affinity Water (2018) 20 Day Report on Consumer Contacts following the planned increase in chlorine residual from Horley Cross.
- Affinity Water (2021) Sundon Customer Communications Plan.
- Anglian Water (2019) Customer Research and Engagement Synthesis.
- Blue Marble (2021) WRE: Club customer engagement, Final report combined.
- BMG (2020) Non-household SME Customer Insight Report 2020.
- BritainThinks (2016) Thames Water Deep Dives Research: Water Hardness.
- BritainThinks (2016) Thames Water, Water Resources Management Plan: Stage 1, Research with Household and Non-Household customers.
- BritainThinks (2016) Thames Water, Water Resources Management Plan: Stage 2, Research with additional audiences.
- Cambridge Water (2021) Cambridge Water Quality Metrics Updated.
- Consumer Council for Water/YouGov (2015) Using water wisely and attitudes to tap water.
- Cranfield Water Science Institute (2014) Public perceptions of recycled water: a survey of visitors to the London 2012 Olympic Park.
- DJS Research (2020) Affinity Water: tap water research.

Sources

- Dolnicar, S (2009) Desalinated versus recycled water: Public perceptions and profiles of the accepters.
- DWI (2017) Copeland area: Consumer concern about drinking water quality.
- DWI (2017) Drinking Water Inspectorate releases investigation into Copeland drinking water event.
- EFTEC/ICS Consulting (2017) Thames Water Customer Preferences Research Programme: Water Resources Stage 2 Study: Water Resource Planning Options.
- Eftec/ICS Consulting (2020) Customer Preferences to Inform Long-term Water Resource Planning – Supply options workshop.
- Eftec/ICS Consulting (2020) Customer Preferences to Inform Long-term Water Resource Planning – Demand levers workshop.
- Experian (2020) Covid-19 Impact Assessment: Understanding consumers' future finances.
- Future Focus Research (2020) Wessex Water 'have your say': Managing water supplies.
- Incling (2021) WRMP 2021: Feedback from the Love Every Drop online community.
- Kuwait-Maastricht Business School/Kuwait University (2010) Public perceptions on water reuse options: the case of Sulalbiya Wastewater Treatment Plant in Kuwait.
- Paneque, Pilar; Lafuente, Regina; Vargas, Jesus (2018) Public Attitudes toward Water Management Measured and Droughts: A Study in Southern Spain.
- Populus (2012) Thames Water hard water qualitative research.
- RAPID (2020) RAPID letter – Building resilient water supplies: the future of water resources management.

Sources

- RAPID (2021) Ofwat letter to Wessex Water – Strategic regional water resource solutions: Standard gate one draft decision letter for Wessex Water.
- Relish (2019-2021) Southern Water – Water Reuse Engagement, Water for Life Hampshire Burst 1-19 Reports.
- Relish (2020) Customer Engagement Event – Headlines.
- Relish (2020) Water for Life Hampshire Potential Objectors Research Report.
- Relish (2021) Water for Life Options – Integrated Summary.
- Relish (2021) Water for Life Hampshire – Customer Closeness Summary.
- Rock, Channah; Solop, Frederic; Gerrity, Daniel (2012) Survey of state-wide public perceptions regarding water reuse in Arizona.
- Shed Research Consulting, Fasttrack Squared (2021) SS and Cambridge Water Regional Plan Customer Research.
- Southern Water (2021) Affordability Concerns and Diverse Cultures.
- SSC (2015) Moors Gorse water quality case study.
- SSC (2017) United Utilities: Case study on Copeland.
- SSC (2022) H2Online – South Staffs Water and Cambridge WaterWQ and water recycling insights 2020-2021.
- TappWater (2021) Where’s the best and worst tap water in the UK?
- Thames Water (2010) TGWTW – Final Report.
- Thames Water (2012) Indirect Potable Reuse, Evidence Base: Key Insight Themes & Communication Big Thoughts.

Sources

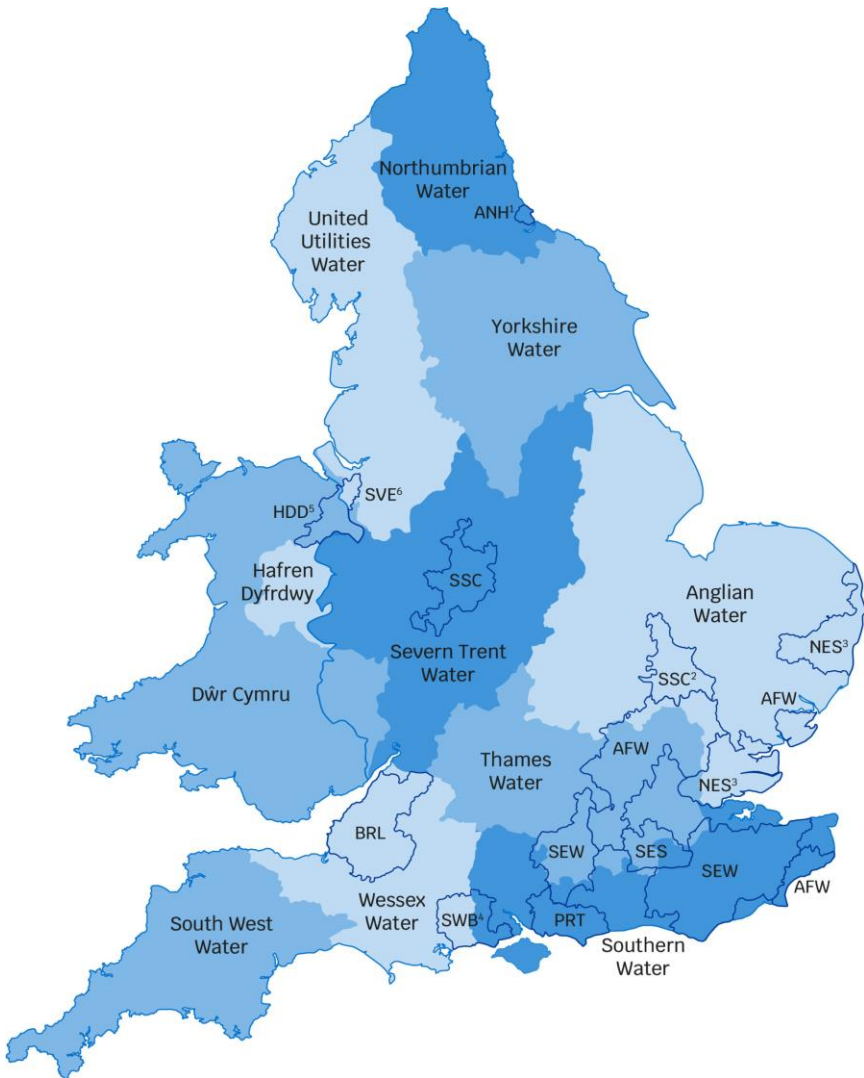
- Thames Water (2012) Indirect Potable Reuse: Strategic Framework for Communications.
- University of Manchester (2021) University of Manchester England and Wales supply demand modelling report.
- Verve (2018) Water Trading Report prepared for Severn Trent, Thames Water and United Utilities.
- WRE (2022) The Emerging Water Resources Regional Plan for Eastern England.
- WRW (2022) Emerging Regional Plan for consultation: Executive Summary.
- Yonder (2020) Water recycling Semiotic Study.
- Yonder (2021) Hampshire Water Resource Business Challenge.
- YouGov (2020) Who drinks bottled water everyday?

2 Qualitative research

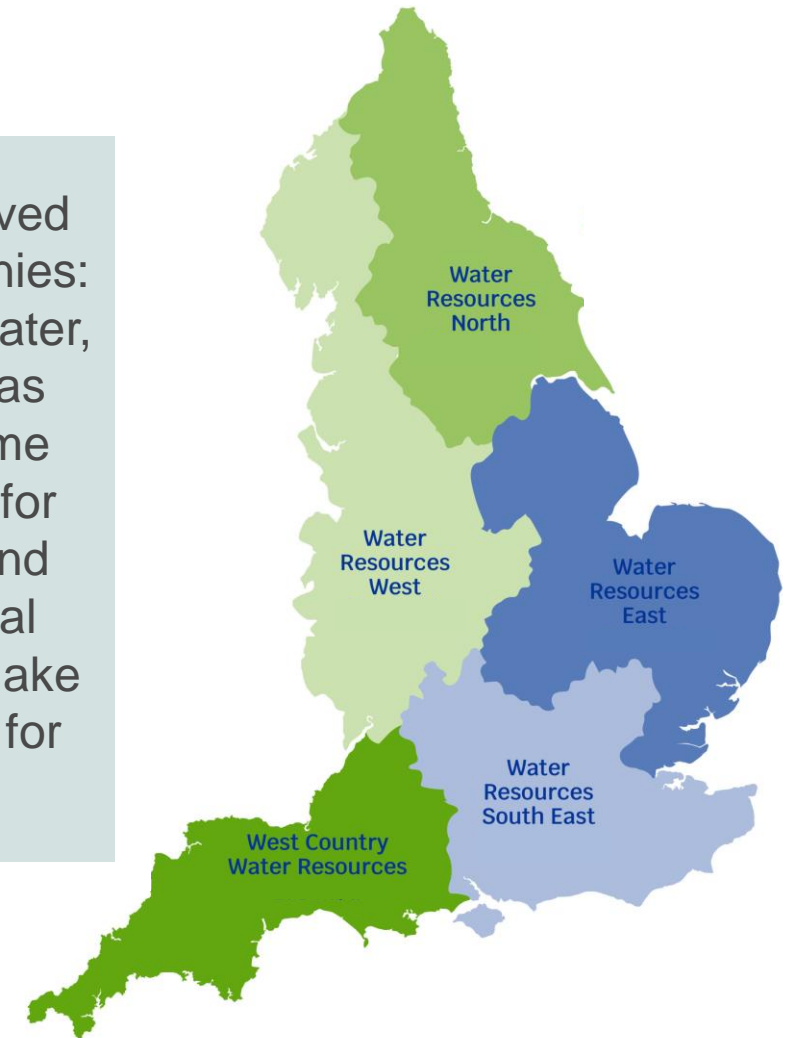
Research materials shown as part of the deliberative workshops



THE WATER INDUSTRY TODAY



England and Wales are served by 20 different water companies: some provide just drinking water, others take away sewage as well. Companies in the same area work together to plan for the future in their region, and work with the other regional groups across England to make sure there is enough water for everyone.



THE WATER INDUSTRY TODAY



Water companies

- Take water from the environment and treat it so it's safe to drink
- Build and maintain infrastructure (like pipes) to supply water to homes and businesses



Environment Agency

- Protects and enhances the environment
- Works with water companies to ensure operations and plans develop in a sustainable way



Drinking Water Inspectorate (DWI)

- Makes sure the water supplied in England and Wales is safe and that drinking water quality is acceptable for customers



There are a number of different players in the water industry who serve **water customers** to ensure the water supplied is safe, reliable and environmentally friendly.



Department for Environment Food & Rural Affairs

Defra

- The UK Government department responsible for protecting the environment and countryside, including water



Consumer Council for Water

- Represent customers on matters relating to water.
- Investigate complaints and provide advice to ensure water services remain fair for customers



Office of Water Services (Ofwat)

- A regulator that makes sure water companies do their job properly, including fair pricing for customers and ensuring there is always a reliable water supply

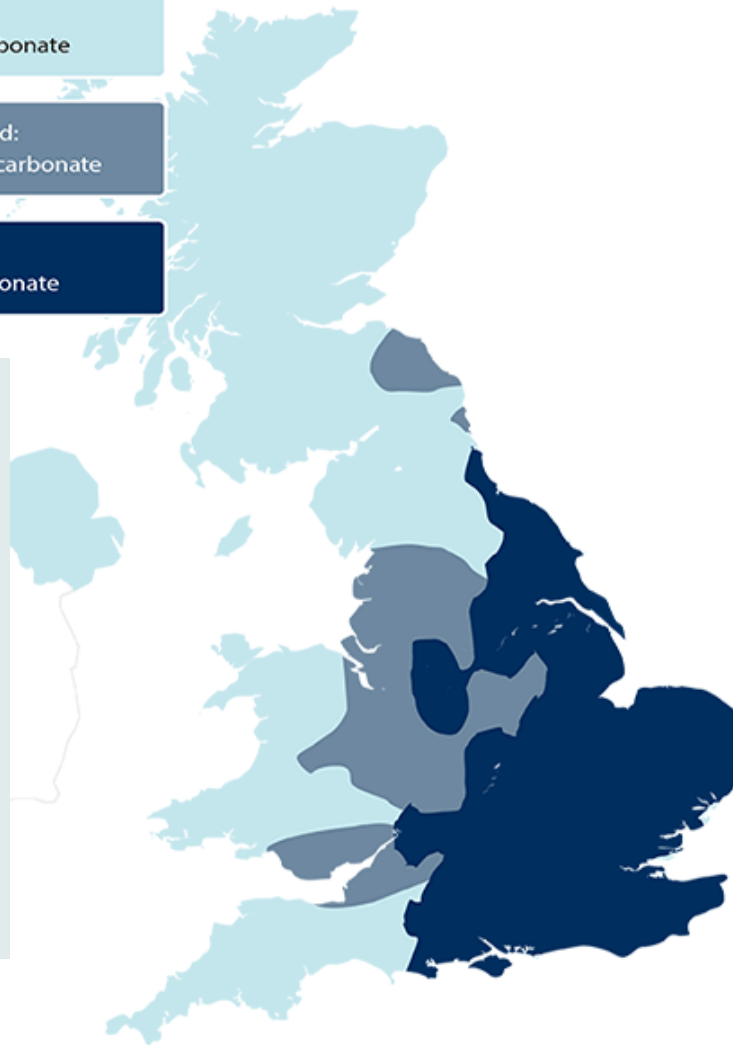
CURRENT WATER SUPPLY

Soft to moderately soft:
0 - 100 mg/l as calcium carbonate

Medium to moderately hard:
100 - 200 mg/l as calcium carbonate

Hard to very hard:
200 + mg/l as calcium carbonate

This map shows water hardness across the UK. When water falls as rain, it is 'soft' and free of minerals. It picks up naturally occurring minerals, such as calcium and magnesium, as it passes through rock, sand and soil, which causes the water to become 'hard'.



Hard water at home

Hard water leaves more limescale in your kettle and on your taps, and makes less bubbles from soap. It can be annoying, but doesn't do you any harm.



YOUR WATER SUPPLY

The amount of water taken each day to produce your water

Water companies take millions of litres a day but must be careful to balance society's needs while ensuring there is enough for the environment.

15,315

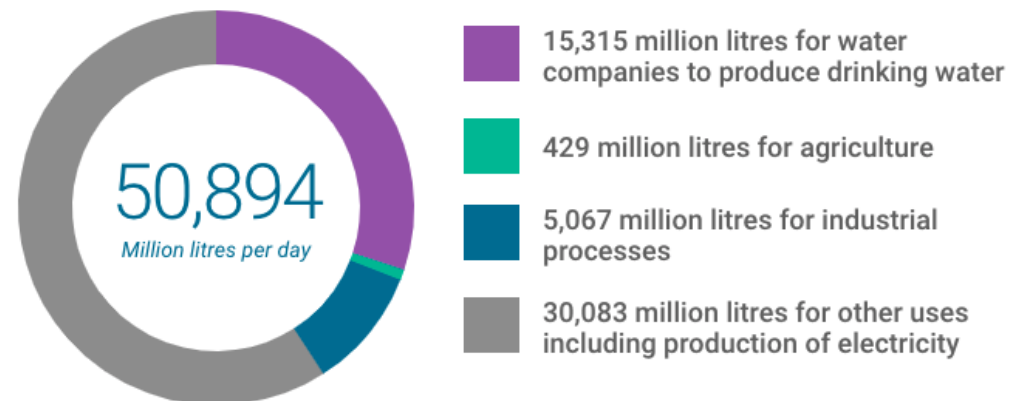
Million litres each day

Equivalent to



Source: Environment Agency and Natural Resources Wales; England and Wales, Jan 2015 - Dec 2015

It is not only water companies that take water from the environment



Source: Environment Agency and Natural Resources Wales; England and Wales, Jan 2015 - Dec 2015

WATER SUPPLY AND SERVICE

Your water comes from many sources

Water is found from different places before being collected, treated, and then pumped through many kilometres of pipes to your home.

474

Lakes, reservoirs and rivers

2,259

Underground sources

Source: Drinking Water Inspectorate; England and Wales, Jan 2020 - Dec 2020

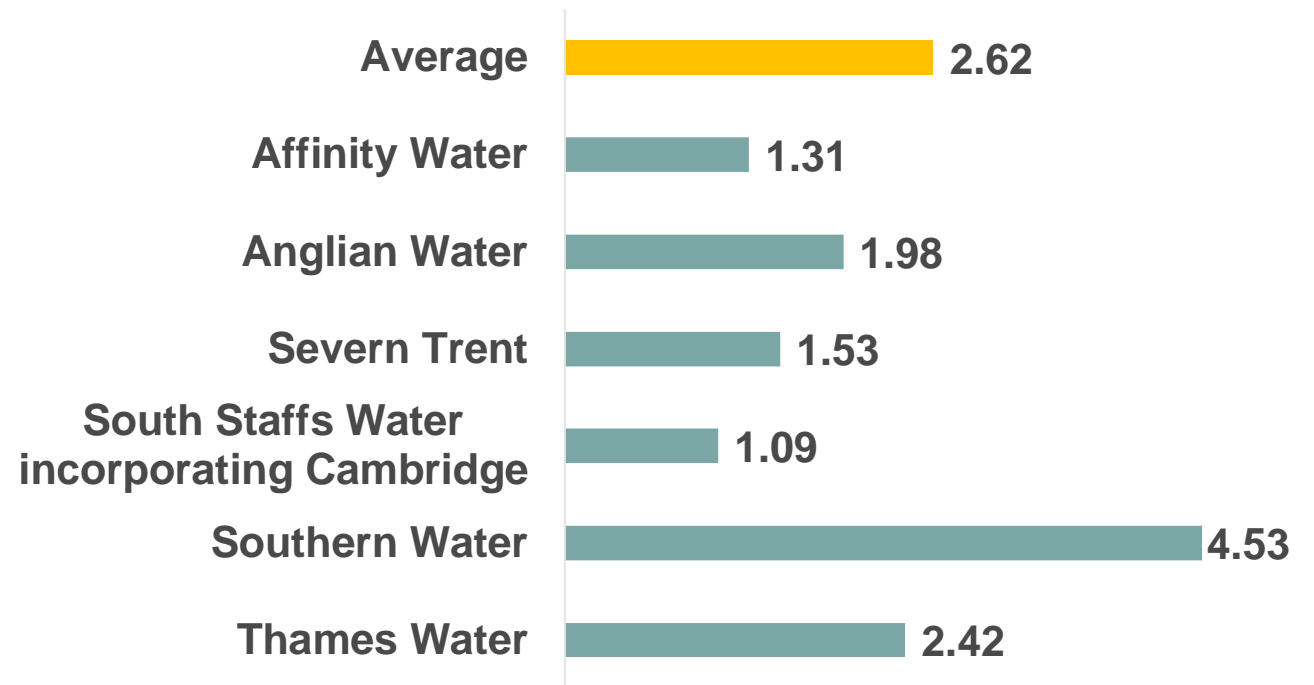
- Collecting and storing water is the first stage of delivering water to customers.
- Water is obtained from **lakes, reservoirs, rivers or underground sources**. Although there are more underground sources, most of the water that companies collect comes from lakes, reservoirs and rivers.
- This untreated water is then **pumped to water treatment plants**. In some cases, the untreated water is stored in reservoirs – this helps with the treatment process as large particles sink to the bottom.
- The amount of water that companies can take out of rivers or underground sources is controlled by the Environment Agency and Natural Resources Wales.

WATER SUPPLY AND SERVICE

There are **strict standards for the quality of your drinking water** – set to protect public health and ensure water quality is acceptable to customers. On average, **over 99.95% of all tests pass the standards**, and small variations are due to local factors which can affect individual samples of drinking water. The plumbing in your own home can also influence water quality if not fitted or maintained properly.

The chart on the right uses the Compliance Risk Index score to indicate water companies' performance in this area – the lower the score, the better.

Water quality across water companies
Overall 2020 performance against water quality tests (known as Compliance Risk Index (CRI))
Source: Drinking Water Inspectorate



WATER SUPPLY AND SERVICE



*The CCW stands for The Consumer Council for Water

WATER SUPPLY AND SERVICE

Ofwat (the industry regulator) measures the quality of service that companies provide to customers on a routine basis. The measure used is called the Customer Measure of Experience (C—Mex) and is scored out of 100. **The higher the score the better.**

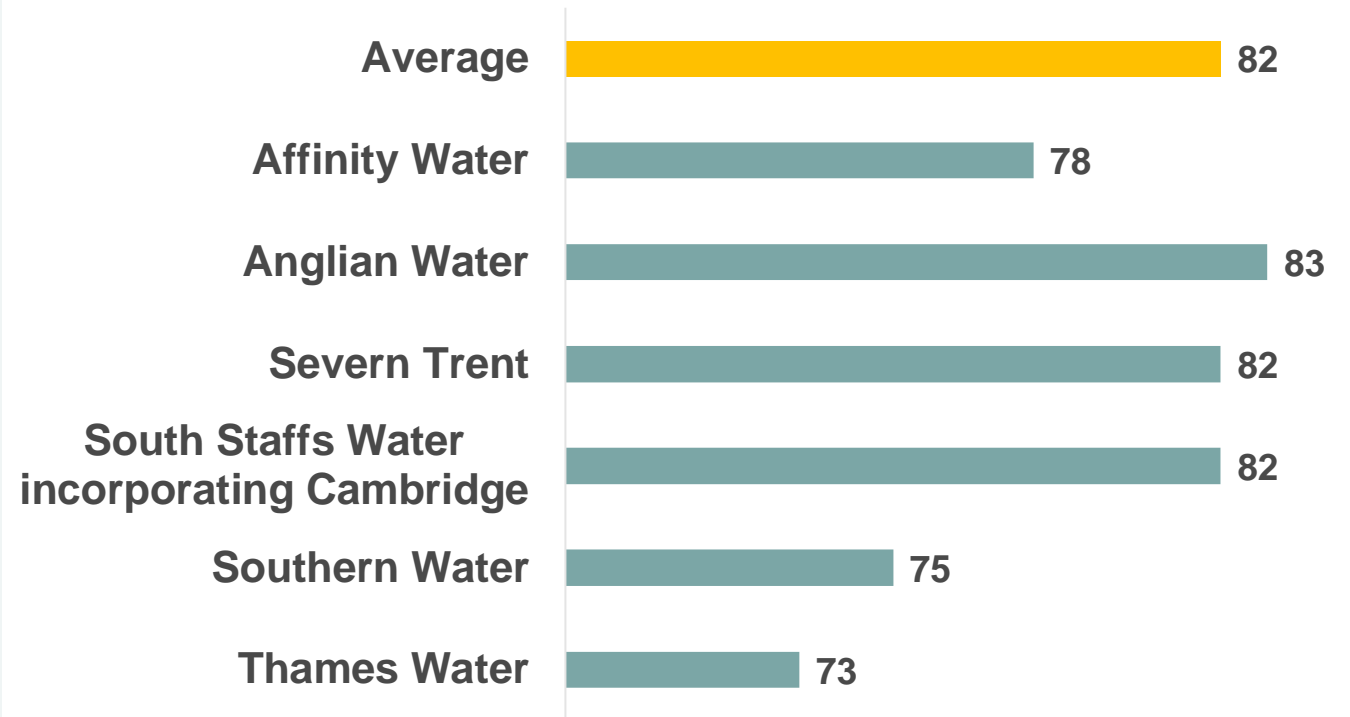
This is measured through surveys with customers who have recently contacted their company and random members of the public. Customers are asked how satisfied they are with the service provided and how likely they would be to recommend the water company to family or friends.

Source: Water UK; England and Wales, Apr 2020 - Mar 2021

C-MeX score (out of 100)

Company scores out of 100 for the latest year

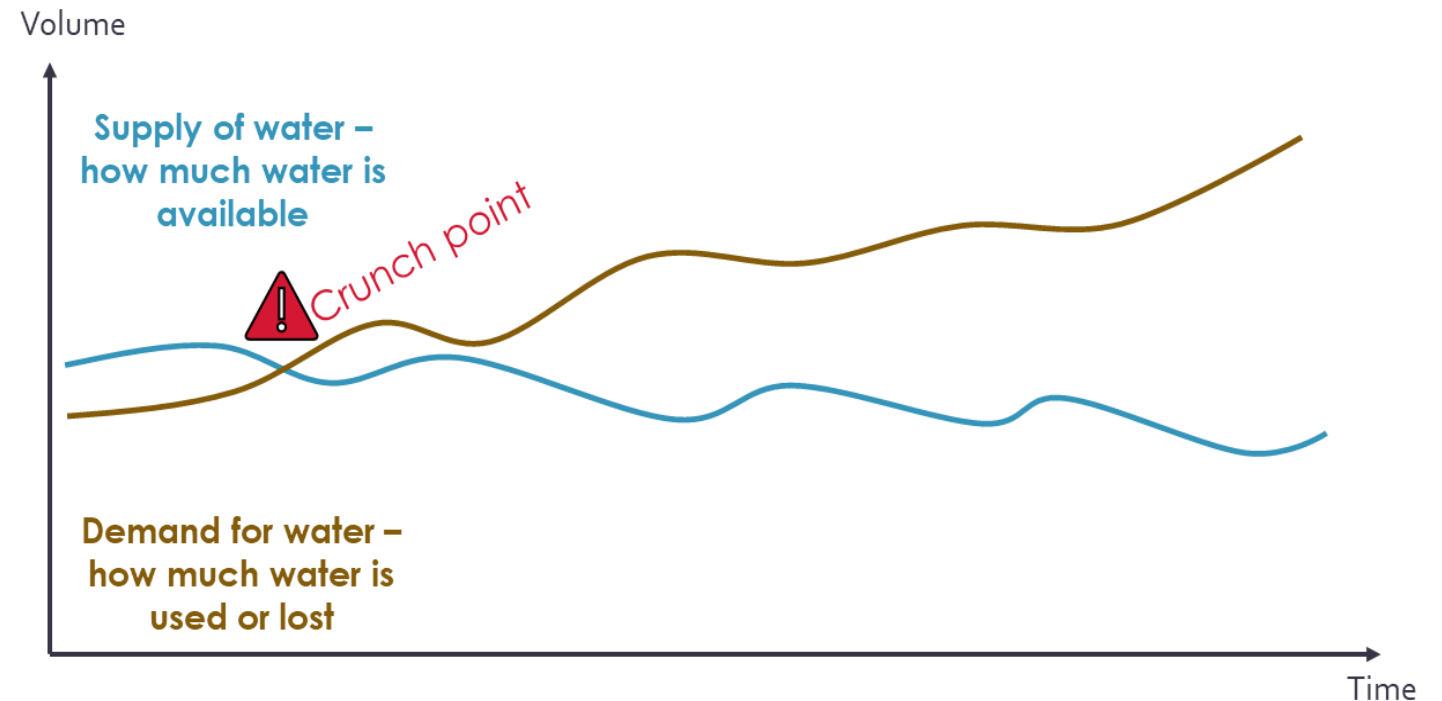
Source: Water UK



WATER SOURCE PRESSURES

In order to ensure everyone receives water, water companies need to balance the **supply** (i.e., water available) with the **demand** for this water.

If the level of demand exceeds the amount of water for supply, we would end up at a crunch point, where there is not enough water.



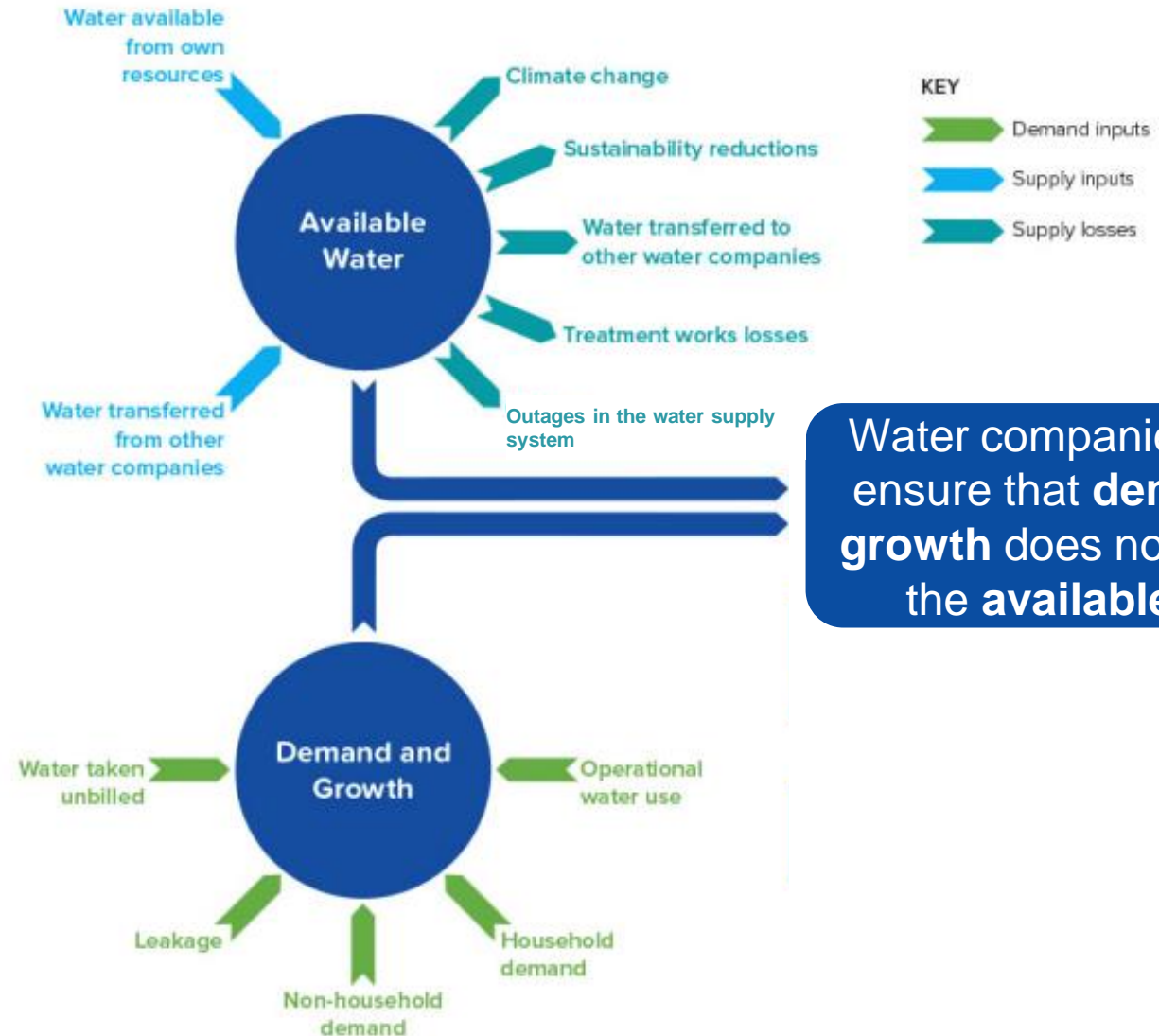
WATER SOURCE PRESSURES

These images show some of the things that influence how much water is available, and how large the demand for water is.

Water companies need to plan ahead to ensure that the demand for water does not exceed the supply.

They can do this by increasing supply and by reducing demand, and plan ahead many years to manage this.

When water companies need to invest, for example in a new supply, this cost is passed on to you via your water bill.



Water companies need to ensure that **demand and growth** does not outweigh the **available water**

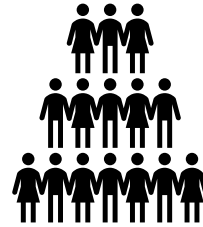
WATER SOURCE PRESSURES

There are 3 key factors that mean there will be more pressure on water resources in the future:



CLIMATE CHANGE

Changing climates could impact existing water sources both in normal years and when we experience a drought, which will change the amount of water that is available, mainly due to lower levels of rainfall. This is the main factor that could impact future water resources.



POPULATION GROWTH

More people in a region means an increase in the demand for water - more water must be supplied to more houses, as well as businesses serving the region.



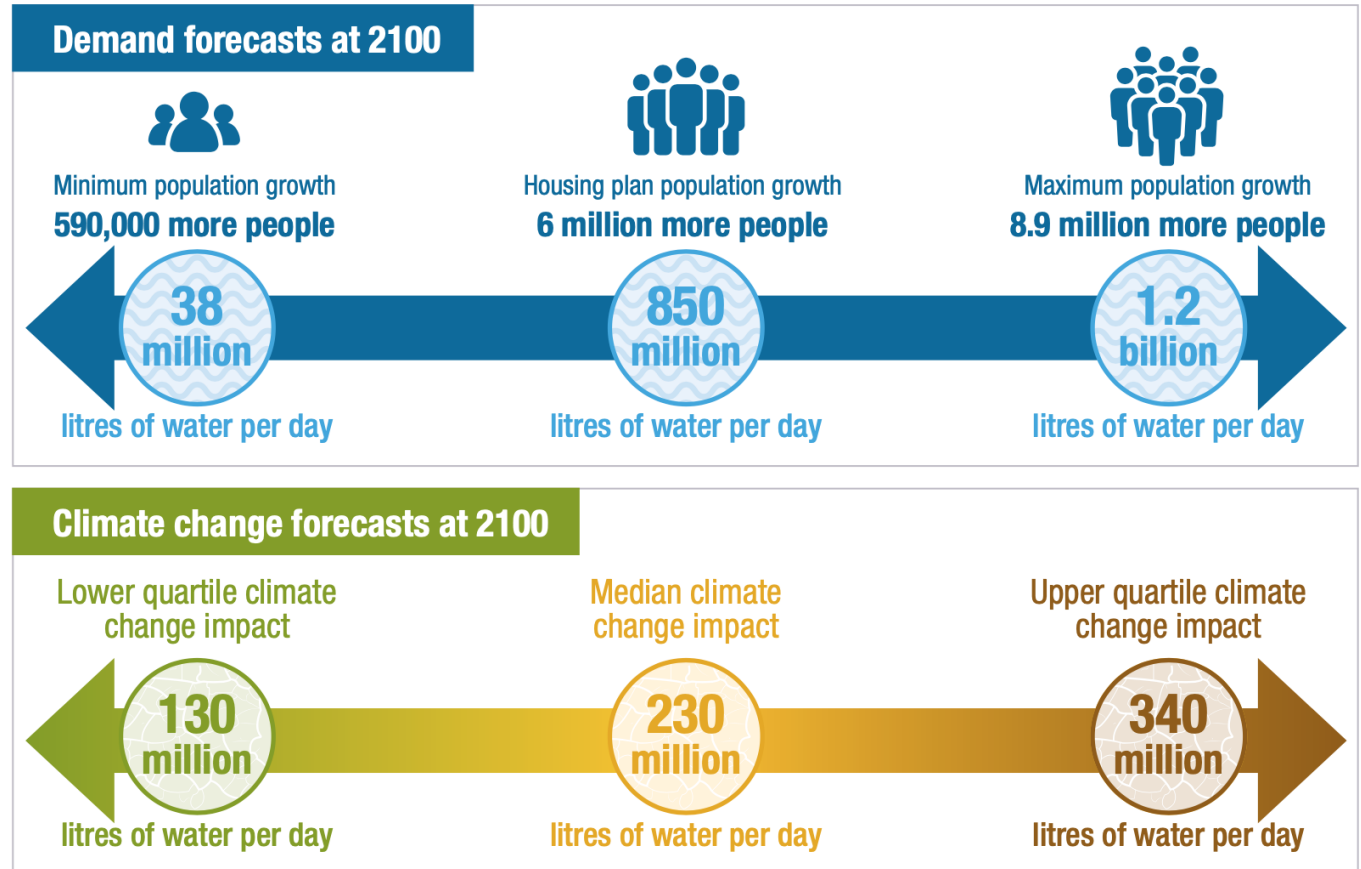
ENVIRONMENTAL PROTECTION

The environment must be protected, as if too much water is taken from the environment, less is available for wildlife habitats in lakes and rivers, which could cause irreversible harm to biodiversity.

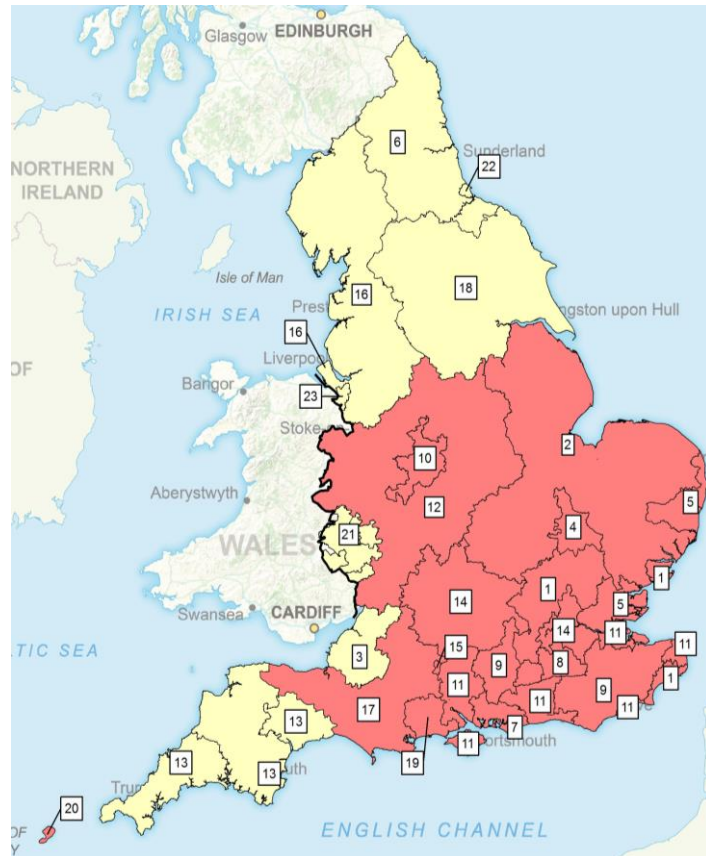
WATER SOURCE PRESSURES

While water companies do what they can to reduce demand and encourage customers to reduce their own use, the increase in pressures mean that **new water supplies (i.e., making more water available) will be needed** to ensure there is a reliable water source for everyone in the future.

The chart on the right shows just how much **additional water per day** could be needed by 2100 in the **South East** alone from population growth and climate change alone depending on a range of different predictions and potential scenarios.



WATER SOURCE PRESSURES



- = seriously water stressed areas
- = not seriously water stressed areas

Source: The Environment Agency, 2021

Most areas in England are defined as seriously water stressed. This means the current household demand for water is close to the rainfall available to meet that demand, either now or in the future.

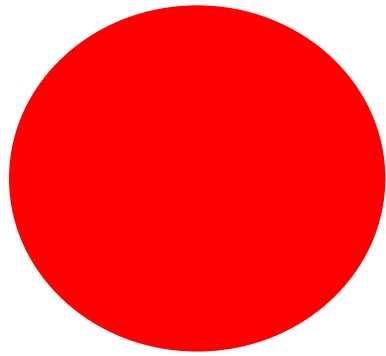
This means water companies need to look for new ways of supplying customers with water. The diagram on the right shows the process by which water companies have new water supply options approved by Defra and regulators.



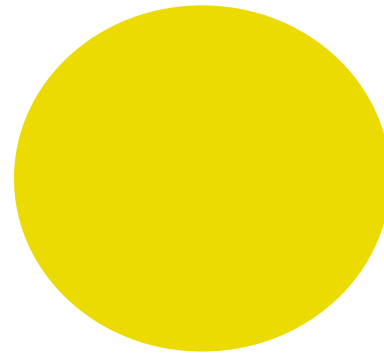
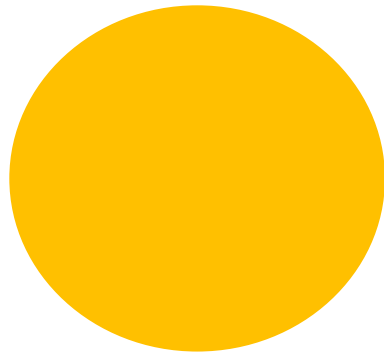
ASSESSING WATER SOURCES

Amount of water	Amount of additional water that the option can provide
Lead time	How long it will take before the water becomes available to supply customers
Cost	Cost per unit (litre) of water provided
Reliability under severe drought	Will the option still provide water during a severe drought
Resilience to other hazards	How vulnerable is the option to other hazards such as flooding or power outages
Energy use/Carbon	Energy used and carbon emitted during operation (carbon emissions cause climate change, so less carbon emissions is better)
Treatment required	Amount of water treatment required to meet water quality standards (more treatment can be more expensive and use more energy)
Positive environmental impact	E.g., protecting habitats of plants and animals
Negative environmental impact	E.g., damages habitats of plants and animals, produces waste and other pollutants

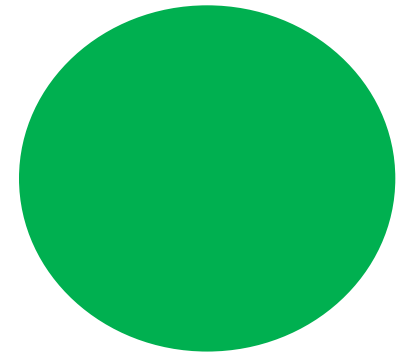
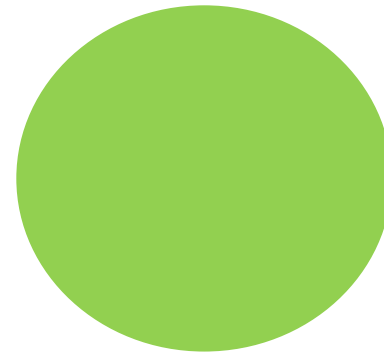
ASSESSING WATER SOURCES



Very poor



Average



Very good

RESERVOIR TO STORE WATER



What is it?

New Reservoirs can be built to store water when it is available. Water can be taken from rivers during the winter, when there is plenty of water, and stored so it can be used during drier periods

Is it already used?

Reservoirs are already a widely used resource across the UK

CASE STUDY: Proposed Fens Reservoir (between Peterborough and Kings Lynn)

- Would be able to provide 99 million litres of water a day to Anglian, Cambridge and Affinity Water customers
- Would cost roughly £107mn to construct, plus costs for new pipelines
- Would be able to start supplying homes by the mid-late 2030s

RESERVOIR TO STORE WATER

Amount of water	Lead time in years	Cost	Reliability under drought	Resilience to other hazards	Energy use/Carbon	Positive environment impacts	Negative environment impact
HIGH	12						

- ✓ Reliable – provides large volumes of additional water when it's needed e.g., in summer
- ✓ Will deliver the amount of water is planned in most conditions
- ✓ Once built, they can be used for recreation e.g., fishing and sailing
- ✓ Creates new habitats to support a range of wildlife
- ✓ Low cost to operate
- ✓ Could be used to help alleviate flooding

- X High cost option to build
- X Takes a long time to plan, get permission for, and build
- X May not be suitable for all location due to local geology (i.e., rock and ground material)
- X During construction there is lots of disruption on communities
- X Disrupts landscape and the natural environment, including loss of habitats for plants and wildlife that could reduce biodiversity
- X Is less flexible to future changes, including weather patterns

DESALINATION



What is it?

Taking sea water and treating it, including removing the salt, so it can be used for water supply.

Is it already used?

Limited use in UK but more common worldwide.

CASE STUDY: Beckton desalination plant (Thames)

- Cost £250mn, and can produce 100 million litres of water per day, supplying 400,000 homes in North London
- Uses approximately 5 times more energy than normal water treatment
- Only operates during periods of drought, periods of low rainfall or to maintain supplies in case of an incident

DESALINATION

Amount of water	Lead time in years	Cost	Reliability under drought	Resilience to other hazards	Energy use/Carbon	Positive environment impacts	Negative environment impact
HIGH	4-6						

- ✓ Reliable source of large volumes of additional water
- ✓ Water is always available, even in times of drought
- ✓ The treatment works can be built in a way that makes them more flexible to future changes (e.g., in demand)
- ✓ Possibility to use green energy sources in the future

- X High cost option to operate
- X Restricted to areas where there is a coastline or estuary
- X Currently, it requires a lot of energy and has a high carbon footprint
- X Disrupts marine and coastal wildlife and habitats
- X Process to purify water produces salt as a waste product, which needs to be safely disposed of
- X Difficult to operate if only used intermittently

RECYCLED WATER



What is it?

This involves taking treated wastewater and recycling it through a water treatment works for re-treatment to a very high standard so that it can be used for water supply. All public drinking water has to pass high legal and quality safety standards.

Is it already used?

Already happens as part of the existing water supply system

CASE STUDY: Proposed plant at Minworth (near Birmingham)

- Would be able to supply up to 215 million litres of water per day
- Would be a robust, reliable and resilient source of raw water
- Cost is expected to be between £0.9m and £3.6m depending on the exact specification

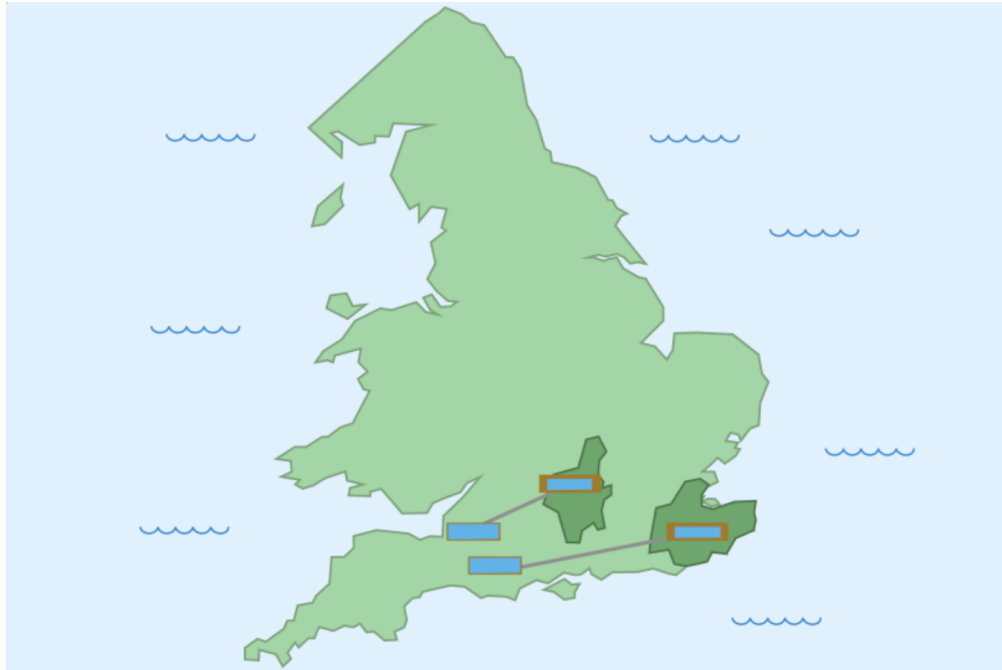
RECYCLED WATER

Amount of water	Lead time in years	Cost	Reliability under drought	Resilience to other hazards	Energy use/Carbon	Positive environment impacts	Negative environment impact
HIGH	4-6						

- ✓ Reliable source of large volumes of additional water
- ✓ Allows for the reuse of a resource that would otherwise be lost
- ✓ The treatment works can be built in a way that makes them more flexible to future changes (e.g., in infrastructure)

- X High cost option to operate
- X Requires advanced treatment which uses lots of chemicals and energy
- X Chemicals used in the process could impact local plant and wildlife
- X Not as flexible to future changes e.g., if demand alters or there are changes to the wastewater
- X Dependent upon a suitable location being found

WATER TRANSFER



What is it?

Water may be transferred within a water company, between companies or between regions. Water may be transferred via dedicated pipelines, or using rivers or canals (with some connecting pipelines).






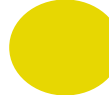
Is it already used?

This system is already used in many countries, including part of the UK

CASE STUDY: Grand Union Canal (near Birmingham)

- Would cost between £250-560mn to construct depending on the extent of transfers, and would be able to supply between 50-100 million litres of water per day
- Would utilise existing canal infrastructure and be in use by 2035
- Water would be transferred from an area that is less water stressed to an area that is more water stressed

WATER TRANSFER

Amount of water	Lead time in years	Cost	Reliability under drought	Resilience to other hazards	Energy use/Carbon	Positive environment impacts	Negative environment impacts
HIGH	3-12						

- ✓ Can provide large volumes of additional water to supplement local resources
- ✓ Creates more connections in the water supply system
- ✓ Using the river or canal system may give opportunities for environmental improvement due to better water flows

- X Can be a high cost option- water is heavy, so may need lots of energy to move it
- X Taste, smell and hardness of water may change if water is transferred from a different area with a different water source
- X The volume of water that can be supplied is limited by the capacity of the river/canal and whether neighbouring water companies have enough themselves (e.g., during a drought)
- X Water may be contaminated during the transfer.
- X There may be impacts on the water environment e.g., if non-native species were transferred between rivers to an area where they are invasive

WATER EFFICIENCY | Leakage and Metering



What is it?

Water companies work to ensure the water available is used as efficiently as possible. This is done through repairing leaks and bursts, making sure treatment plants are efficient, and installing meters to help customers identify leaks and manage how much water they use.

Is it already used?

Yes – by UK water companies

CASE STUDY: South Staffs Water | Satellite leak detection

- On average, 117 litres of water per household in the UK is lost through leaks everyday
- South Staffs use satellite technology to detect leaks by looking for signs like discoloured tarmac or soil
- This has helped identify leaks, resulting in a saving of over 2 million litres of water per day

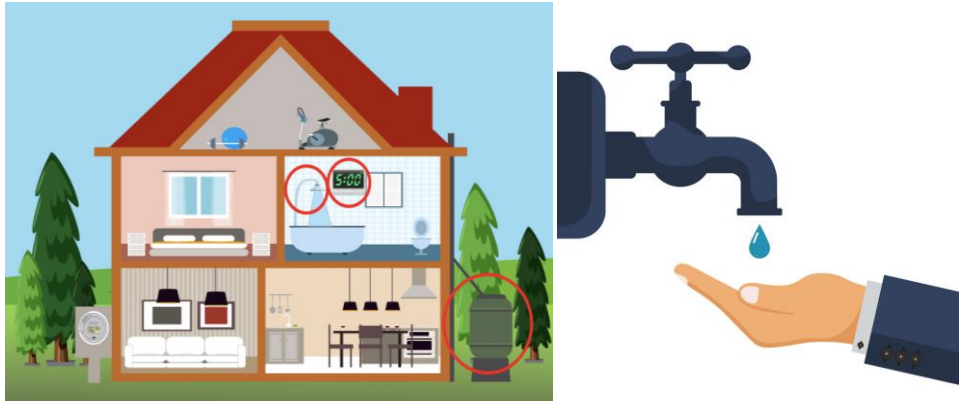
WATER EFFICIENCY | Leakage and Metering

Amount of water	Lead time in years	Cost	Reliability under drought	Resilience to other hazards	Energy use/Carbon	Positive environment impacts	Other negative environment impact
MEDIUM	1-5						

- ✓ Reduces need to take more water from rivers and underground
- ✓ Keeps more water in the 'supply system'
- ✓ Easy to install meters and are low cost
- ✓ Households use 10% less water on average in the years after a meter is fitted, though this reduces to 5% less water after 5 years after the meter is fitted

- X Many leaks are deep in the ground and are expensive to find or fix, causing disruption and congestion from road works
- X Hidden leaks are expensive and hard to find
- X Up to a quarter of leaks can be on customer properties, which are the responsibility of customers
- X The amount of water saved would only provide part of future water needs
- X Installing meters does not guarantee water saving

WATER EFFICIENCY | Education



What is it?

Water companies provide customers with advice and education on how to use less water, and encourage the use of water saving devices such as water butts (for watering the garden), shower timers and water efficient shower heads to reduce demand. This requires customers to change their own water usage and habits.

Is it already used?

Yes – by UK water companies

CASE STUDY: Save Water Save Money

- Water companies across the UK promote this service to customers to help them save water
- It sells various tools to save water, such as water butts to collect rainwater for the garden, or a hippo bag to reduce the water used each time your toilet flushes, as well as tips on identifying leaks on your property

WATER EFFICIENCY | Education

Amount of water	Lead time in years	Cost	Reliability under drought	Resilience to other hazards	Energy use/Carbon	Positive environment impacts	Negative environment impact
LOW	1-3						

- ✓ Water saving devices are easy to install & there is minimal disruption for customers
- ✓ Low cost
- ✓ Can reduce bills for people on meters
- ✓ Reduces the need to increase the supply of water, so avoids negative environmental impacts

- X Unreliable, as customers will not necessarily change their behaviours to use less water/ not reduce their use enough to ensure the supply is reliable in the long term
- X Needs lots of customers to change their behaviours and have the devices fitted

3 Quantitative research

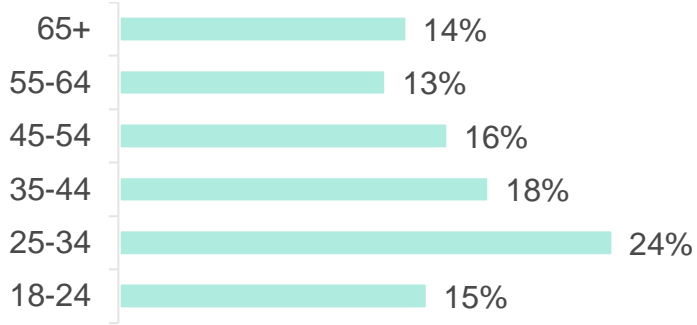


Sample breakdown

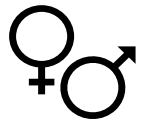
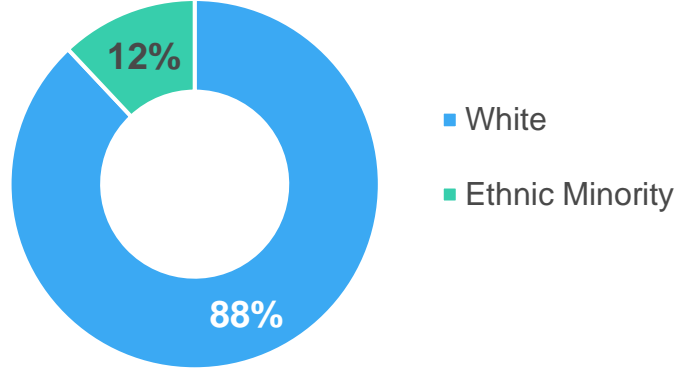
Sample: Demographics



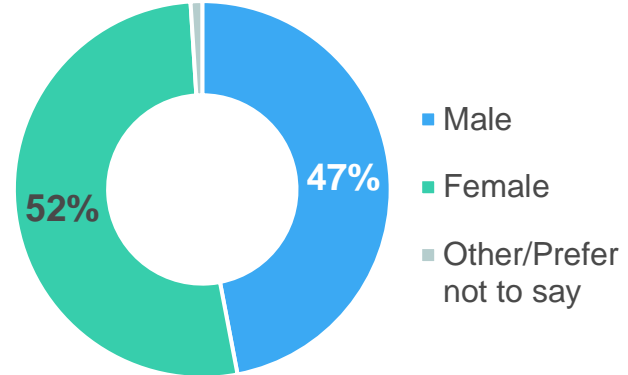
Age



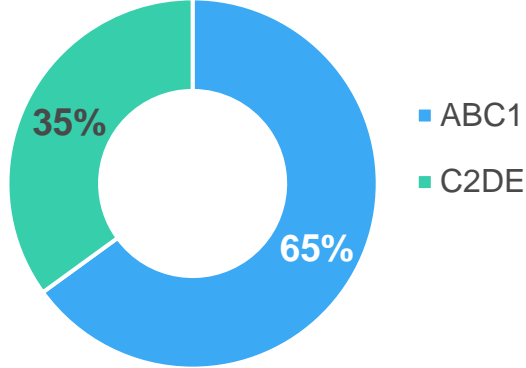
Ethnicity



Gender



SEG

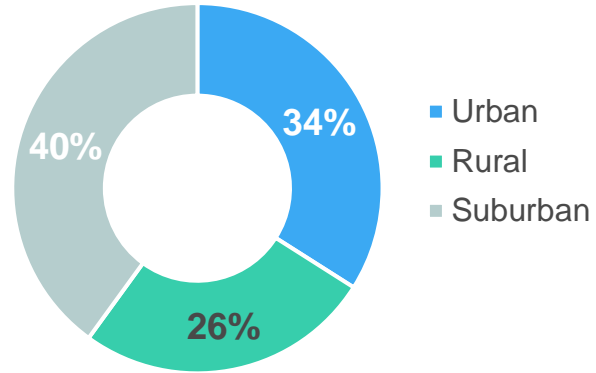


D1. How old are you? Base: All HH respondents (n=1762). D2. In which of the following ways do you identify? Base: All respondents (n=1762). D5. Which of the following best describes the profession of the chief income earner in your household? Base: All HH respondents (n=1762) D7. Which of the following best describes your living situation? Base: All HH respondents (n=1762). D8. How would you describe your ethnic origin? Base: All HH respondents (n=1762). HH data weighted to natrep standard based on Age/Gender/SEG.

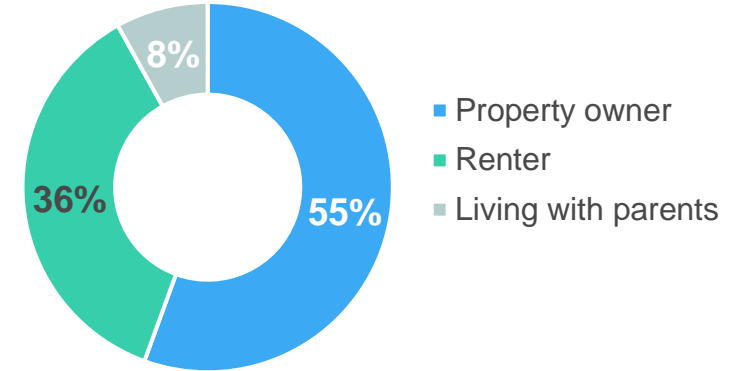
Sample: Household types



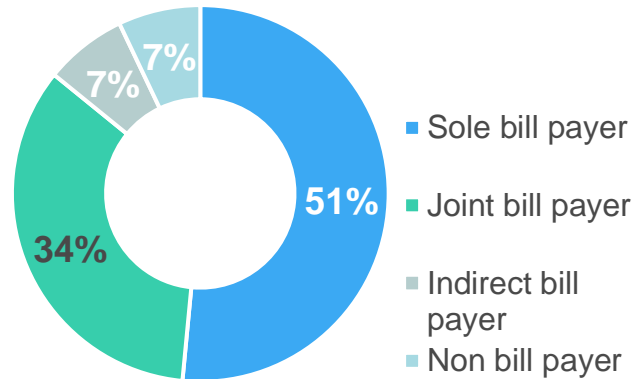
Type of area



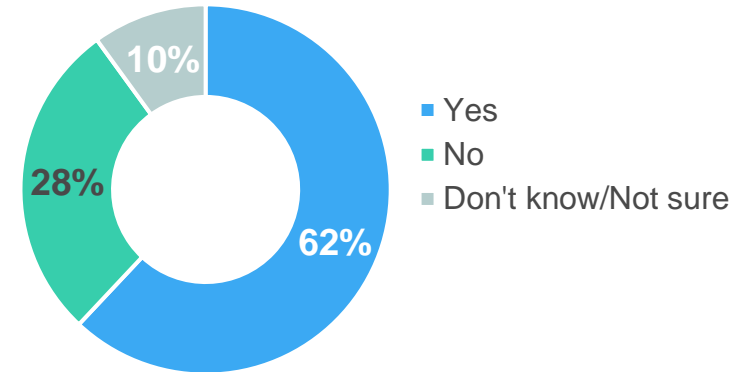
Living situation



Water bill payers



Water meter

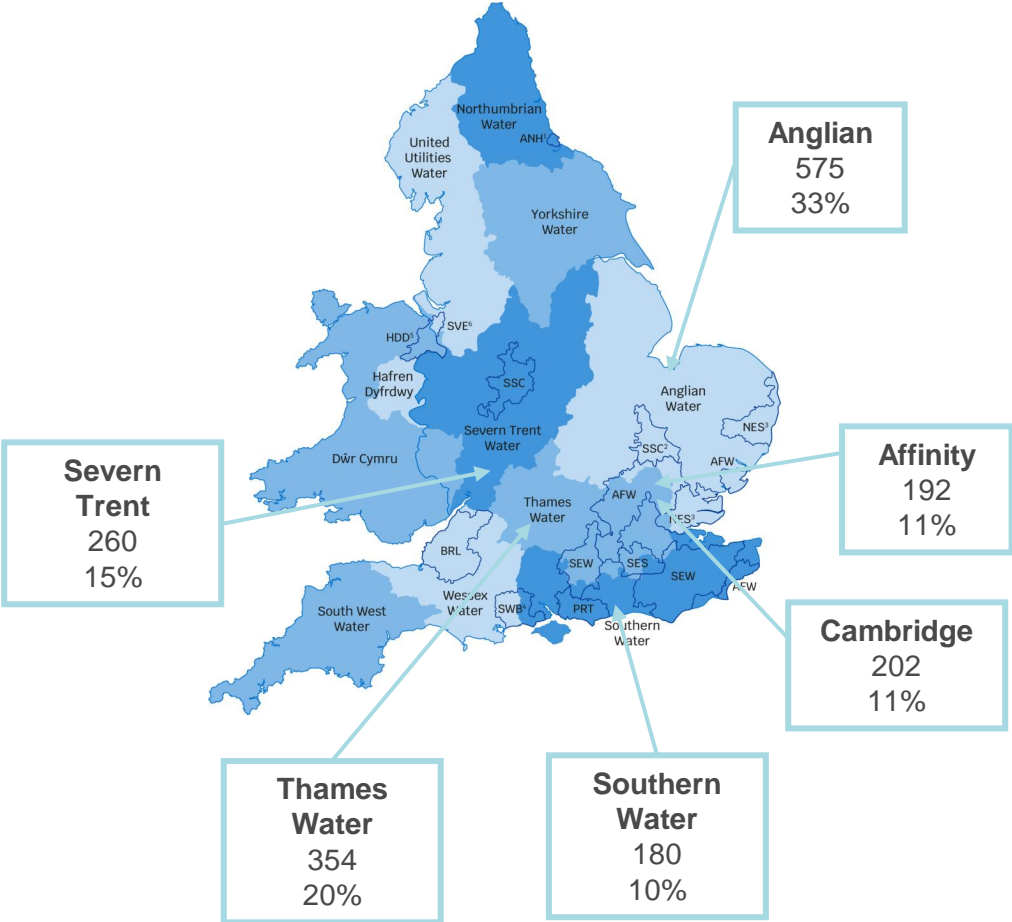


D6. How would you describe the area you live in? Base: All HH respondents (n=1762). D9. When it comes to paying each of these types of bills for your home, which of the following best describes you? Base: All HH respondents (n=1762). D10. Do you have a water meter? Base: All HH respondents (n=1762). Household data weighted to natrep standard based on Age/Gender/SEG.

Sample: Household Customers by water company

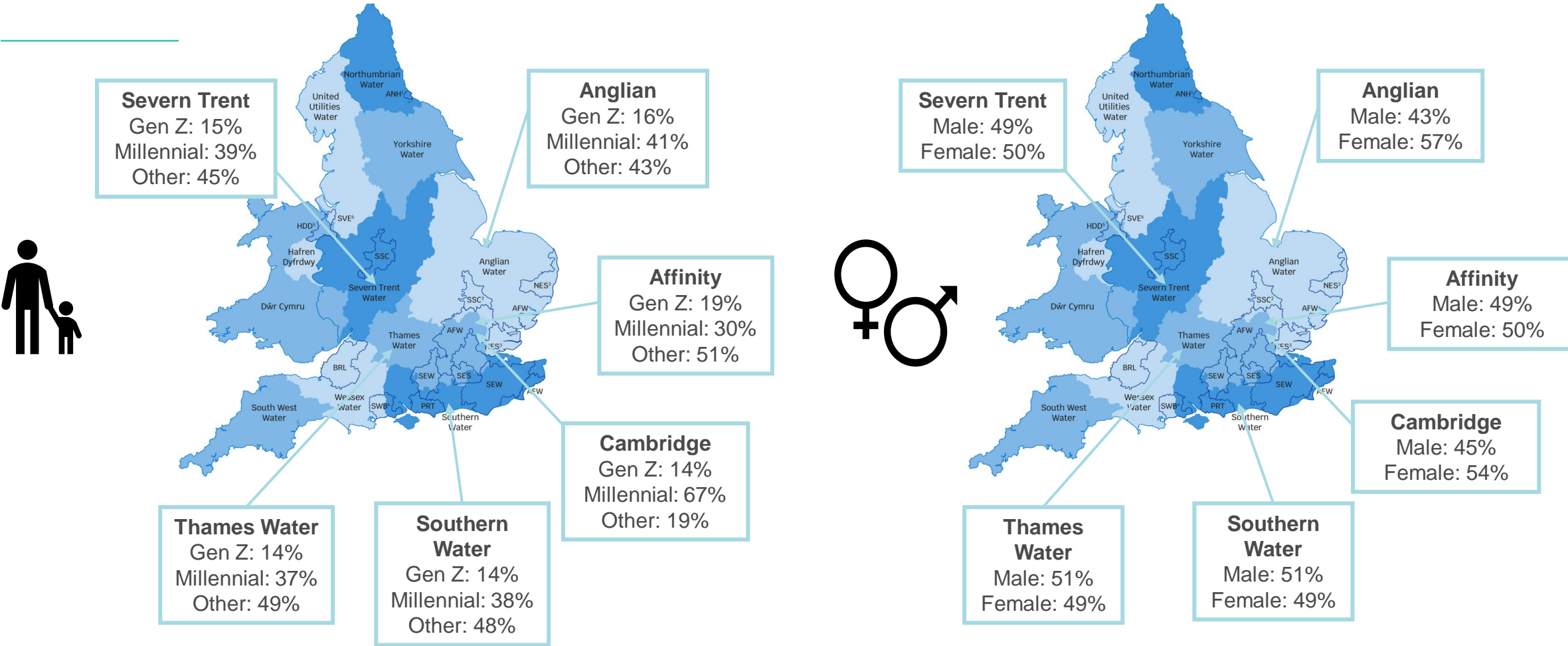


Household Customers by water company	Number of participants	Proportion of total sample
Anglian	575	33%
Affinity	192	11%
Cambridge	202	11%
Southern Water	180	10%
Thames Water	354	20%
Severn Trent	260	15%



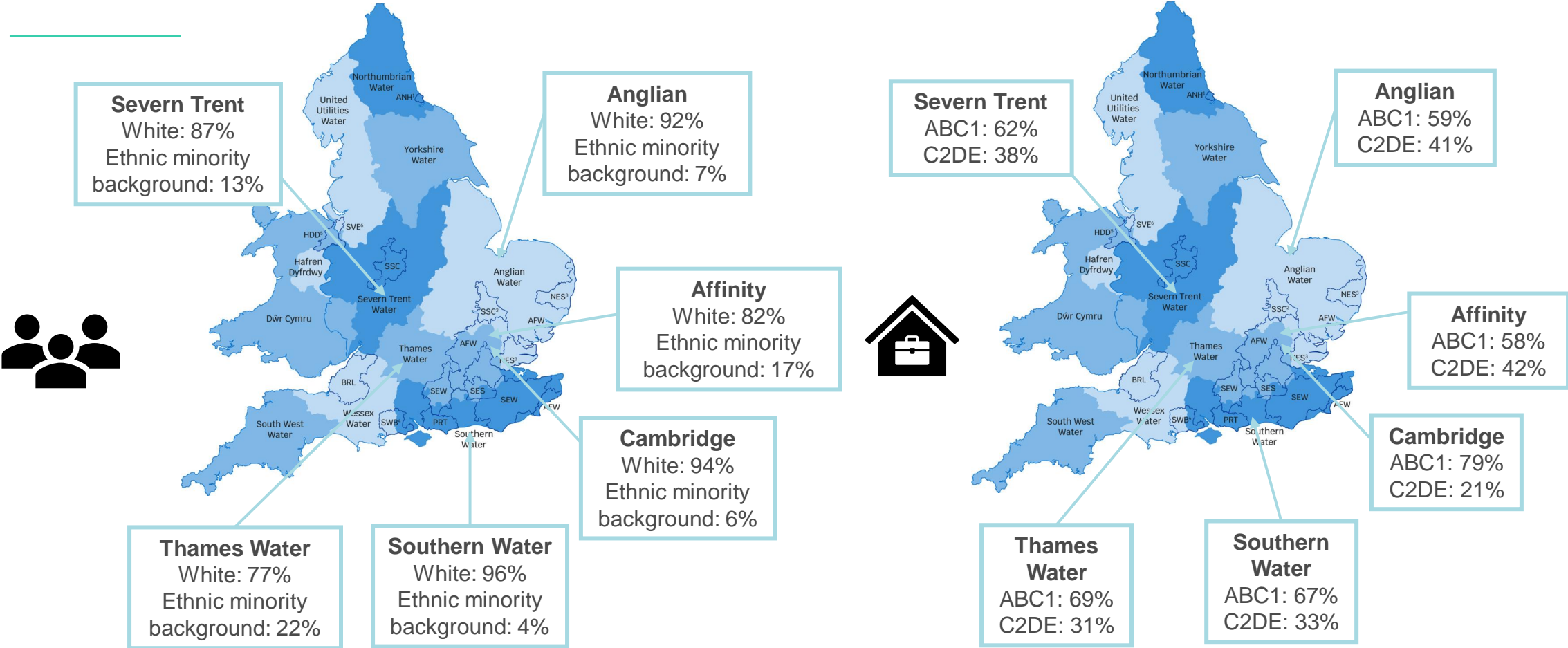
Hidden routing from D4. What is your postcode/area code? Base: All HH respondents (n=1762)

Sample: Age & Gender by water company (HH)



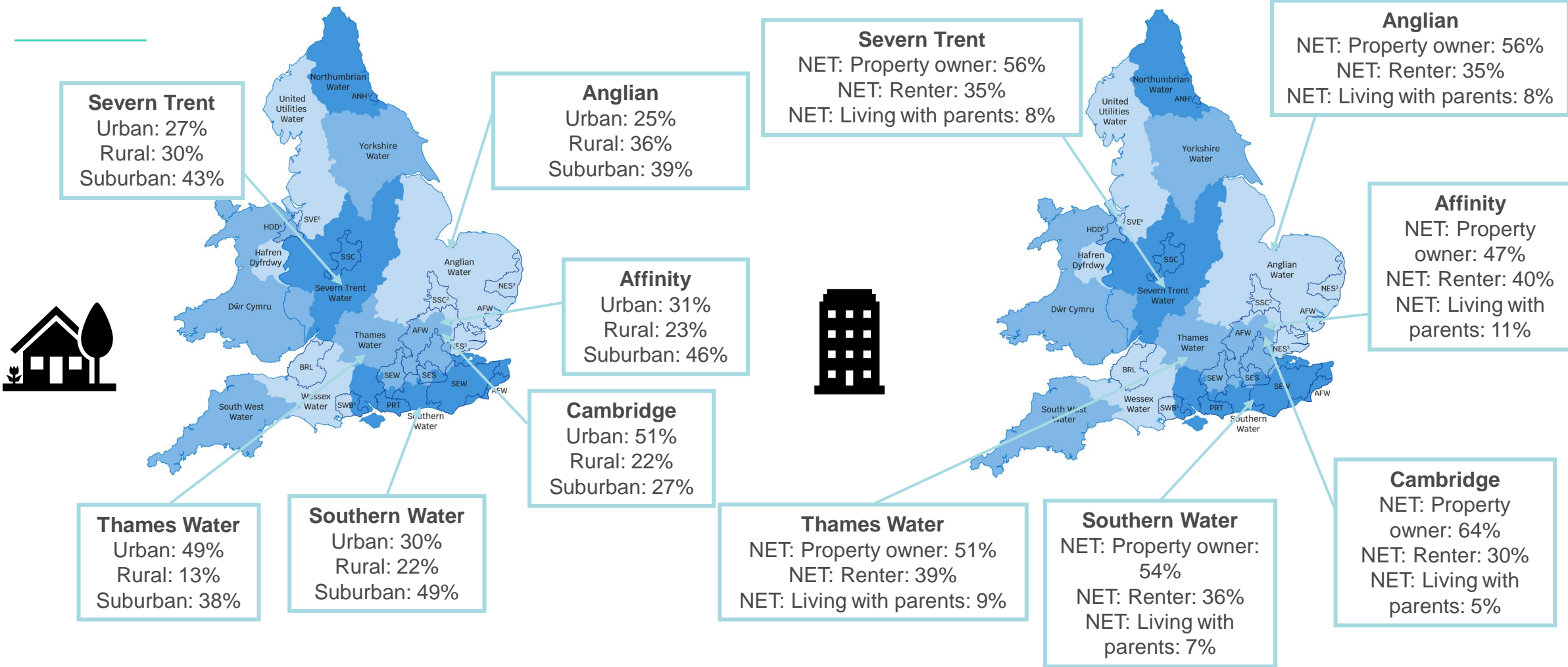
D1. How old are you? Base: All HH respondents (n=1762)
 D2. In which of the following ways do you identify? Base: All HH respondents (n=1762)

Sample: Household Customers by Ethnicity & SEG (HH)



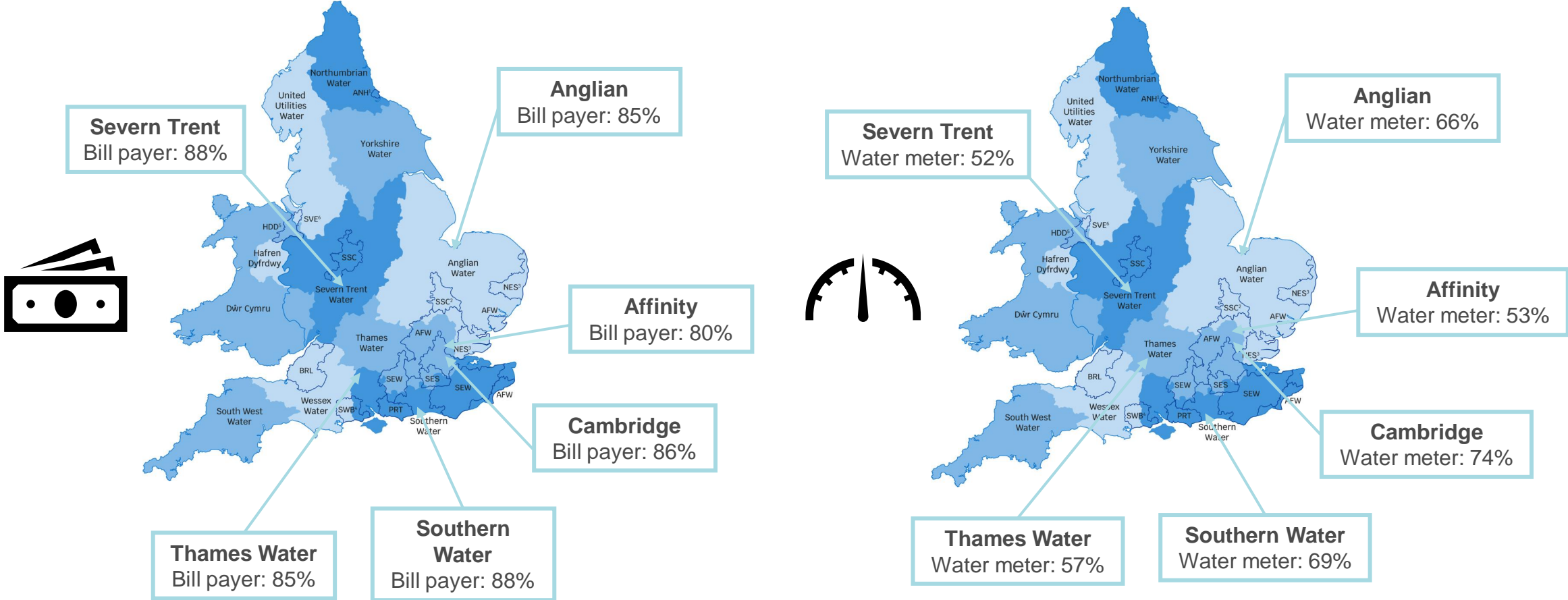
D5. Which of the following best describes the profession of the chief income earner in your household? Base: All HH respondents (n=1762).
D8. How would you describe your ethnic origin? Base: All HH respondents (n=1762).

Sample: Type of area & Living situation by water company (HH)



D6. How would you describe the area you live in? Base: All HH respondents (1762).
D7. Which of the following best describes your current living situation? Base: All HH respondents (n=1762)

Sample: Water bill payers & Water meter users by water company (HH)

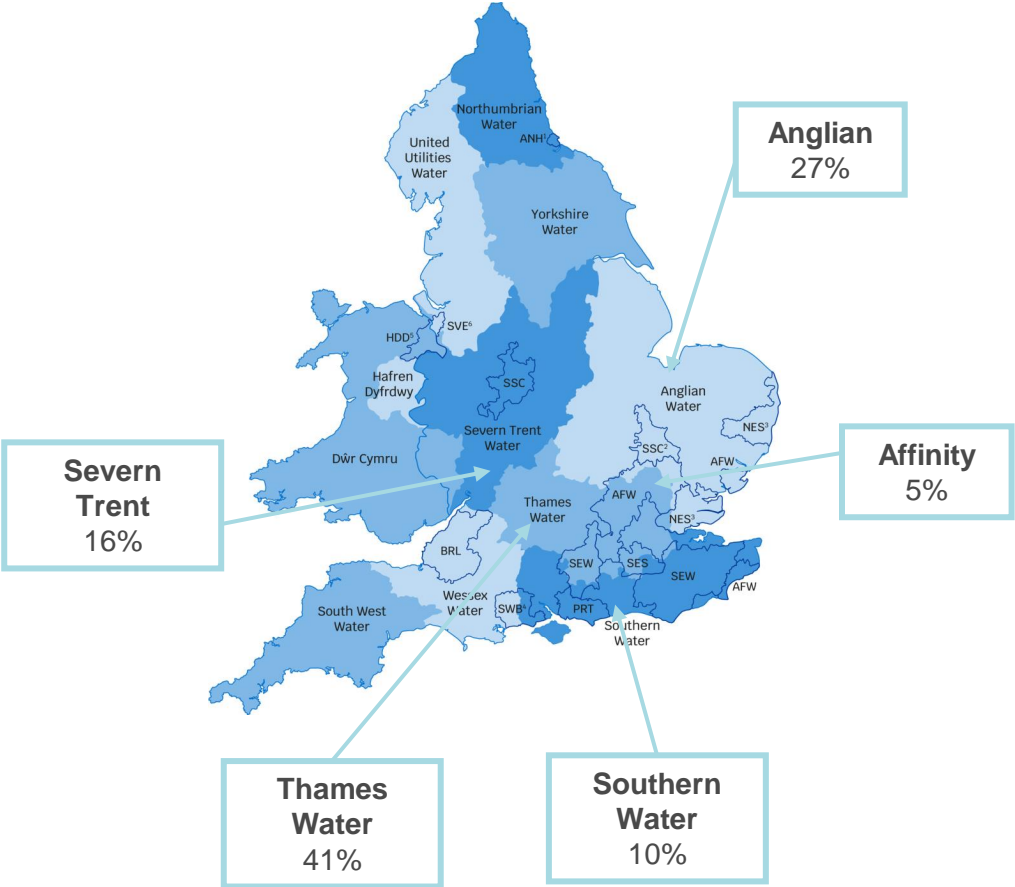


D9.1. When it comes to paying each of these types of bills for your home, which of the following best describes you? – Water. Base: All HH respondents (n=1762).
D10. Do you have a water meter? Base: All HH respondents (n=1762).

Sample: Non-household Customers by water company



Household Customers by water company	Number of participants	Proportion of total sample
Anglian	54	27%
Affinity	10	5%
Cambridge	-	-
Southern Water	20	10%
Thames Water	82	41%
Severn Trent	32	16%



Hidden routing from D4. What is your postcode/area code? Base: All NHH respondents (n=198)

Sample: Non-household customers



Number of workers in organisation	Number of participants	Proportion of sample
1 (0 employees)	6	3%
2-4	4	2%
5-9	20	10%
10-19	23	12%
20-49	25	13%
50-99	37	19%
100-249	35	18%
250+	48	24%

NHH3. Including yourself, how many people work for your organization? Base: All NHH respondents (n=198)

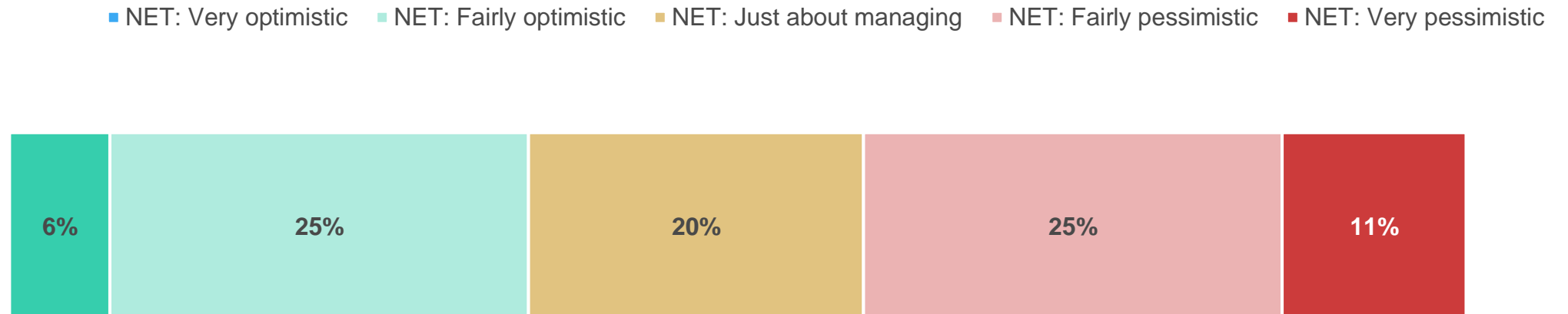
Sample: Non-household customers



Type of business	Number of participants	Proportion of sample
Agriculture, Forestry and Fishing	9	5%
Mining and quarrying	0	-
Manufacturing	20	10%
Electricity, Gas, Steam and air conditioning	6	3%
Water supply, sewerage, waste management and remediation activities	0	-
Construction	19	10%
Wholesale and retail trade; repair of motor vehicles and motorcycles	10	5%
Transport and storage	10	5%
Accommodation and food service activities	19	10%
Information and communication	11	6%
Financial and insurance activities	15	8%
Real estate activities	5	3%
Professional, scientific and technical activities	12	6%
Administrative and support service activities	8	4%
Public administration and defence; compulsory social security	2	1%
Education	13	7%
Human health and social work activities	13	7%
Arts, entertainment and recreation	11	6%
Other	15	8%

Optimism or pessimism on cost of living – Household customers

Thinking about your personal life, to what extent are you feeling optimistic or pessimistic about being able to afford luxuries/essentials in life?

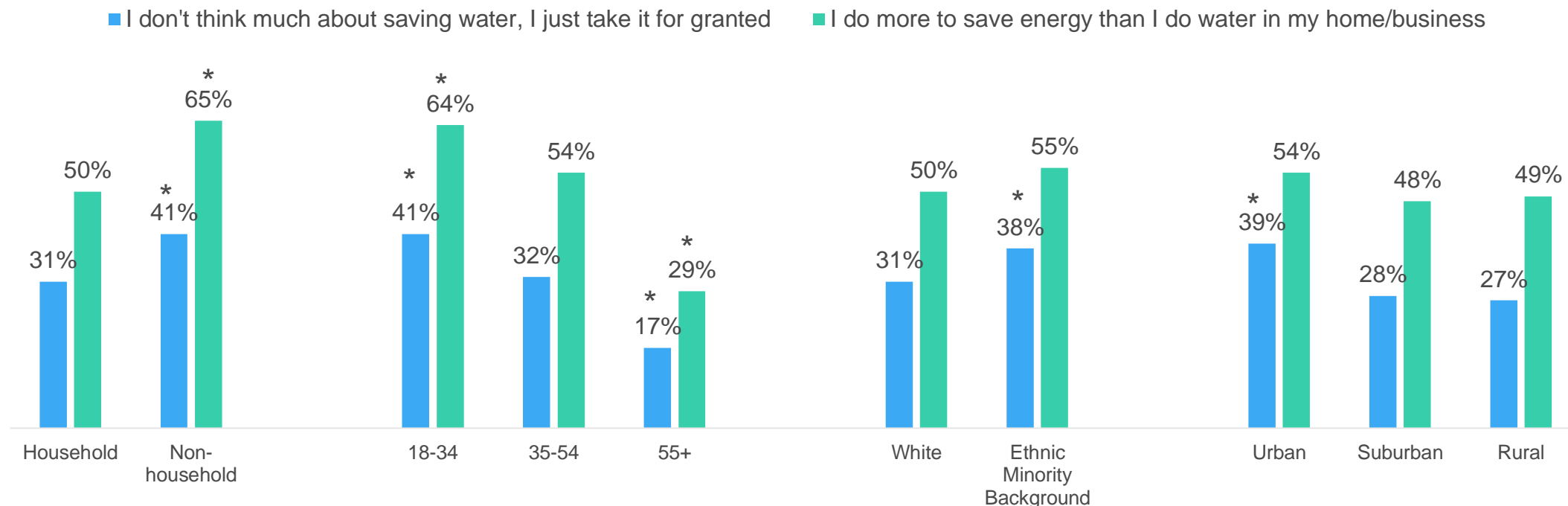


B1. Thinking about your personal life, to what extent are you feeling optimistic or pessimistic about the following? Being able to afford the essentials in life/Being able to afford the luxuries in life. Base: All respondents (n=1762).

Younger respondents, those from urban areas and ethnic minority backgrounds report taking water for granted more

To what extent do you agree with the following statements?

% agree/strongly agree

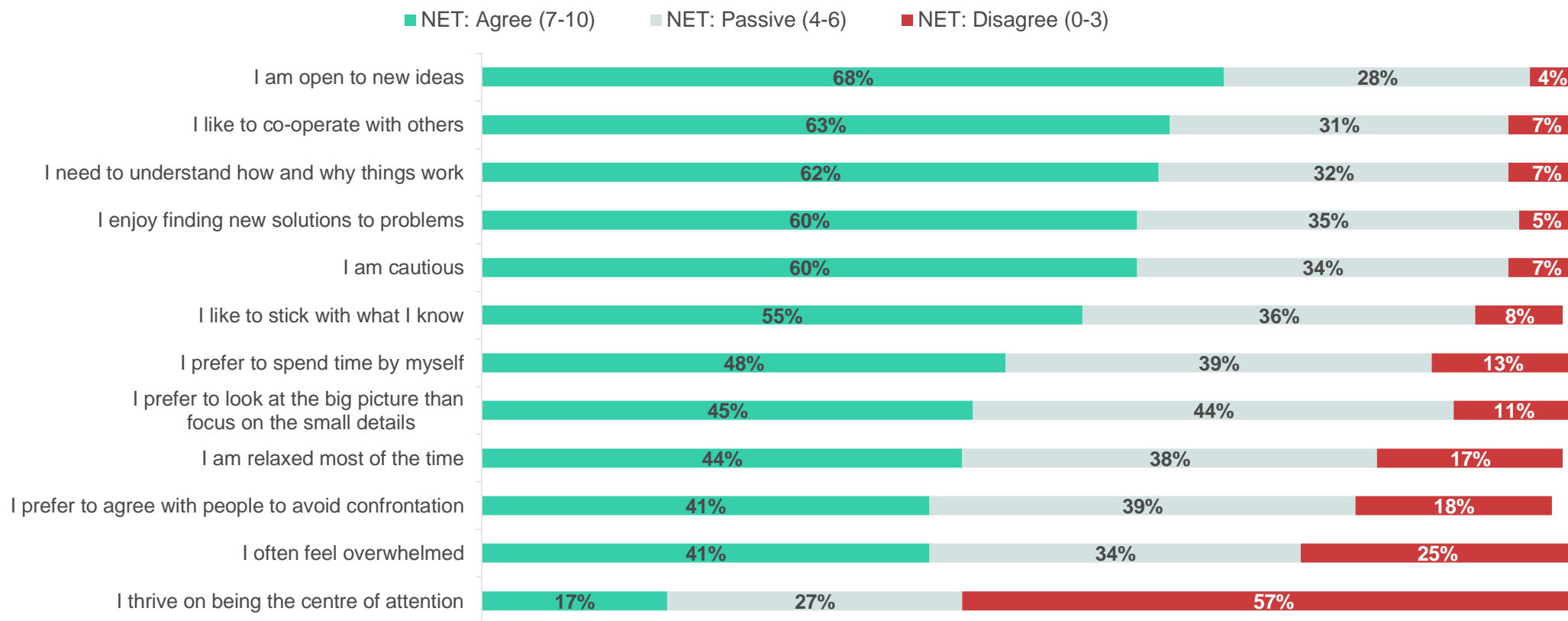


* = Statistically significantly higher/lower at 95% confidence level compared to household customers overall

B4. To what extent do you agree with these statements? 'I don't think much about saving water, I just take it for granted.' 'I do more to save energy than I do water in my home/business'
 Base: All respondents, HH (n=1762), NHH (n=198)

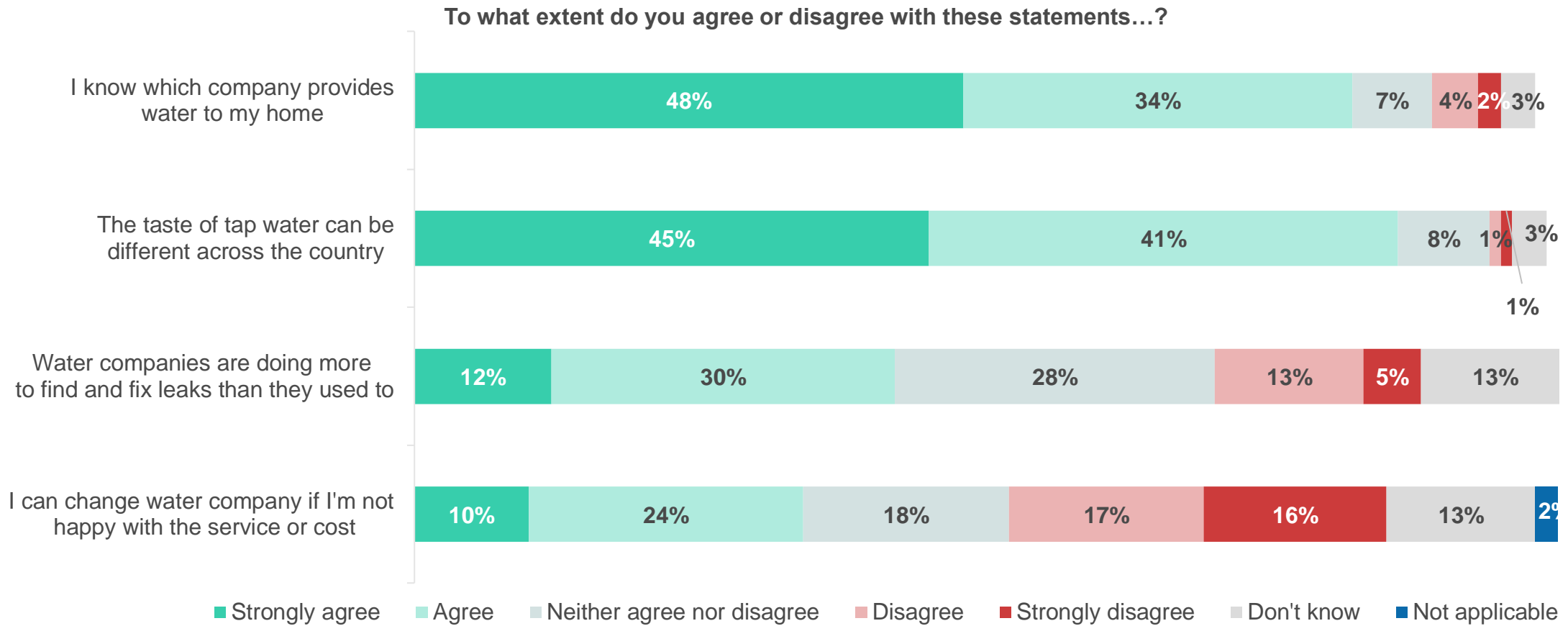
Behavioural – Household customers

To what extent do you agree or disagree with these statements...?



B2. To what extent do you agree or disagree with the following statements about yourself on a scale from 0 to 10 where 0 is strongly disagree and 10 is strongly agree? Base = All respondents (n=1762).

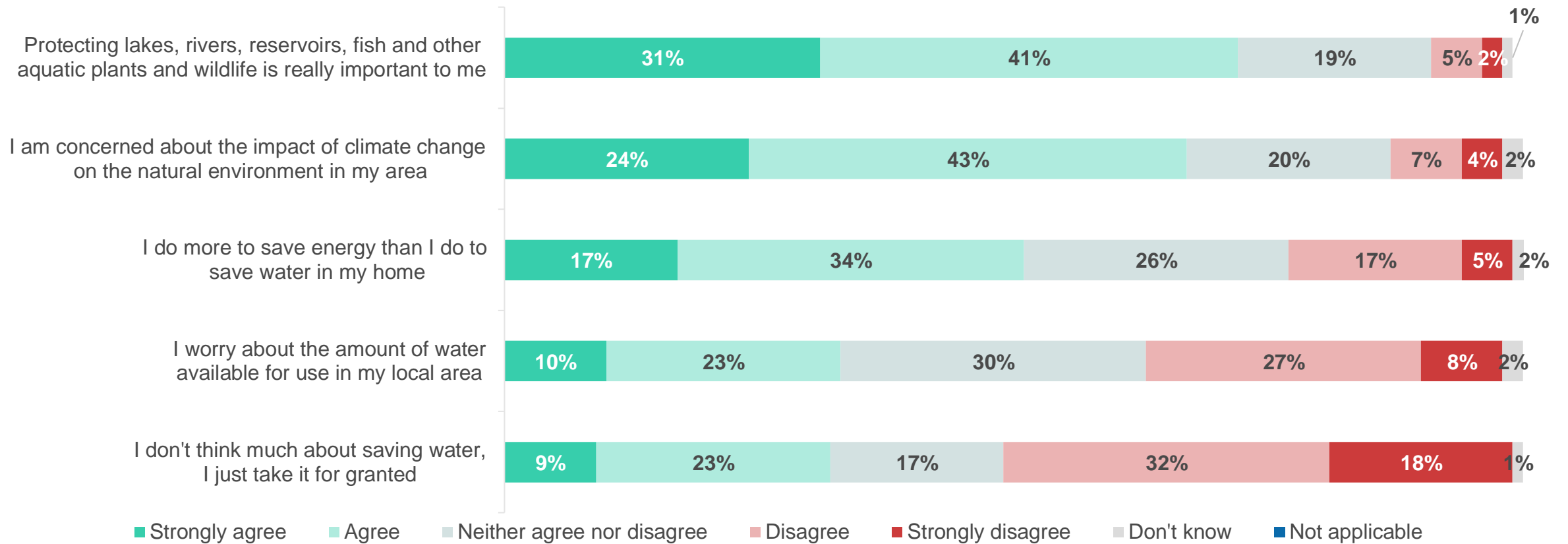
Water knowledge – Household customers



B4. To what extent do you agree with these statements? Base = All respondents (n=1762)

Water knowledge– Household customers

To what extent do you agree or disagree with these statements...?

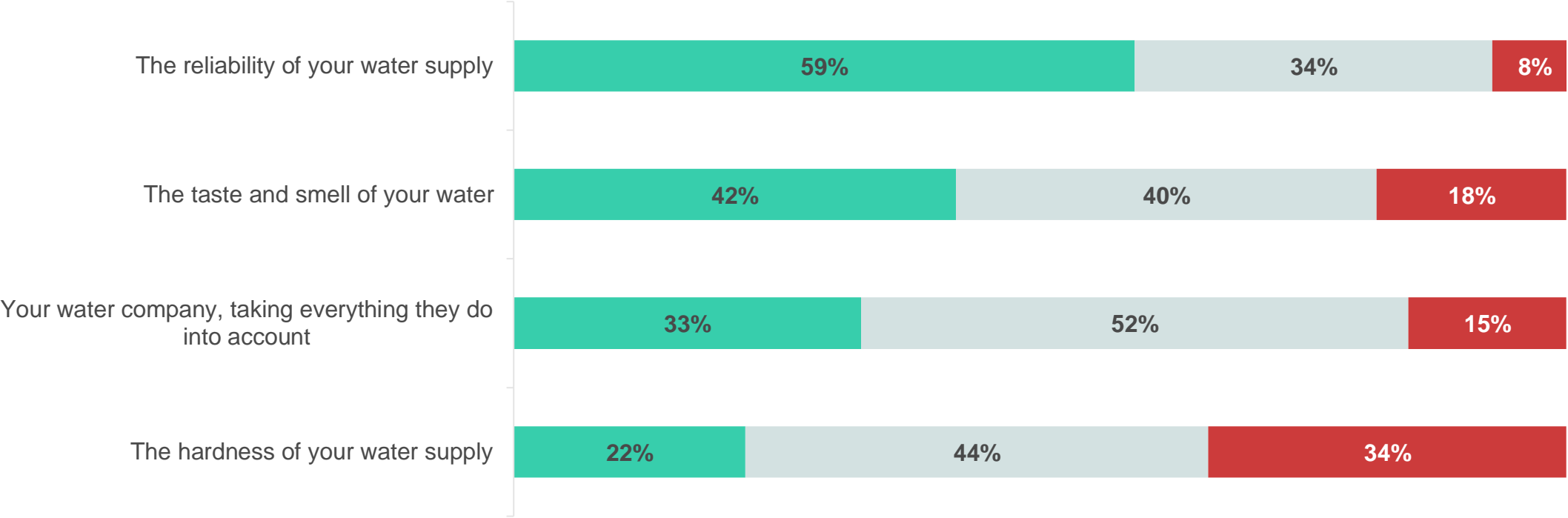


B4. To what extent do you agree with these statements? Base = All respondents (n=1762)

Water company satisfaction – Household customers

How satisfied or dissatisfied would you say you are with the following aspects of your water supply?

■ NET: Satisfied (7-10) ■ NET: Passive (4-6) ■ NET: Dissatisfied (0-3)



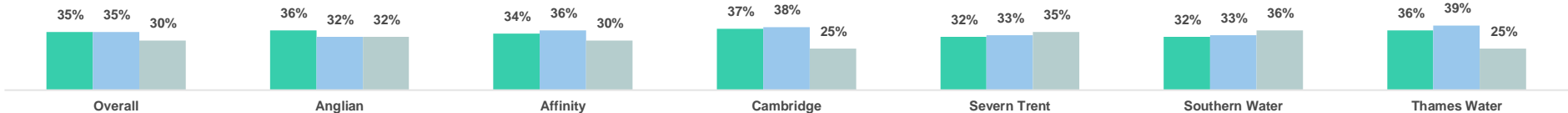
B6. How satisfied or dissatisfied would you say you are with the following aspects of your water supply? Base = All respondents (n=1762).

Household preference by supply region shows minor statistical variation but not statistically significant differences

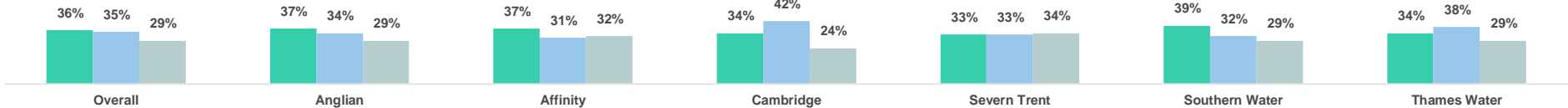
Household customer framing preference
Showing % selecting each

■ Environmental Framing ■ Human Framing ■ Practical Framing

Reservoirs



Recycling



Desalination



* = Statistically significantly higher/lower at 95% confidence level from overall figure

F1+S6. Thinking about the three ways of communicating this change to your water supply, overall, which of these do you prefer?

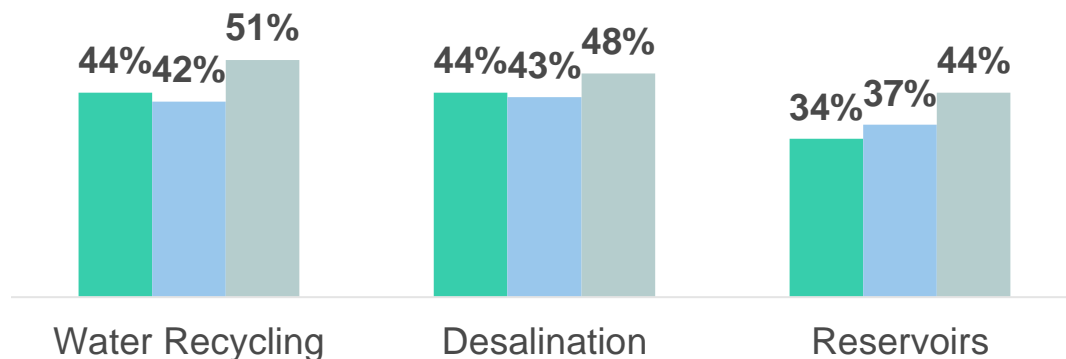
Base: All respondents, HH by supply region – (Anglian n=575, Affinity n=193, Cambridge n=202, Severn Trent n=260, Southern n=180, Thames, n=353)

Levels of concern – 35-54 year olds show consistently indicatively higher levels of concern for all framings

Rated level of concern about change after seeing each framing – Total

Showing % concerned (very + somewhat)

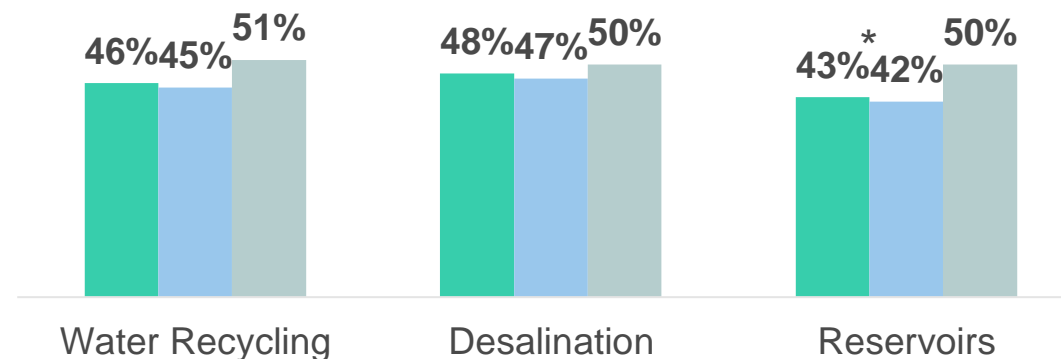
■ Environmental Framing ■ Human Framing ■ Practical Framing



Rated level of concern about change after seeing each framing – 35-54

Showing % concerned (very + somewhat)

■ Environmental Framing ■ Human Framing ■ Practical Framing



* = Statistically significantly higher at 95% confidence level

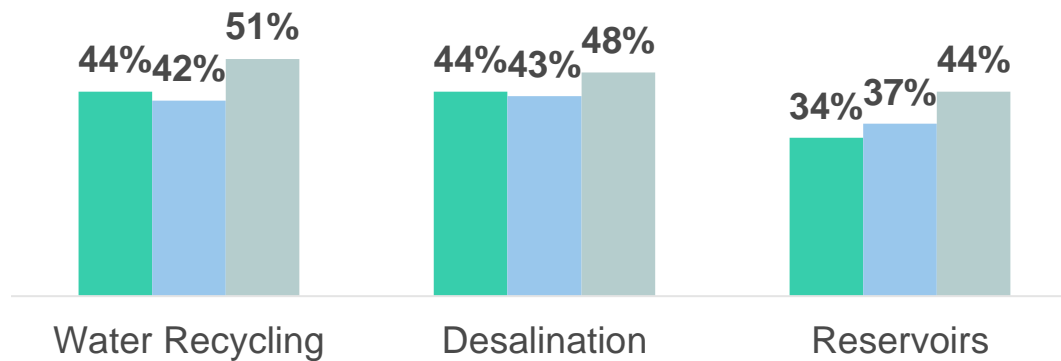
S4 - If you received this letter, how concerned would you be about this change of your water supply? Base: All respondents, HH (n=1762) (n= 605 Water Recycling, Reservoirs) (n=552 Desalination) (n=218 35-54yr olds Water Recycling, Reservoirs) (n=162 35-54yr olds, Desalination)

Levels of concern – highly environmentally aware customers

Rated level of concern about change after seeing each framing – Total

Showing % concerned (very + somewhat)

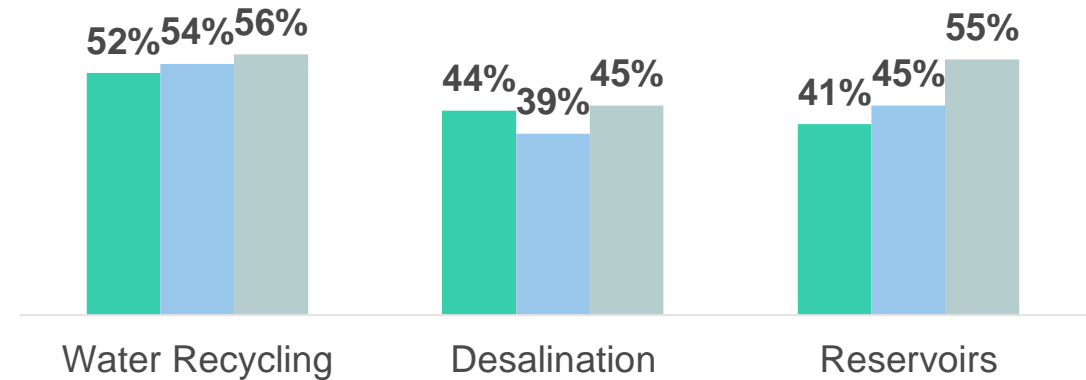
■ Environmental Framing ■ Human Framing ■ Practical Framing



Rated level of concern about change after seeing each framing – highly environmentally aware

Showing % concerned (very + somewhat)

■ Environmental Framing ■ Human Framing ■ Practical Framing



* = Statistically significantly higher at 95% confidence level

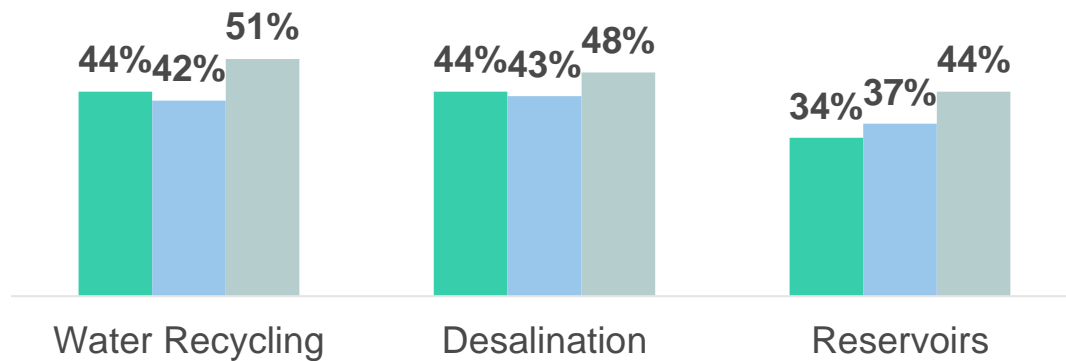
S4 - If you received this letter, how concerned would you be about this change of your water supply? Base: All respondents, HH (n=1762) (n= 605 Water Recycling, Reservoirs) (n=552 Desalination) HH Highly Environmentally Aware (Those with strong agreement with the statements “ Protecting lakes, rivers, reservoirs, fish and other aquatic plants and wildlife is really important to me and I am concerned about the impact of climate change on the natural environment in my area) (n=95 Reservoirs) (n=82 Recycling) (n=92 Desalination)

Levels of concern – currently dissatisfied customers

Rated level of concern about change after seeing each framing – Total

Showing % concerned (very + somewhat)

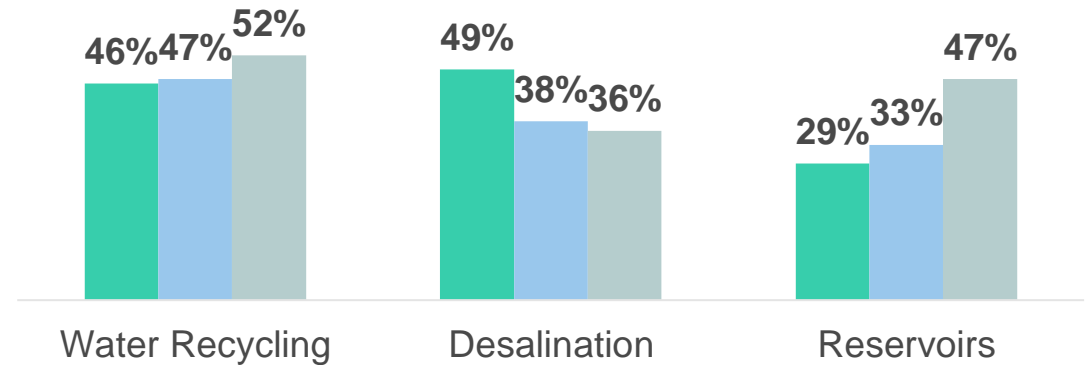
■ Environmental Framing ■ Human Framing ■ Practical Framing



Rated level of concern about change after seeing each framing – dissatisfied customers

Showing % concerned (very + somewhat)

■ Environmental Framing ■ Human Framing ■ Practical Framing



* = Statistically significantly higher at 95% confidence level

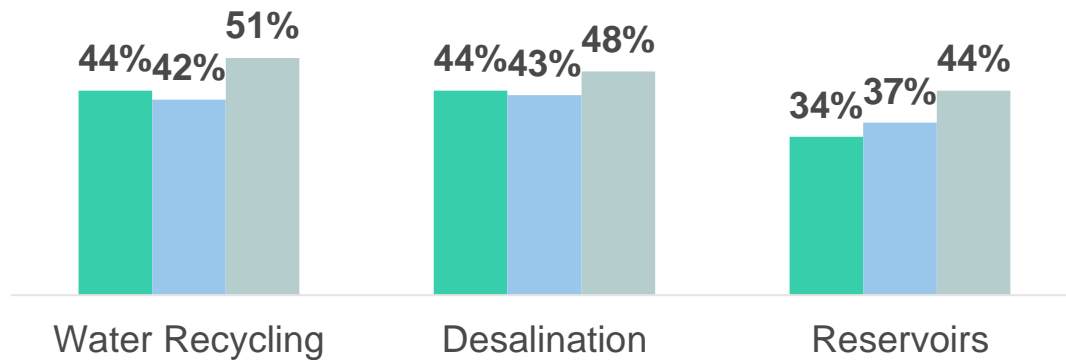
S4 - If you received this letter, how concerned would you be about this change of your water supply? Base: All respondents, HH (n=1762) (n= 605 Water Recycling, Reservoirs) (n=552 Desalination) Customers dissatisfied with current water company (Those rating current company 0-3/10) (n=82 Reservoirs) (n=95 Recycling) (n=83 Desalination)

Levels of concern – read bills in detail

Rated level of concern about change after seeing each framing – Total

Showing % concerned (very + somewhat)

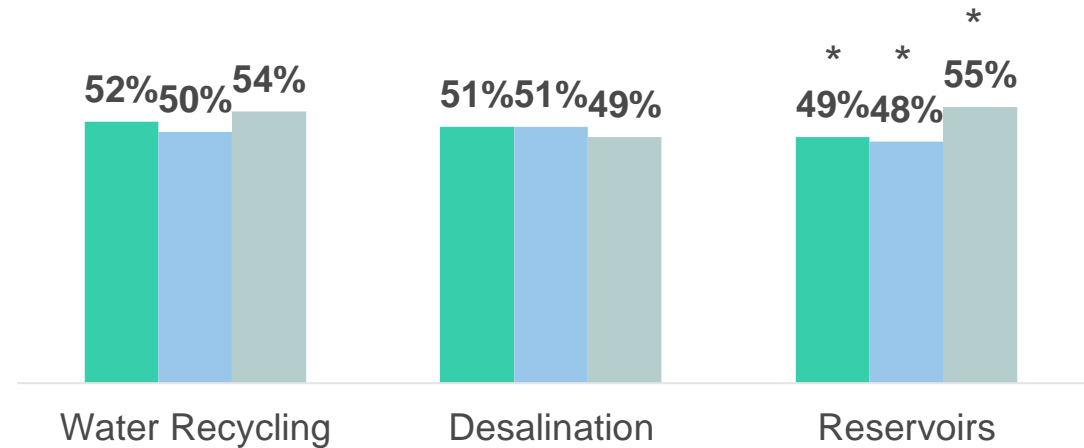
■ Environmental Framing ■ Human Framing ■ Practical Framing



Rated level of concern about change after seeing each framing – read bills in detail

Showing % concerned (very + somewhat)

■ Environmental Framing ■ Human Framing ■ Practical Framing



* = Statistically significantly higher at 95% confidence level

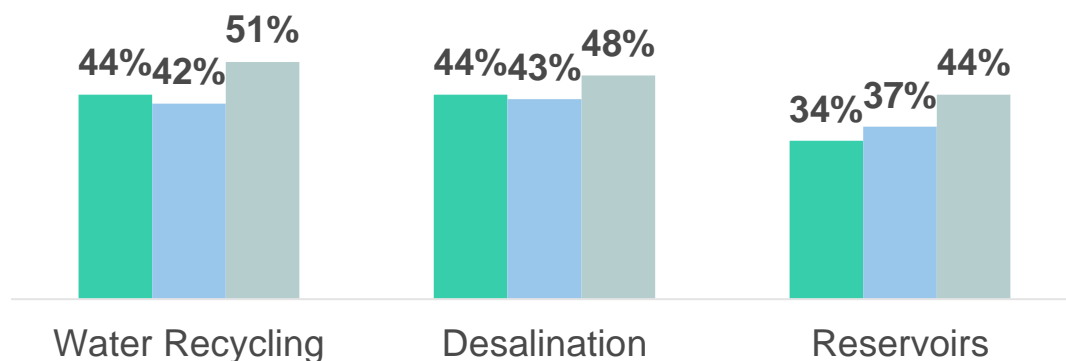
S4 - If you received this letter, how concerned would you be about this change of your water supply? Base: All respondents, HH (n=1762) (n= 605 Water Recycling, Reservoirs) (n=552 Desalination) HH Highly Environmentally Aware (Those with strong agreement with the statements " Protecting lakes, rivers, reservoirs, fish and other aquatic plants and wildlife is really important to me and I am concerned about the impact of climate change on the natural environment in my area) (n=160 Reservoirs) (n=175 Recycling) (n=92 Desalination)

Levels of concern – household v non-household customers

Rated level of concern about change after seeing each framing – Total

Showing % concerned (very + somewhat)

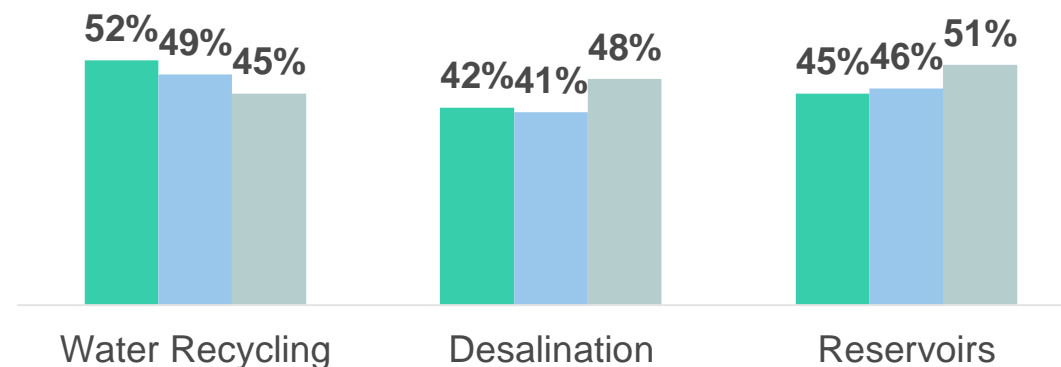
■ Environmental Framing ■ Human Framing ■ Practical Framing



Rated level of concern about change after seeing each framing – non-household customers

Showing % concerned (very + somewhat)

■ Environmental Framing ■ Human Framing ■ Practical Framing



* = Statistically significantly higher at 95% confidence level

S4 - If you received this letter, how concerned would you be about this change of your water supply? Base: All respondents, HH (n=1762) (n= 605 Water Recycling, Reservoirs) (n=552 Desalination) NHH (n=198) (n= 67 Water Recycling, Reservoirs, Desalination)

Full communications preferences

Communications Timing

Communications Channel

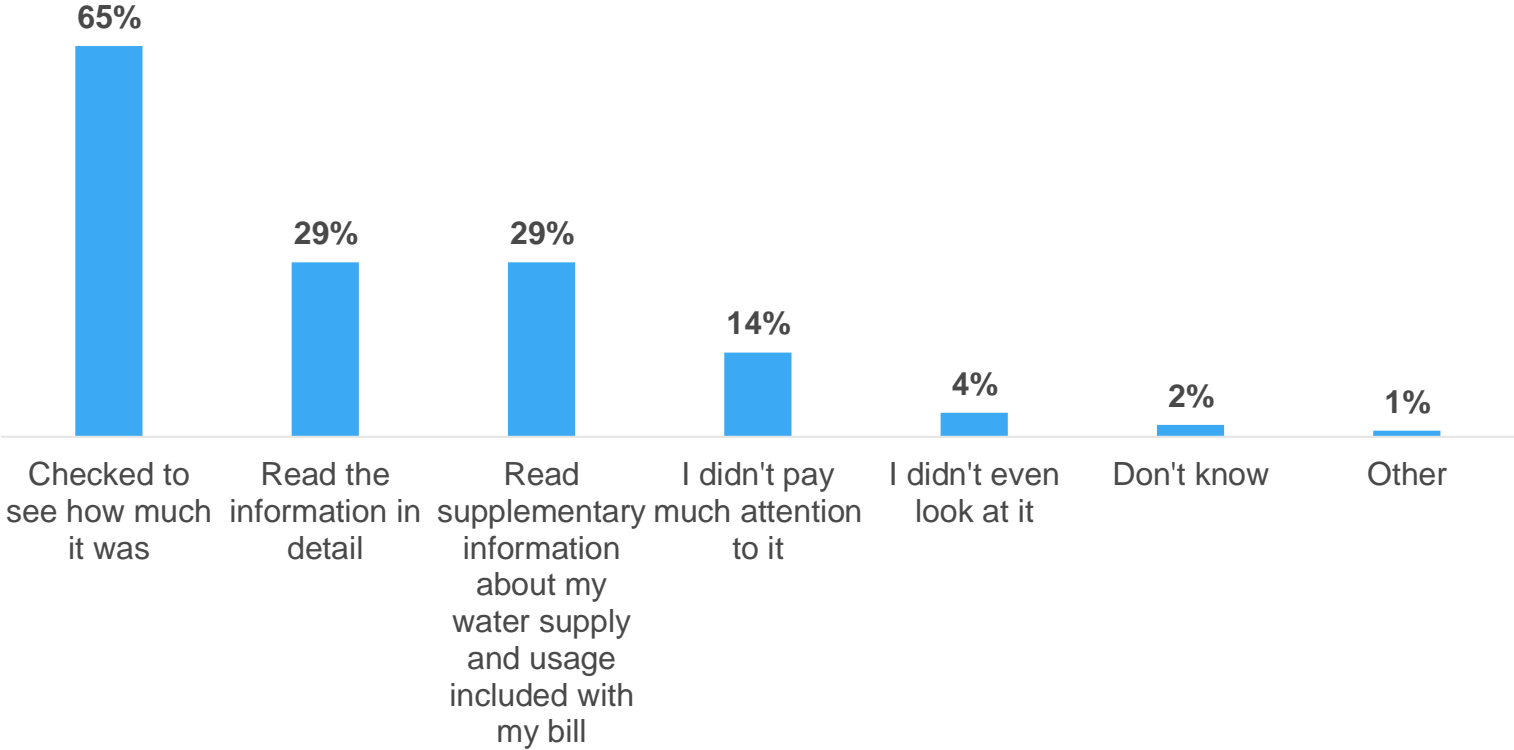
	Only after the change has already occurred	A few days before the change	Two weeks in advance	One month in advance	Three months in advance	Six months in advance	A year in advance	Three years in advance
E-mail	29%	52%	51%	52%	49%	43%	37%	30%
With my next water bill (Even if this was at a later date)	26%	14%	16%	19%	22%	26%	29%	34%
Letter separate from my water bill	19%	33%	42%	55%	59%	57%	55%	53%
WhatsApp/text message	26%	27%	21%	13%	11%	11%	9%	6%
Information in Local media	23%	11%	10%	11%	11%	11%	16%	33%
Telephone call	20%	12%	10%	8%	5%	7%	8%	9%
Online Video [e.g YouTube/TikTok video]	6%	5%	5%	3%	4%	6%	7%	9%
Social media post	19%	10%	10%	7%	7%	8%	8%	8%
Face-to-face at an event organised by the water company to discuss the changes	16%	5%	6%	5%	5%	5%	9%	18%
TV / radio advert	3%	10%	9%	9%	7%	9%	11%	17%

S9. [thinking about the times you would want to be notified of a change of supply] What formats would you want to receive this information in at each point? Base: Respondents selecting each communication timing, HH (n=31-797)

Bill behavior – Household customers

When you received your last household water bill, which of the following did you do?

(% Selecting each option – Multiple selections possible)



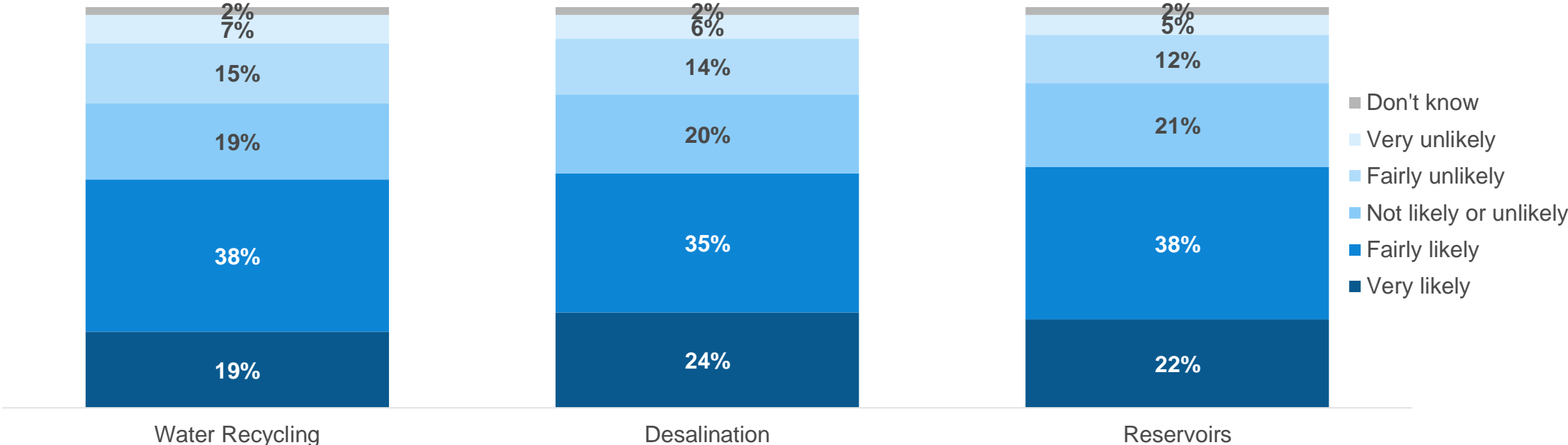
Men are more likely to say they read bills in detail (36%, and to read supplementary information 37%, than women).

ABC1 Customers are more likely to read information in detail (31% v 26%) and read supplementary information (33% v 23%) than C2DE customers

B7. When you received your last household water bill, which of the following did you do? Base = All respondents who are bill payers (n=1629).

A majority of respondents think that they would click through to look at additional information – consistent across sources

How likely would you be to click through and look for more information?
(% Selecting each response)



S10 Looking at the information provided, more information on this water source change is available through www.watersourcechange.co.uk. How likely would you be to click through and look for more information?

Base; All Household Responses (n=1762)



Thank you

For more information:

Author names redacted

BritainThinks
Somerset House
Strand
London
WC2R 1LA