Water Resources Management Plan 2024

Technical Appendix T - Our Customers' Priorities and Preferences

Contents

Overview 3
Background and Introduction 5
Overview of the research studies 6
TW led research studies 6
PR24 Enhancement topics 9
Vision 2050 and public value 12
Levels of service 14
Public consultation 16
Acceptability and affordability testing 20
Collaborative research – South East region 20
WRSE Phase 1 - Customer preferences to inform long term planning 21
WRSE Phase 2 - Determining 'best value' 27
WRSE Phase 3 – Regional plan preferences 29
Collaborative research - Strategic resource options 32
Providing wider benefits 33
Communicating changes to the source water for customers' water supply 36
Communicating about water recycling with London customers 38
Overview of our customers' priorities and preferences 41
Consideration of customers' priorities in developing the WRMP24 45

Figures

Figure T-1: Insight framework from What Customers, Communities and Stakeholders Want 7
Figure T-2: The seven topics for water 8
Figure T-3: Sustainable abstraction deep dive – methodology and sample structure 10
Figure T-4: Sustainable abstraction deep dive – the findings #1 11
Figure T-5: Sustainable abstraction deep dive – the findings #2 11
Figure T-6: Customer ranking of enhancement areas 12
Figure T-7: Thames Water's Vision 2050 and public value – methodology 13
Figure T-8: Thames Water's Vision 2050 and public value – the results 14
Figure T-9: Customer preferences on draft performance commitments 15
Figure T-10: Public consultation Research Study - Participants demographics 17
Figure T-11: WRSE Phase 1 Research: Overview of the research 21
Figure T-12: Summary of the best value plan for customers 23
Figure T-13: Option preference weights from customers in the South East 25
Figure T-14: Option preference weights for Thames Water customers 26
Figure T-15: Customers' preferences for best value criteria 28
Figure T-16: WRSE alternative plan research - Geographic representation of customer participants 30

Figure T-17: Preferred plan profiles without consideration of bill impact 30
Figure T-18: Thames Water customers – preferred plan profile 32
Figure T-19: Thames Water customers – preferred plan profile - £50 bill impact 32
Figure T-20: Public Value research: Overview of the qualitative phase 34
Figure T-21: Public Value research: A summary of Willingness to Pay values across all types of schemes for household customers..... 35
Figure T-22: Water sources research: Methodology overview 36
Figure T-23: Water sources research: Source specific findings 38
Figure T-24: Water sources research: Water recycling key implications for communications ... 38
Figure T-25: Water recycling testing communications: The methodology and sample 39
Figure T-26: Water recycling: A summary of the framework for effective communications 40

Tables

Table T- 1: Public consultation qualitative research – key findings 20
Table T-2: A summary of our customers' priorities and preferences in relation to long-term water resource planning 44
Table T-3: How we have taken account of the priorities and preferences of our customers 47

Overview

The priorities and preferences of our customers are an important consideration in the development of our long-term plan for water resources. Regulatory guidance, including the Water Resources Planning Guideline (WRPG) and Price Review 24 (PR24) documents published by Ofwat, set out the requirement for long-term plans to be informed by customer research to ensure we understand, and take account of, customers' priorities and preferences, as ultimately the plans should deliver value for money for our customers.

In this Appendix we present an overview of the research undertaken to understand our customers' views on key matters in relation to planning future water resources; a summary of our customers' priorities and preferences; and how we have taken these into account in developing and refining our WRMP24. This section does not cover the representations submitted to the public consultation on the draft WRMP24 and our consideration of the representations, this is reported in the Statement of Response which is available on our website www.thames-wrmp.co.uk.

We have undertaken a number of research studies to ensure we understand what our customers want. These include studies led by Thames Water, collaboration research for the South East led by Water Resources South East (WRSE), and scheme specific research. We used independent research agencies to conduct the research, ensuring expert input and challenge as well as helping to bring forward innovative approaches.

We worked with the regional Customer Challenge Group (rCCG), which is made up of CCW alongside representatives of the South East water companies' own CCGs, on the collaborative regional studies and engaged with CCW and other regulators on other studies.

The headline priorities for our customers are:

- they want us to plan ahead to ensure there is enough water now and in the future and to future proof core infrastructure
- they support collaborative working with other water companies
- they believe that improved water supply resilience should not be at the expense of the environment
- there is support to improve the environmental impact of water abstraction beyond current statutory requirements, albeit with some concern over the cost
- they want a balanced plan leading with actions to tackle leakage and reduce demand as a priority, with timely development of new water sources
- they feel that current levels of leakage are too high and want to see reducing leakage as a priority.
- they support the ambition to help customers use much less water although some think it unfair to ask this of customers when leakage levels and the company's profits are perceived to be high.
- most customers agree that metering is fair.

- customers tend to prefer supply options that have a net positive environmental impact and deliver wider public value. Reservoirs are typically the favoured long-term supply option due to the potential for multiple benefits for the environment and communities.
- customers recognise that new infrastructure projects will cause local disruption and there will be local opposition, however they consider these schemes must progress for the benefit of wider society

This appendix includes a summary of the research studies that we have undertaken with the full research reports available on our website, or on request info@thames-wrmp.co.uk.

Background and Introduction

T.1 The priorities and preferences of our customers are an important consideration in the development of our long-term plan for water resources and the Business Plan. In developing the WRMP24 we have reviewed previous research undertaken for WRMP19 and PR19, commissioned new research, worked collectively with other water companies in the South East through WRSE, and also across the strategic resource option (SRO) projects to ensure we have a sound understanding of our customers' views, priorities and preferences. We have used this insight to inform the development of our draft WRMP24 and to update the draft WRMP24 following the public consultation.

T.2 We have used best practice methods, worked with leading independent market research agencies, and used a wide range of techniques to elicit customer views on water resources. We engaged a wide range of customer segments including hard to reach, future and non-household customers. The approach we have taken is in line with the expectations set out in the WRPG[1] and regulatory framework[2] and CCW was engaged in the design of the research studies completed by WRSE and for the strategic resource options (SROs).

T.3 This appendix is structured as follows:

- An overview of the research studies completed to inform the development of the WRMP24 and as part of the public consultation on the draft WRMP24
- An overview of our customers' priorities and preferences
- An overview of how these preferences have been considered in the development of the WRMP24 from draft, to revised draft and final WRMP24

[1] Water Resources Planning Guideline, EA, Ofwat, NRW, Update March 2023
[2] PR24 draft Methodology – Creating tomorrow together, Ofwat, 2022

Overview of the research studies

T.4 In this section we present a summary of the research studies undertaken by Thames Water, by WRSE for the collective South East water companies and on the SRO schemes to understand what customers want in respect of long-term water resource planning. The full research reports are published on our website.

TW led research studies

T.5 The WRMP24 is an important component of our Business Plan and research and engagement to inform the WRMP24 has been undertaken in coordination with the wider company research and engagement programme to ensure consistency.

T.6 At the outset of work on the long-term plans and the Business Plan we undertook a review of the evidence collated for WRMP19 and PR19; an initial PR24 foundation customer survey; and reviewed feedback to our continuous service and brand surveys; and "triangulated' these insights to provide a consolidated understanding[3]. Each insight source was scored using a system that assesses the robustness of the engagement activity and feedback gathered. Over 200 separate insight sources have been assessed and triangulated and the output, our 'What Customers, Communities and Stakeholders Want'[4] document, provides a clear and comprehensive source of what our customers and stakeholders expect us to deliver on their behalf. This is a core reference document in preparing our plans and delivering our day-to-day services.

T.7 Customers priorities can be broken down into ten "Wants" as shown in Figure T-1 including "I *want to ensure there is enough water now and in the future*"

[3] PR24 Insight triangulation and line of sight methodology, Sia Partners, February 2022
[4] What customers, communities and stakeholders want, v 17, March 2023

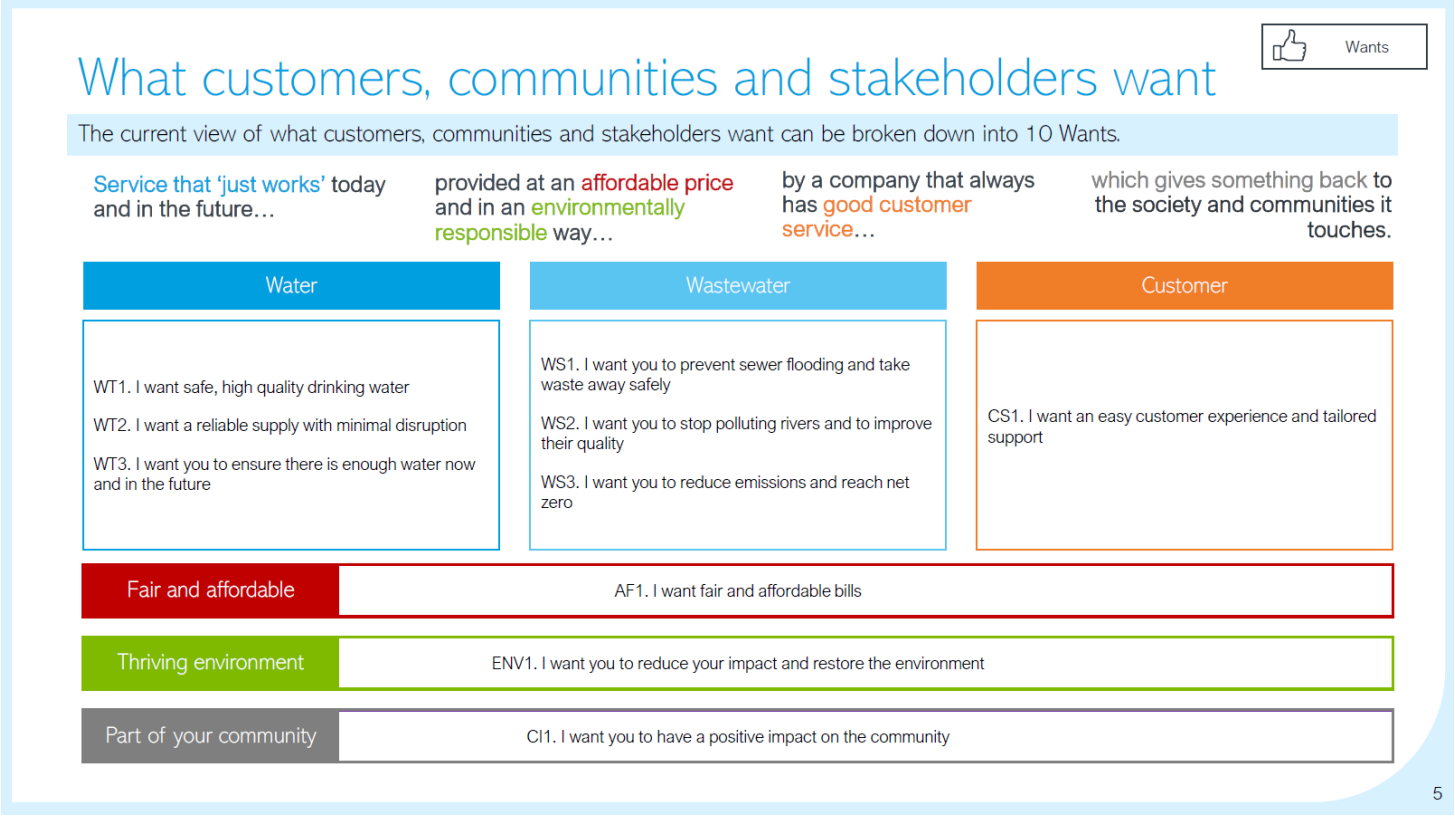


Figure T-1: Insight framework from What Customers, Communities and Stakeholders Want[5]

T.8 The overarching "Wants" for water are broken into seven topics as shown in Figure T-2: of which four are directly relevant to long term water resources planning.

[5] What Customers, Communities and Stakeholders Want, v 17, March 2023

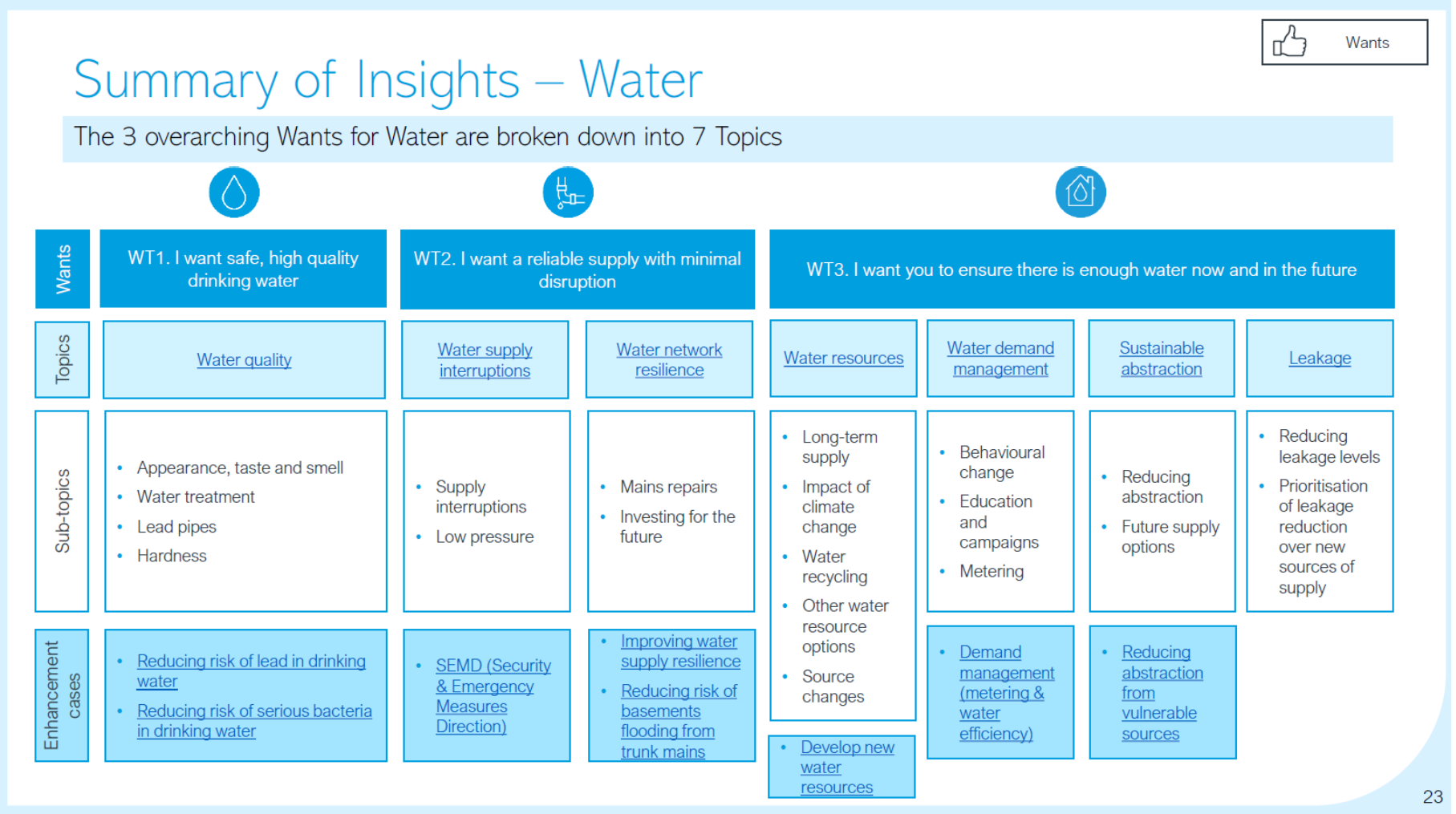


Figure T-2: The seven topics for water

T.9 The overview messages from this consolidated work are:

- The challenge: Most customers are unaware of the challenges to ensuring future water supplies and that demand is projected to exceed supply. When they are informed, customers expect us to plan for a resilient water supply in the long-term.
- Protection of the environment: Customers believe that improved water supply resilience should not be at the expense of the environment. The Vision 2050 goal "*Ensure there is enough water in the future, without taking too much from rivers and harming the environment*" resonated strongly with customers. On the whole, customers support Thames Water's proposals to improve the environmental impact of water abstraction beyond current statutory requirements, however some customers are concerned about costs.
- Making the best use of what we have got: Customers have told us that we should make efficient use of current supplies before building new resources. Customers want us to be more 'self-reliant' around water supply in the Thames area, for example by reducing leakage and educating customers on how to save water, ahead of building new resources.
- Leakage reduction: Customers feel that current levels of leakage are too high. They see wasting water as a moral issue and want to see reducing leakage as a priority. They called for a reduction in the current leakage level to a level that is comparable to the rest of the industry and are prepared to accept some impacts on their bill and disruption from roadworks to achieve this. Customers are uncomfortable with the idea that instead of fixing more leaks, we would seek to replace the water lost by introducing more water into the same 'broken system'. They see this as wasteful and short-term thinking.
- Efficient use of water: The ambition to help customers use much less water is largely supported by customers, although some already feel they 'do their bit' and others think it unfair to ask this of customers when leakage levels and the company's profits are perceived to be high.
- Metering: Customers broadly accept that extending metering is an essential part of reducing water use in our region. Customers support a roll-out of our metering programme, although they would prefer to choose rather than it being compulsory. Most customers agree that metering is fair and expect that it will save them money.
- New supply options: Customers prefer supply options that have a net positive environmental impact and deliver wider public value, for example recreation. Use of chemicals, high energy use, and other environmental impacts are key reasons why customers favour some options less. Reservoirs are typically the favoured long-term supply option due to the potential for multiple benefits for the environment and communities. Intra-region transfers and recycling featured in a second tier of preference. Desalination and inter-region transfers were the lowest ranked resource options.

PR24 Enhancement topics

T.10 Thames Water has undertaken specific research on enhancement areas[6] to gain an understanding about how customers feel about proposed areas of the Business Plan for 2025 to 2030. The enhancement areas cover eight specific topics including sustainable abstraction, which is directly relevant to the WRMP24. These topics were explored with Thames Water's Customer Voices panel, a representative sample of Thames Water customers, through multi-day online community activities to gather in-depth feedback.

[6] PR24 Enhancement Area Deep Dives – Summary Overview, Verve, March 2022

T.11 The methodology and research sample for the deep dive on sustainable abstraction is shown in Figure T-3. This aimed to seek feedback from customers on the objective to improve the environment, related to abstracting water, beyond current statutory requirements, and if so, how quickly.

Our methodology: Customers reviewed the topic of sustainable abstraction within the context of a 3-day community.

Day 1 (22nd Feb)

Objectives:

Scene setting on the water cycle

- **1.1** Customers were introduced to the research and the context of PR24
- **1.2** An overview of the aims of the research and the concept of abstraction
- **1.3** Customers were probed on their interactions with and interest in the natural environment
- **1.4** Assessed customer awareness of the various sources of water, and challenges with supply and sourcing
- **1.5** Customers were provided with information on the water cycle and water sources, and questioned on their awareness of the process and impacts for each

Day 2 (23rd Feb)

Objectives:

Legislation, chalk streams and Thames Water's goals

- **2.1** Customers were introduced to chalk streams and gauged on their initial reactions to reductions in abstraction
- **2.2** Showed reductions in abstractions so far, (inc. River Kennet case study) and questioned customers on their support and understanding for this moving forwards
- **2.3** Presented options for the next 5 years and asked customers to explain their level of support for each option.
  - *N.B. For each possible approach, customers were provided a description of each approach, an approximate impact on customer bills from 2025-30*

Day 3 (24th Feb)

Objectives:

Presenting the options

- **3.1** Customers were presented with options on the level of reduction for abstraction, and questioned on their responses
- **3.2** Asked to assess how certain Thames Water should be on the environmental benefit before reducing abstraction
- **3.3** Asking customers to rank abstraction amongst other initiatives in terms of priority

5

Research sample

This research was designed to capture the diversity of Thames Water's customer base

Customer Groups	Count
Thames Water Customer Voices panel	41
Future customers (recruited externally)	5
Business customers (recruited externally)	5

- 55 customers signed up to complete the research and 51 customers completed all questions
- Specific demographics that we collected from participants closely matched that of the Thames Water customer base*
- Future customers (18-24 year olds, non-bill payers) - Views from this cohort were sought given that decisions made now will impact on their future
- Business customers – Views from this cohort were sought, because even though they don't pay bills directly to Thames Water, their water and wastewater service is still provided directly by Thames Water (and hence impacts their bill)

Customer Voices (41)

Demographics	number
Gender	
Male	18
Female	23
Age	
18-24	1
25-34	8
35-44	9
45-54	9
55-64	8
65+	6
Social grades	
ABC1	26
C2DE	15
Ethnicity	
White	29
BAME	12
Vulnerability status	
Vulnerable**	7
Service type	
Clean & Waste	41

Future customers (5)

Demographics	number
Gender	
Male	2
Female	3
Social grades	
ABC1	5
C2DE	0
Ethnicity	
White	3
BAME	2

Business customers (5)

Demographics	number
Number of employees	
10-15	2
20-25	2
25-30	1
Expenditure on water	*% of outgoings*
0-10%	4
>10%	1

** 'Customer research and sampling approach September 2018' document, supplied by Thames Water*

*** Those declaring a personal vulnerability*

8

Figure T-3: Sustainable abstraction deep dive – methodology and sample structure

T.12 The findings of the research are presented in Figure T-4 and Figure T-5.

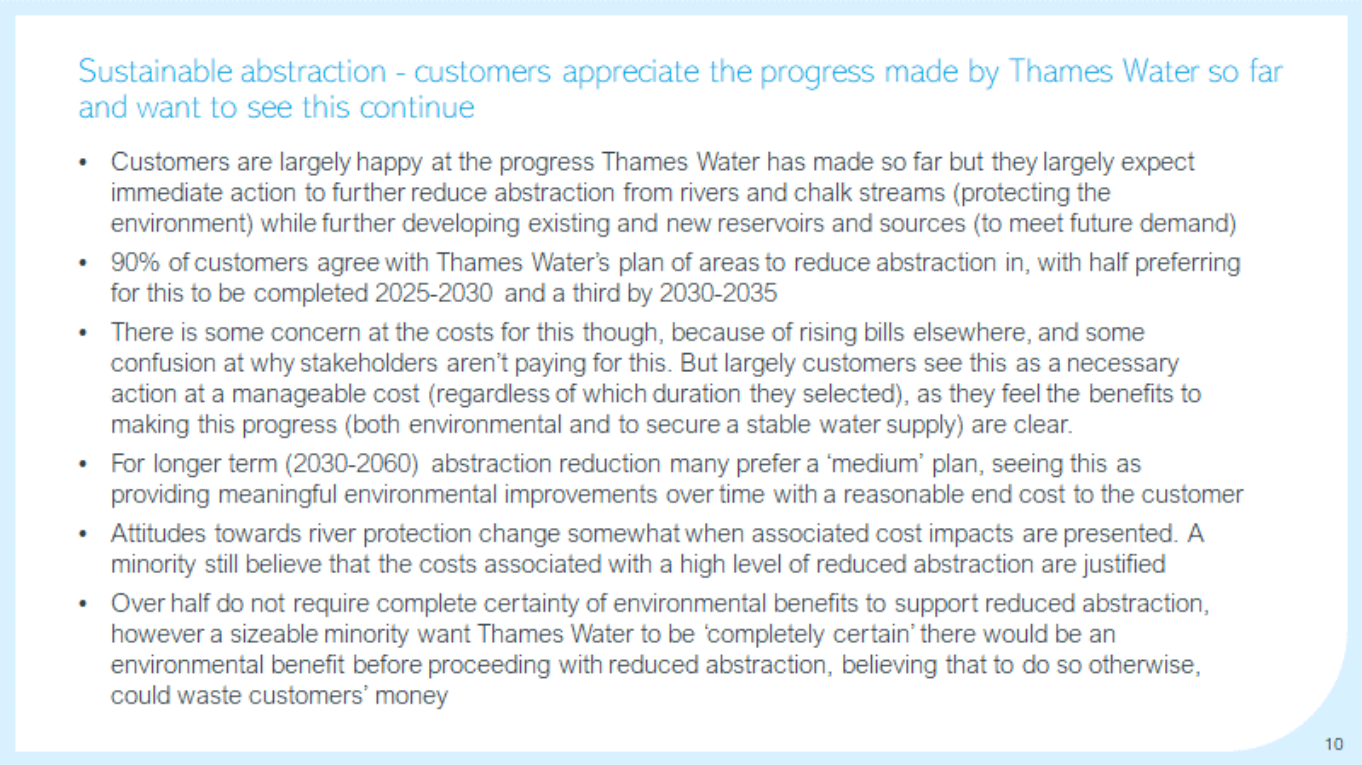


Figure T-4: Sustainable abstraction deep dive – the findings #1

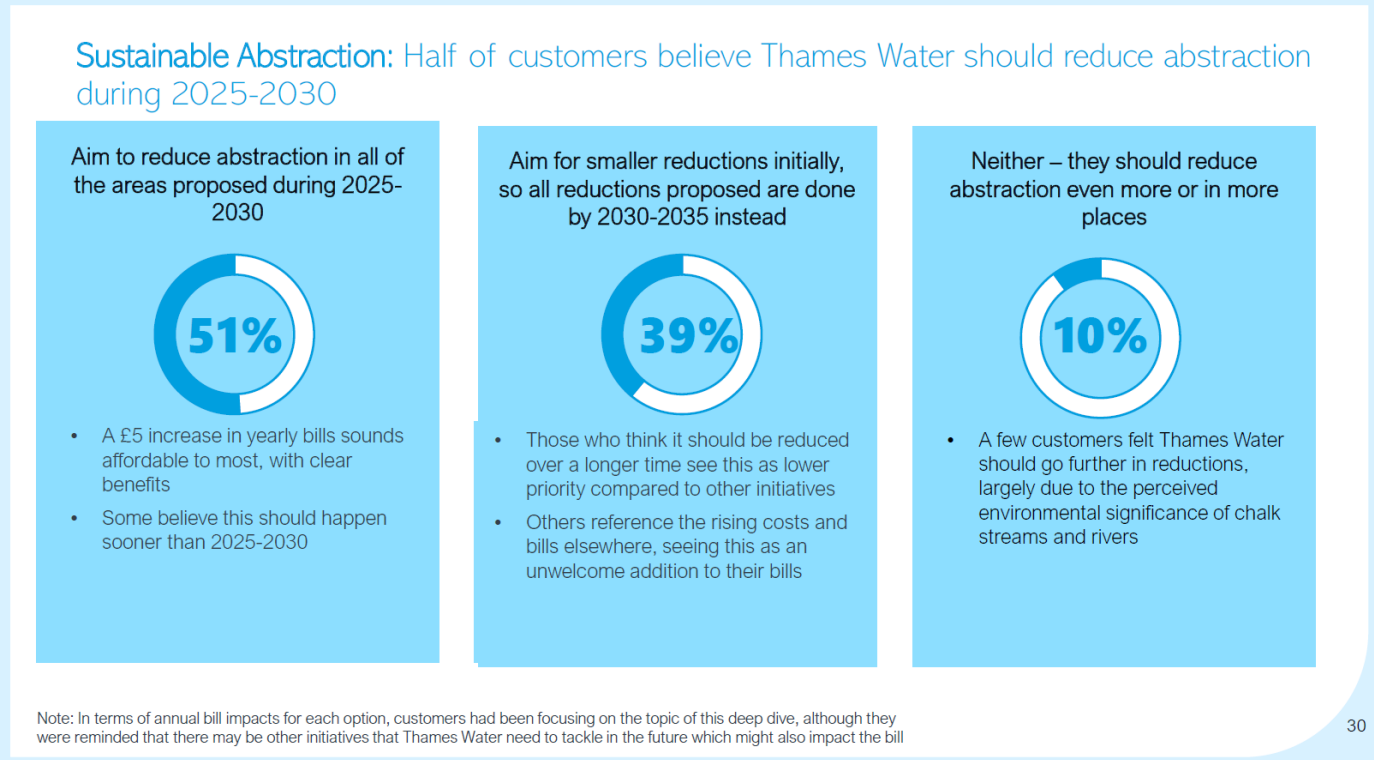


Figure T-5: Sustainable abstraction deep dive – the findings #2

T.13 Customers were asked to rank the enhancement topics in terms of the priority they feel Thames Water should give to improving each. Sustainable abstraction was identified as a lower priority in the eight enhancement areas that were explored as shown in Figure T-6. That said, customers broadly support Thames Water's proposals to improve the environmental impact of water abstraction beyond current statutory requirements, although noting some customers are concerned about costs.

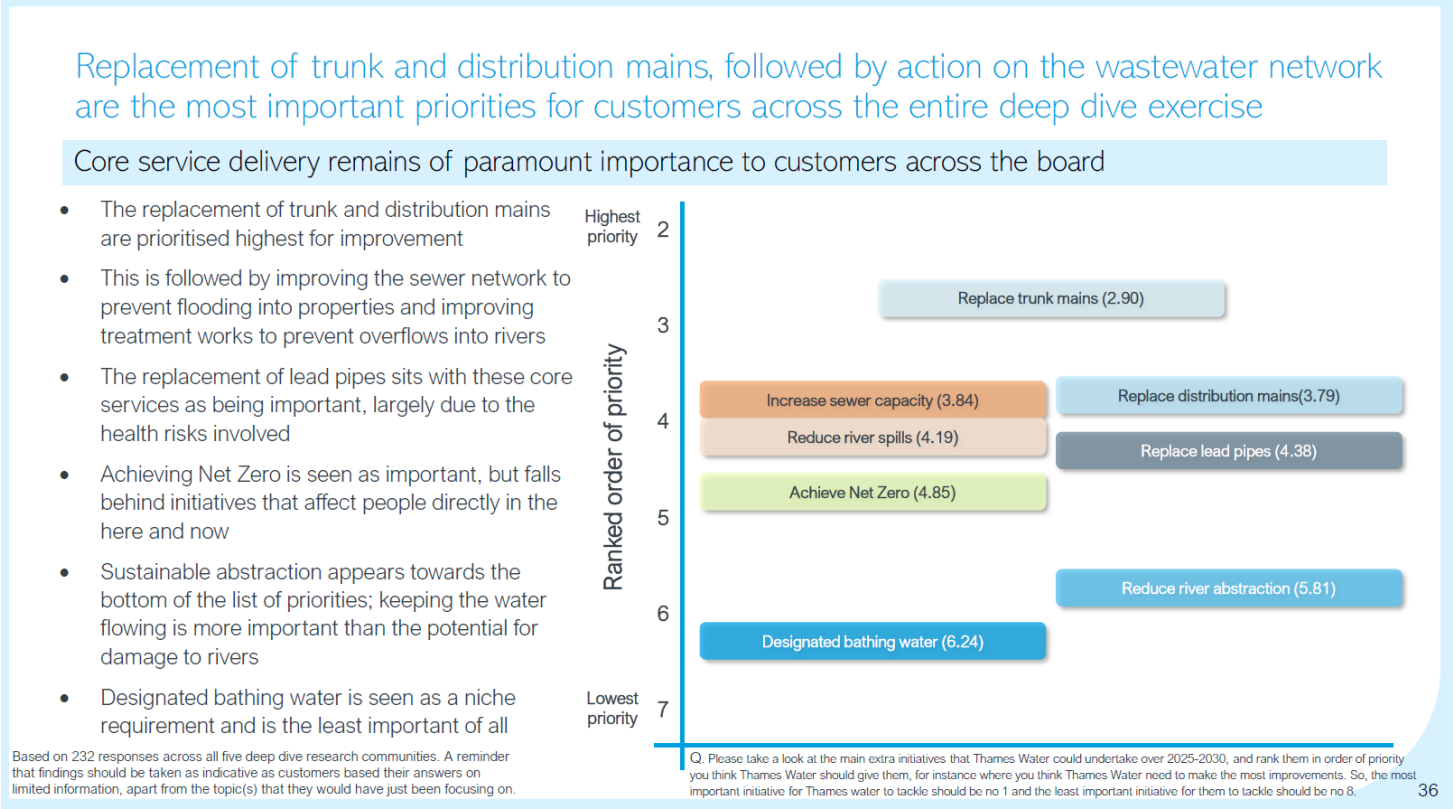


Figure T-6: Customer ranking of enhancement areas

Vision 2050 and public value

T.14 Research was commissioned on Thames Water's Vision 2050 and public value[7] to gain insight into customer's views on public value, the priority areas and role of Thames Water. The methodology is in line with Ofwat's standards and is shown in Figure T-7. A summary of the headline messages is shown in Figure T-8. These findings show a prioritisation of core essential services - delivering water and wastewater services and environmental elements (keeping rivers clean and limiting the amount of water taken from them in preference to less tangible services.

[7] Public Value research, May 2022, Verve

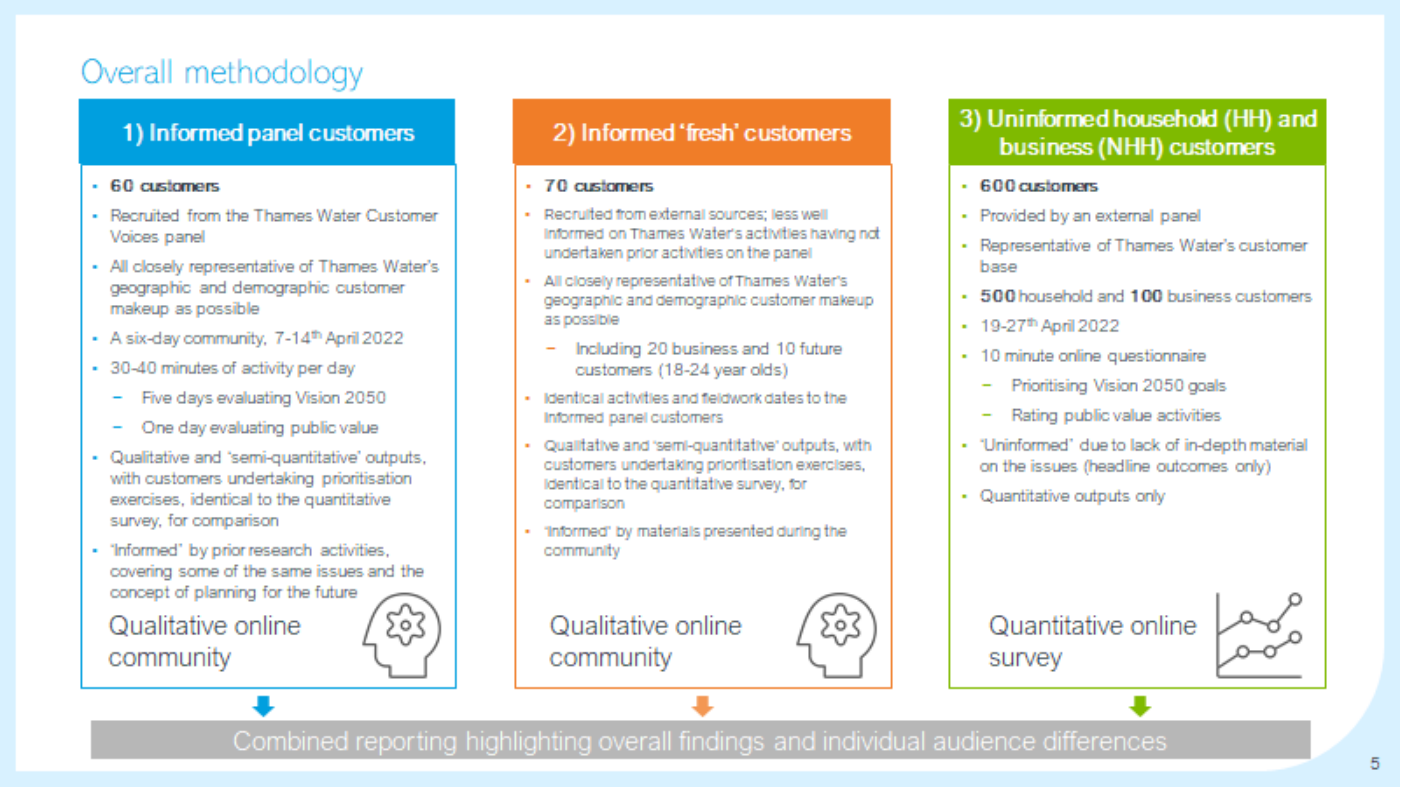


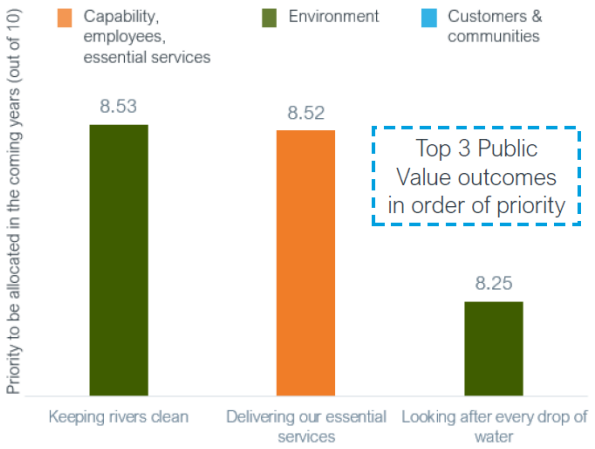
Figure T-7: Thames Water's Vision 2050 and public value – methodology

Prioritisation of Public Value elements

Understand public value priorities

What types of public value (examples) would they prioritise?

- Quantitative data shows a clear prioritisation of core essential services (delivering the **water and wastewater service**) and **environmental** elements (keeping rivers clean and limiting the amount of water taken from them)
- '**Keeping rivers clean**' is given the highest overall priority alongside '**delivering our essential services**'
- Those elements that are deprioritised tend to be the less tangible or less service related, such as '**connecting you with your local surroundings**' and '**bringing communities together**'
  - This deprioritisation appears to be influenced by customers being less sure about what is being delivered
  - Some are simply not focused on things they expect of Thames Water as a priority (ie: anything other than delivering core services to a high standard)
  - 'Customers and communities' outcomes feature rarely in the top half of priorities overall 9with the exception of 'helping those that need it most' (5th position)



A6. Thinking about all the activities that you've just reviewed, we'd like you to rate all of them in terms of how much priority you want Thames Water to allocate to each in the coming years, on a scale of 0-10, where 0 is 'no priority at all' and 10 is 'very high priority'? Base: All respondents (698)

11

River cleanliness and delivery of essential services are the key priorities overall

Understand public value priorities

What types of public value (examples) would they prioritise?

Public value; overall priority for each element (All informed qual and uninformed quant responses - 698)

A6. Thinking about all the activities that you've just reviewed, we'd like you to rate all of them in terms of how much priority you want Thames Water to allocate to each in the coming years, on a scale of 0-10, where 0 is 'no priority at all' and 10 is 'very high priority'? Base: All respondents (698)

12

Figure T-8: Thames Water's Vision 2050 and public value – the results

Levels of service

T.15 We tested customers' views on levels of service for water supply interruptions during extended periods of dry weather as part of the research to inform WRMP19. Customers

told us[8] that water use restrictions at their current expected frequency of implementation were not perceived to have significant impacts on their day-to-day activities. They did not want deterioration in the levels of service and were broadly happy with current service levels with the exception of more severe restrictions, where there was support for improved levels of service from the current service levels of 1:100 year drought to a 1:200 year drought, subject to the bill increase. Beyond this, household customers placed little weight on further improvements to service, although there was a greater level of support from non-household customers.

T.16 Ofwat undertook collaborative research across all water companies to test 17 draft common performance commitments including levels of service around water restrictions. An initial view of customer priorities on the relative importance (High, Middle, Low) of specific PR24 performance commitments is shown in Figure T-9. The results were broadly consistent with the WRMP19 research and showed that water use restrictions were considered to be of lower importance to customers than other service aspects. More stringent restrictions in a severe drought are of more importance than a hosepipe ban and non-essential use ban for businesses, this was identified to be true for vulnerable customers and those with needs for enhanced support[9].

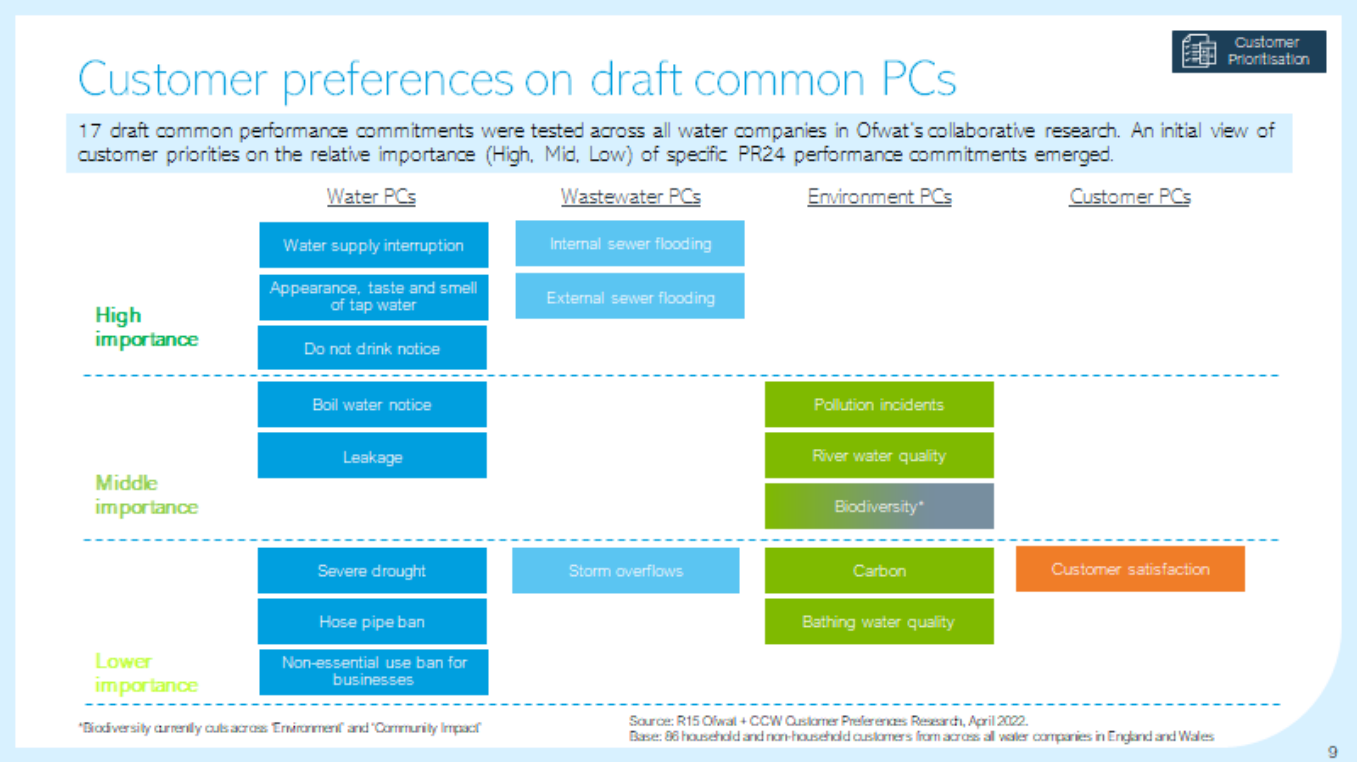


Figure T-9: Customer preferences on draft performance commitments

T.17 We have made two changes to our levels of service in our WRMP24, these are to the Level 2 restrictions – the frequency of Level 2 restrictions (Temporary Use Bans (TUBs)) and Level 4 restrictions.

[8] WRMP19 Appendix T, T.25 onwards
[9] What customers communities and stakeholders want, v 17, March 2023 slide 122

T.18 In respect of the Level 2 restrictions we reviewed the service levels for water use restrictions across the South East water companies to try and ensure consistency across the region and in accordance with WRSE's policy ambition statement[10] we updated our Levels of Service for TUBs from 1 in 20 to 1 in 10 years on average to achieve consistent service levels across the South East region. We set this out in our Drought Plan, which we updated in 2021, and in line with regulatory requirements we consulted on our draft Drought Plan and no concerns were raised on this matter. Our Drought Plan[11] was approved by the Secretary of State for Environment, Food and Rural Affairs in August 2022.

T.19 In respect of the Level 4 restrictions and in line with the WRPG we have increased our resilience to severe droughts. Our WRMP24 has been developed to increase our resilience to droughts of a severity of 1:200 years in the early 2030s and to droughts of 1:500 years by 2040.

Public consultation

T.20 We commissioned research[12] as part of the public consultation on the draft WRMP24. The objective of this research was to ensure the views and preferences from customers, that are representative of Thames Water's overall customer base, are heard and considered in refining the WRMP24 alongside the views of stakeholders. This is very important noting that public consultations are often completed by those who are very engaged with the issues either because they are part of an organised group or because planned developments will directly impact where they live and as such, the feedback to consultations is not always representative of the general population.

T.21 Customers were asked for feedback on the questions asked as part of the public consultation on the draft WRMP24 as well as being asked to consider their attitudes to water shortages, the acceptability of the plan overall, and the trade-offs of environmental improvement, increasing bills and disruption to some local communities.

T.22 The research was designed and delivered by Verve, an independent market research agency, using a qualitative approach involving 123 participants who represented household, non-household and future customers from across Thames Water's supply area. This is considered a robust sample size for qualitative research. The breakdown of customers who took part is shown in Figure T-10.

[10] WRSE policy ambition statement regarding Levels of Service in which WRSE water company members committed to work towards a common service level for Temporary Use Bans. The policy statement was consulted on in August 2020, and respondents were supportive of this policy ambition. TW updated our Levels of Service for Temporary Use Bans from 1 in 20 to 1 in 10 in our Drought Plan to be consistent, which in turn was subject to public consultation, and the change was reported in the 2022 Annual Review of our WRMP19.
[11] Thames Water Drought Plan, August 2022
[12] 7120 Water Resources Management Plan, Verve, May 2023

Demographic (Household n = 98)	% Attended	% TW customer profile
Male	51%	49%
Female	49%	51%
18-24	16%	18%
25-34	18%	18%
35-44	18%	18%
45-54	22%	18%
55 -64	19%	12%
65+	7%	16%

Demographic (Household n = 98)	% Attended	% TW Customer Profile
ABC1	70%	62%
C2DE	30%	38%
White	67%	74%
BAME	33%	26%
Vulnerable	9%	14%
Non-vulnerable	91%	86%
London WRZ	80%	78%
Thames Valley	20%	22%

Figure T-10: Public consultation Research Study - Participants demographics

T.23 A digital pop-up community was used for the research which allowed participants to take their time on the activities to ensure they fully understood the material and then give their informed opinions on the topic. The community was open for 10 days in March 2023. Each day, participants were asked for their initial view on an aspect of the draft WRMP24 before being presented with information from the consultation. Participants' initial and subsequently informed views on the draft WRMP24 were captured. Their responses were kept private to avoid any influence. Ignite AI (an artificial intelligence tool) was used in conjunction with human analysis to analyse responses such as sentiment and emotionality.

T.24 The main findings from this research study are presented in Table T- 1.

Topic	Customer views
Attitudes towards water resources in the Thames Water catchment	Customers were reassured that collaboration with other water companies would mean an improvement in water management and taking responsibility to better secure water supplies. Action should be taken sooner rather than later to ensure a secure and sustainable water supply, despite the likely disruption and bill impact.
Protecting the environment by reducing water abstractions	Participants were keen, in principle, to protect the environment. Detailed points raised: Collaboration with the Environment Agency, as well as other water companies, brought a level of reassurance. Everyone should be accountable for the damage made to the environment, and that the cost burden isn't solely left to the customer to pick up. With reference to the involvement of Government and Local Authorities in mitigating these issues, as well as sharing the burden of cost implications. Those who are struggling with the current cost of living crisis felt there are more pressing societal issues that make it difficult for them to prioritise environmental improvements to areas they do not live in or visit. Whilst others, mainly Non-Household Customers, supported the importance of planning ahead the principles of shared social

Topic	Customer views
	responsibility and finding sustainable solutions for the environment and therefore a contribution to this approach was supported. Those willing to contribute more see higher bills as a 'necessary evil' and that this may be the only way the environment can be protected effectively. Therefore, the mention of the "highest level of environmental improvement" resonated well. As affordability becomes more of a priority, participants are keen to get more context and assurance that any increase to their bill is fair and considered.
Making the most of available water	Using water wisely: There was consensus that we should all play our part, and views that there needs to be education on the amount of water everyday items (such as white goods) use, to ensure the total water consumption of residents in the UK decreases. Thames Water's conservative per capita consumption target in the draft WRMP24 was considered to be more realistic compared to the Government's plan. It is hoped that once the Thames Water target is achieved that more will be done to reduce customer usage to be more in line with the Government target. Thames Water should not penalise customers too harshly without first doing more to prevent water loss through leakages. Despite some verbal support, there was little evidence to suggest that participants were going to change their existing behaviours. Many felt that they already do their bit and that it's for others (customers, house builders, businesses) to reduce their consumption. Leakage reduction: Participants were shocked by the amount of water that gets lost through leaks, as well as the vast water pipe system Thames Water must maintain. Customers wanted leakage tackled as a priority. The majority were supportive of the targets set by Thames Water to halve leakage by 2050 considering it reasonable noting the length of time and disruption to fix water pipe infrastructure in a heavily populated area like London. Some considered that Thames Water should aim for more ambitious targets.
Proposed investment	After learning about the water deficit faced in the Thames Water catchment and that water saving measures would not go far enough, investing in new water sources was thought to be prudent and none argued against the need for development.
A new river abstraction at Teddington	Responses to the schemes were mostly positive. Those who are familiar with the location or live closer to the Teddington area were sympathetic to the objections, but overwhelmingly felt the benefit to water supplies outweighed any local concerns around environmental harm to this part of the river. Some had concerns that the process could fail, and untreated sewage

Topic	Customer views
	could be introduced into the river causing environmental harm. They would like more information on the overall risks that something could go wrong with this method and, if so, what the consequences would be on the environment. There are also minor concerns about the chemicals that will be used to clean the water. Some reassurances that the water reintroduced to the Thames will not upset the eco-system and that wildlife will not be impacted as a result, may combat this.
South East Strategic Reservoir	Reservoirs are easy to understand and are considered a natural solution that could benefit the environment, as well as provide a reliable water supply in the future. This is the most accepted of the three initiatives. Building a larger reservoir was thought to better protect the Thames Water area from running out of water in the future. It was felt that having a larger reservoir for a similar cost seemed like the best approach to ensure a secure water supply for the future without the need for further investment. There was positivity for a larger size reservoir, when costs are similar. Participants feel the benefits of securing a reliable water supply outweigh the concerns of those who live near the proposed reservoir site.
Severn to Thames Transfer	Of the three schemes, the inter-regional transfer had the least support. The scheme was considered to be ambitious and difficult to complete. The reliability of the scheme was also questioned; it relies on other water catchments having a surplus of water. To gain support, there would need to be a greater explanation of the scheme and assurances it is feasible and will work.
The plan overall	There is support for the draft WRMP24 overall as the majority agree that it is important to act while there is time to make a difference. There are concerns about the cost of this to bill payers. With that in mind, participants question if all three schemes are needed, or if the new abstraction at Teddington and the Reservoir would be adequate. There is trust that Thames Water has considered the options and are working in the best interest of their customers. There are concerns about the time it will take to implement the plans and that no immediate action is being taken. This creates worries that money will be spent on interventions but they will come too late to make any meaningful difference. There are also some thoughts that opposition from local groups and the need for permissions will delay things further, and that no plans will ultimately be realised to create new sources of water.
Bill impact	There is a view that those with higher stakes in the WRMP24 (e.g., Government funding, taxes, the water companies involved, etc.) should pay a higher cost, taking the burden off consumers. The cost-

Topic	Customer views
	of-living crisis is also mentioned with consistency and there are concerns those already struggling will not be able to cope with the extra cost of the WRMP24 to their bill. Few suggested to split the costs more equitably based on household income.

Table T- 1: Public consultation qualitative research – key findings

Acceptability and affordability testing

T.25 We commissioned research[13] to consider three alternative Business Plans with a representative sample of customers to seek their feedback on their preferred plan. The research was designed to comply with OFWAT and CCW requirements and the insight is based on a comprehensive qualitative exercise with a quantitative study to be completed by Autumn 2023. The three alternative Business Plans were:

- *Proposed plan* which includes statutory and discretionary service enhancements
- *Must Do* plan which includes only statutory service enhancements
- *Alternative plan* which includes phasing of service enhancements for wastewater plus discretionary service enhancements.

T.26 The research showed a preference for the *proposed plan* which included service enhancements that address concerns around key environmental wastewater issues relating to combined sewer overflows and river pollution, as well as investment to address longer term water security challenges and leakage.

T.27 The findings of this research indicate customers preferences for investment to future proof core infrastructure and ensure longer term network resilience delivering more than "just what's required". Furthermore, two thirds of customers favour quicker bill increases to spread investment costs across generations.

T.28 In terms of affordability just under half of all customers found the *proposed plan*, which would see the average household bill rise by £242 by 2030 (note that this bill increase is a total bill increase accounting for all investment areas, not just investment associated with the WRMP24) affordable partly because the water bills are relatively low, it's a vital service and because investment to future proof the network is felt to be crucial. Whilst around 3 in 10 would find the *proposed plan* bill increase difficult to afford due to the general cost of living crisis, concerns over rising inflation or high water usage. This is especially true of the lower income and financially vulnerable customers.

Collaborative research – South East region

T.29 WRSE engaged with customers from across the South East region to inform the development of the South East regional plan. Thames Water has been involved with, and has used, this regional engagement in the preparation of our WRMP24.

T.30 The research was managed through the WRSE Engagement and Communications Board which has representatives from all the six South East water companies as well as a representative from the Environment Agency. Members of the water company customer

[13] Acceptability and Affordability testing, Stage One: Qualitative work, Accent, May 2023

research teams were also engaged to help design and develop the engagement activities, ensuring best practice and alignment to wider insight activities across the companies.

T.31 WRSE established and worked with a rCCG, bringing representatives from the CCW and the company independent challenge groups, to share and input to the design and approach of the research studies.

WRSE Phase 1 - Customer preferences to inform long term planning[14]

T.32 WRSE commissioned ICS/Eftec, an independent market research agency, to seek customers' priorities for the principles, policies and solutions that will shape future plans including building resilience, how far the plan goes beyond statutory requirement for the protection of the environment, the level of ambition for reducing water use and the potential supply options, sharing resources and the strategic resource options.

T.33 The research aimed to draw together wide-ranging customer evidence through a collaborative programme of work coordinated by WRSE. The research comprised three parts as shown in Figure T-11.

Part A: Evidence Review	Part B: Deliberative Research	Part C: Customer Survey
• Insights compiled from PR19, WRMP19 and recent customer research. • 120 documents submitted by the ten companies. • Consolidated view of the customer evidence structured around: (i) resilience outcomes; (ii) demand measures; (iii) supply side solutions; and (iv) the wider policy context.	• Conducted with household customers from all ten participating companies. • Implemented online between August 2020 and January 2021 with approximately 80 customers. • Range of discussion topics and exercises to understand views on: (i) water resources and the risk of emergency drought restrictions; (ii) resilience planning; (iii) supply and demand options; and (iv) sharing resources and strategic options.	• Representative online survey of customers in the WRSE region carried out in Autumn 2020 to measure preferences for: (i) demand and supply options; and (ii) alternative regional plan profiles. • Approximately 2,300 household customers and 350 non-household customers. • Results are a direct input to the WRSE regional plan investment model.

Figure T-11: WRSE Phase 1 Research: Overview of the research

T.34 The key findings were:

- Customers are fully supportive of the collaborative approach to developing the plan in the South East
- There is a strong expectation that the plan will deliver beyond the minimum requirements for ensuring long-term security of supply, by reducing the dependency of the system on the environment and building in additional capacity to ensure against wider uncertainty and disruption

[14] WRSE, Phase 1 Research, ICS/Eftec Customer preferences to inform long term water resource planning, March 2021

- Underlying customers' views is a willingness to support plans and investments that will safeguard service levels and the environment for future generations
- Whilst some limited aspects of extreme drought measures (rota-cuts/standpipes) may be felt tolerable, most restrictions on the use of water that would be in place are generally not acceptable to customers. Correspondingly, there is support for further reducing the risk of these measures being needed from the current level of a 40% chance during a customer lifetime (corresponding to a 1 in 200 level of service)
- Customers recognise that a pragmatic mix of options are required to achieve this. Leakage reduction, demand measures, and new supply sources are not seen as substitutes. Rather it is the timing and ordering of options that matters most to customers. First, companies must get their "own house in order" by reducing leakage and helping customers to save water. After this, the right supply options for customers are ones that are reliable, avoid environmental harm, and provide wider benefits including enhanced local amenity and recreation opportunities
- There is a role for water sharing and transfers if they are an absolute necessity, but in general the inherent preference is for self-sufficiency within an area rather than dependency on a transfer-in. Indeed, customers can be uncomfortable with transfers because there is a perception that these schemes will simply shift water availability problems around the country rather than dealing with them directly

T.35 There is a high level of importance placed by customers on protecting the environment. There is little support for abstracting more water from the rivers and groundwater in normal circumstances – for both sensitive habitats and wider catchments – and use of drought orders and drought permits is seen as a last resort. Only in very extreme drought situations where rota cuts and standpipes are being considered could the environment be seen as a lower priority than people.

T.36 The summary of the best value plan for customers is shown in Figure T-12.

Box ES1: The shape of the best value plan for customers

The findings from the research provide a forming view on the key characteristics of the best value plan for customers. In effect, these represent customers' expectations or criteria for what an acceptable plan will feature and the aspects of candidate plan(s) that will likely be the focus of customers' attention.

Protect the environment

For customers, the environment is as equally – if not more - important as the other key outcomes that the plan can deliver. The plan is as much an opportunity to bring about an improved water environment through reducing the dependency of the water system on rivers and groundwater, as it is to safeguard water supplies over the long-term.

The key expectation for customers is that:

- The long-term plan to secure water supplies and improve resilience of the water system to drought and unexpected events are not at the expense of the environment; and
- Supply options that have a net positive environmental impact and deliver wider public value (e.g. recreation and amenity) will be preferred. Use of chemicals, high energy use, and other unmitigated impacts are key reasons why some options are less favoured.

Minimise risk in the system

For customers, a resilient plan is one that reduces future uncertainty by building capacity into the water system to deal with future disruption. Insurance associated with overbuilding infrastructure is not a key concern, with a typical view that it is "better to be safe than sorry".

The key expectation for customers is that:

- The long-term plan will place more weight on options that safeguard supplies and reduce risk of disruption with a high degree of certainty.

Acceptable balance of demand and supply options

For customers there is a very clear view on the balance of demand and supply options for the plan, and the order and timing in which they should be implemented.

The key expectation for customers is that:

- Ensuring the current system is efficient is the starting point. Practically this means reducing leaks and removing constraints in the water supply network;
- In the short-term efforts will be focused on being more efficient with the water that is currently supplied and helping customers use less water, along with actions that deliver wider benefits and public value, such as catchment management initiatives; and
- Over the longer-term new resource schemes will be the cornerstone of the plan because gains from leakage reduction can only go so far and significant reductions in demand cannot be relied upon. For supply options the driving preferences are certainty and avoiding significant environmental impacts (see above).

Affordable for all

For customers, there is typically a degree of insensitivity to fairly modest changes in bills for investments that will improve service levels and reduce the risk of future disruption. There is also a willingness to pay for investments now to safeguard water resources and the environment for future generations. At present, the main constraint in terms of customer support and the cost of the plan appears to be that bills are affordable for vulnerable or low-income households.

The key expectation for customers is that:

- The scale of any bill increase accounts for the needs of vulnerable and low-income households, helping to ensure their bills are affordable.

Figure T-12: Summary of the best value plan for customers

T.37 These findings[15] informed the development of policy statements on demand management strategies and confirmed the need to develop a resilience framework.

T.38 The findings specifically in relation to customers' preferences for demand and supply options were:

- Firstly the current system should be efficient, this means reducing leaks and removing constraints in the water supply network
- Secondly, efforts should be focused on being more efficient with the water that is currently supplied and helping customers use less water, along with actions that deliver wider benefits and public value, such as catchment management initiatives
- Customers then see the role for new resource schemes After this, the right supply options were ones that were reliable, avoid environmental harm, and provide wider benefits including enhanced local amenity and recreation opportunities such as reservoirs. The engagement provided a hierarchy of preferences for options
- Beyond this are the least preferred options that have potentially significant negative environmental impacts, including increased abstraction and greater reliance on drought orders and drought permits as short-term measures

T.39 Figure T-13 shows the option preference weight16 for household and non-household customers across the South East. The results show a clear priority order for demand and supply for customers. The starting point is ensuring that the current system is efficient; practically this mean reducing leaks and removing constraints in the water supply network. After this, efforts should be focused on being more efficient with the water that is currently supplied and helping customers use less water, along with actions that deliver wider benefits and public value, such as catchment management initiatives. Respondents then saw the role for new resource schemes, with reservoirs the most preferred, followed by water recycling. Beyond this, inter-regional transfers and desalination were the least preferred supply options. These findings informed the development of a customer preference metric which was used in the best value plan programme appraisal.

[15] Customer Preferences to Inform Long-term Water Resource Planning, Synthesis of Findings – Summary Report for WRSE, Eftec & ICS, March 2021

[16] Respondents indicated their preference for different demand and supply options through a paired comparison choice task. Across a sequence of repeated choices respondents were shown different pairs of options and asked to state which they preferred – in terms of what options should be prioritised in developing the regional plan

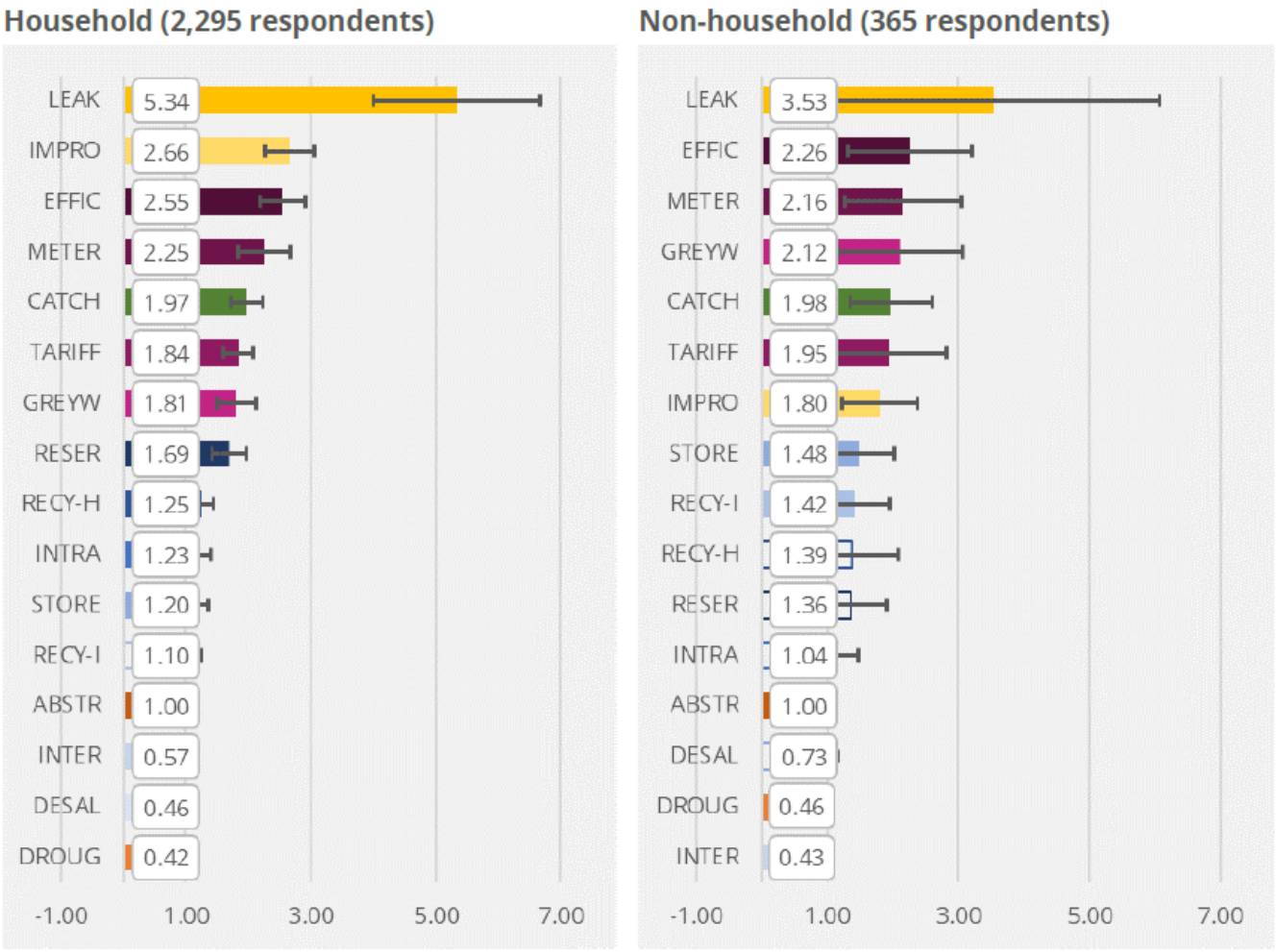


Figure T-13: Option preference weights from customers in the South East[17]

The options noted in the figure are as follows: Leakage detection and reduction (LEAK); Improvements to the current water supply system (IMPRO); Universal metering (METER); Using tariffs to encourage water saving (TARIFF); More efficient use of water in homes (EFFIC); Using grey water to rainwater collection and use (GREYW); Catchment management (CATCH); Extra drought measures (DROUG); Taking water from rivers and groundwater (ABSTR); Reservoir to store water (RESER); Storing water underground (STORE); Taking water from the sea (DESAL); Recycling treated wastewater for household use (RECY – H); Recycling treated wastewater for industrial use (RECY – I); Transferring water from other regions (INTER); Transferring water within the South East region (INTRA)

T.40 The results for the Thames Water customers broadly reflected those of the wider South East as shown in Figure T-14.

[17] WRSE - Customer Preferences to Inform Long-term Water Resource Planning – Part C Customer Survey, March 2021

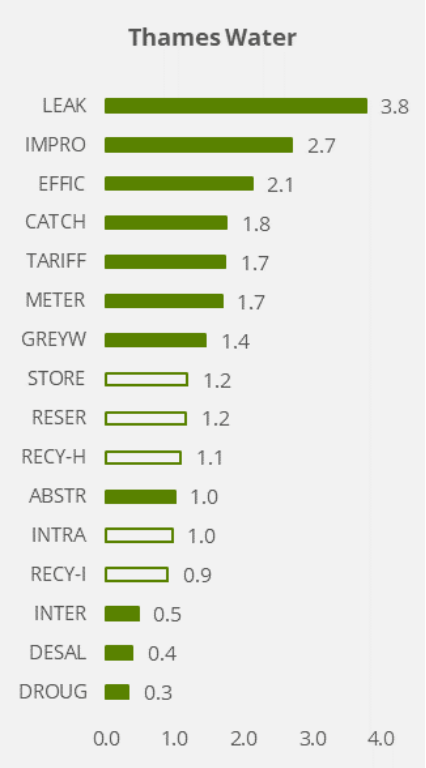


Figure T-14: Option preference weights for Thames Water customers

T.41 The findings specifically in relation to the potential plans for the South East region showed that they supported an enhanced plan over a least cost plan, and that the most important aspects are:

- Buffer to cope with potential disruption: a plan that provides a buffer is more likely to be preferred by a larger proportion of customers
- Flexibility to deal with future changes: a plan that provides a degree of flexibility in the future is more likely to be preferred by a larger proportion of customers
- Protection of the environment: a plan should protect the environment, ensuring that a plan has a positive impact (or less likely to have a negative impact) on the environment. Overall, it appears that customers see the plan as an opportunity to safeguard the environment, as much as it is to ensure water supplies over the long-term
- Balance of the supply and demand measures: a plan should have a good balance of both increasing the supply and reducing the demand of water in line with the hierarchy of preferences concerning the timing of different types of option
- Value for money: whilst the alternative plans tested in the survey were not strongly differentiated in terms of impact on customer bills, some respondents did base the choices on value money considerations. This was particularly important for respondents in lower socio-economic groups and those dependant on water
- Impact on lifestyle: for some customers it is likely that minimising the impact on the use of water by households will be an important consideration

T.42 The research also provided useful information to guide future engagement in terms of the type of information customers wanted to see and the importance of framing the discussions, as well as explaining the full scheme composition and how the scheme fits within a wider plan.

WRSE Phase 2 - Determining 'best value' [18]

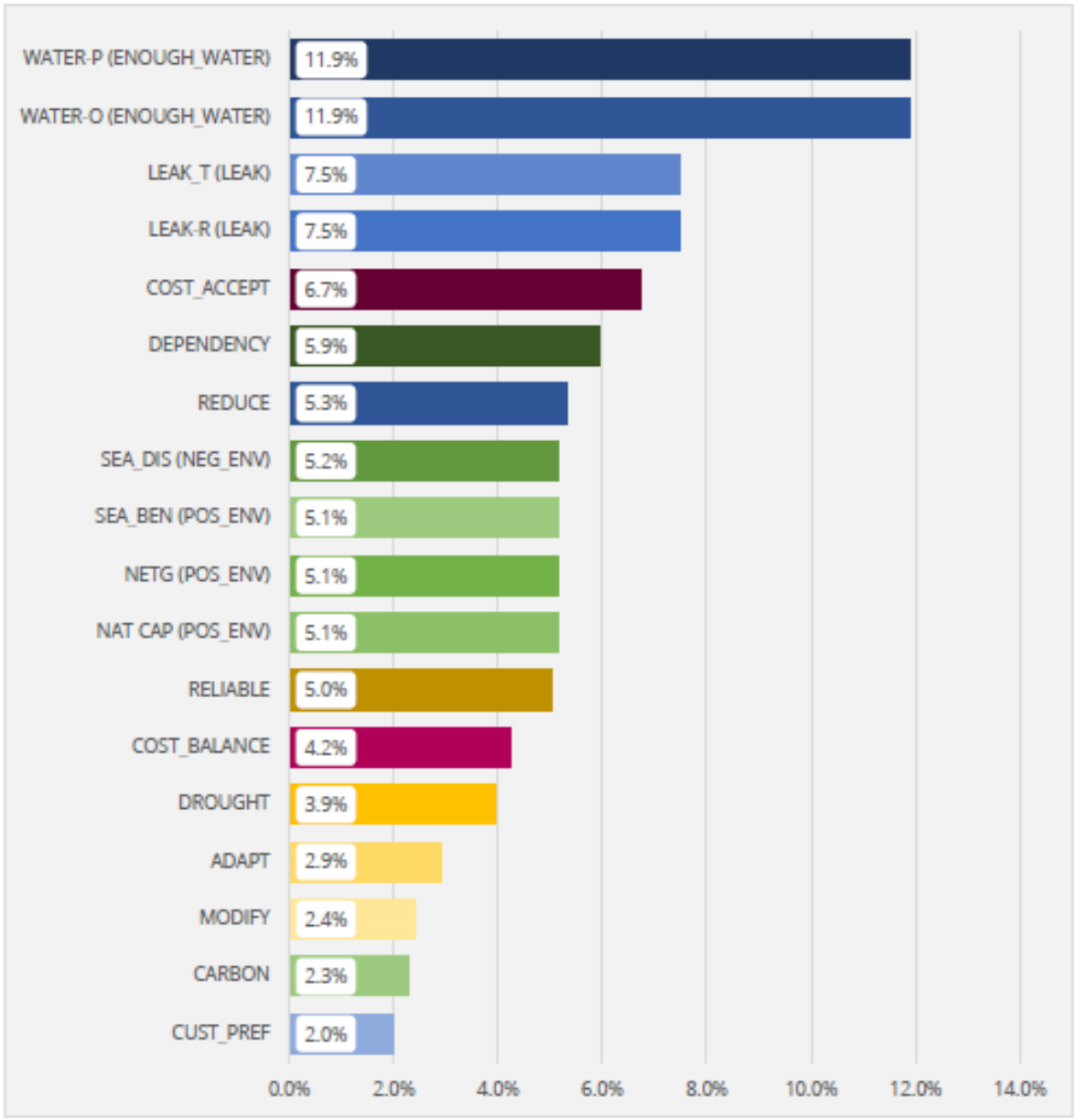
T.43 WRSE commissioned Eftec, an independent market research agency, to seek customers' views on the prioritisation of the strategic objectives and criteria which are used to reflect a range of outcomes and benefits associated with an enhanced plan including resilience, environmental impacts, biodiversity, and wider socio-economic and customer benefits. An output of the study was to provide customer preference weights for the criteria used to determine the best value regional plan.

T.44 The research was implemented through a representative online survey of household customers in the South East, with 309 respondents representing all six WRSE companies completing the survey. A choice modelling approach was used to estimate the preference weights for the best value criteria. Customers were segmented by age, socio-economic group and gender.

T.45 The results are presented in Figure T-15 and show that customers place more weight on the delivery of a secure supply of water, followed by cost or environmental improvements, and then resilience and these criteria were given more weight than the customers preferences for the options. Here is the "tiering" of customers' priorities for the regional plan outcomes:

- Top priorities: foremost to ensure the long-term security of supply in the region, both for public supply purposes and other sectors. Ranking just below this are the key considerations for improving the efficiency of the water supply system in terms of reducing leakage and reducing its dependency on sensitive habitats and groundwater sources, along with the cost and customer affordability constraints for the plan.
- Mid-tier priorities: feature several dimensions of the performance of the plan relating to wider environmental impacts, reducing demand for water, and improving resilience to extreme events.
- Lower priorities: include wider aspects of the resilience of the water supply system, including minimising the risk of emergency drought restrictions, along with balancing the carbon impact and the mix of options used.

[18] Best Value Criteria – Customer Research for WRSE, Eftec, May 2021



Label	Metric	Criteria
CUST_PREF	Customer preference for option type	Customer preference
CARBON	Cost of carbon offsetting	Carbon
MODIFY	Programme evolvability score	Resilience assessment - evolvability
ADAPT	Programme adaptability score	Resilience assessment - adaptability
DROUGHT	1 in 500-year drought resilience	Drought resilience
COST_BALANCE	Health rate (THDR 1%)	Intergenerational equity
RELIABLE	Programme reliability score	Resilience assessment - reliability
NAT CAP (POS_ENV)	Enhancement of natural capital value	Natural capital
NETG (POS_ENV)	Net-gain score	Biodiversity
SEA_BEN (POS_ENV)	Programme benefit (score max)	Strategic environmental assessment
SEA_DIS (NEG_ENV)	Programme disbenefit (score min)	
REDUCE	Distribution input per head of population	Water consumption
DEPENDENCY	Reduction in the volume of water abstracted at identified sites	Abstraction reduction
COST_ACCEPT	Net present value using the social time preference rate	Programme cost
LEAK-R (LEAK)	Percentage leakage reduction above 50%	Leakage
LEAK_T (LEAK)	50% reduction in leakage by 2050	
WATER-O (ENOUGH_WATER)	Provides additional water needed by other sectors	Meet the supply demand balance
WATER-P (ENOUGH_WATER)	Public water supply - supply demand balance profile	

Figure T-15: Customers' preferences for best value criteria

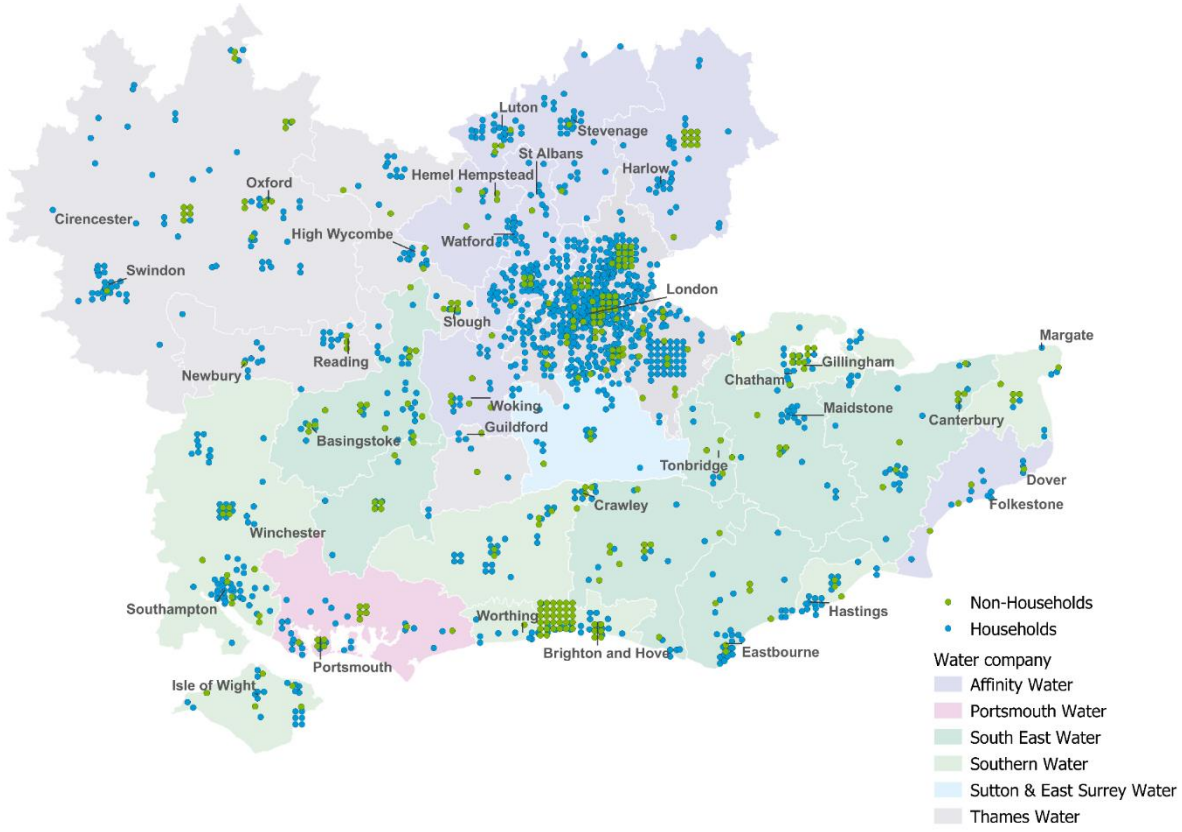
T.46 WRSE used the criteria and the weights customers set out and have judged each of the modelled regional plans against them. This provided an indication of which of the modelled regional plans are meeting the customer expectations and which ones aren't. Our WRMP24 inherently takes account of these preferences by reflecting the South East regional plan.

WRSE Phase 3 – Regional plan preferences [19]

T.47 WRSE commissioned research to explore customer preferences for the balance of the regional long-term water resources plan in terms of reducing demand for water, developing new schemes, and bill impact.

T.48 The key findings of the WRSE report are summarised here. For more information, including the survey structure and more detailed of analysis of household and non-household customers' views, please read the WRSE report.[20]

T.49 The research was quantitative research using an online survey between March and May 2023. Approximately 1,700 household and non-household customers representative of the South East of England and providing coverage of the six WRSE water companies participated in the research. Figure T-16 shows the location of the participants.



[19] Alternative plans – Customer Research for WRSE, Eftec, May 2023
[20] Eftec (for WRSE), September 2023, WRSE Customer Research – Regional Plan Preferences – Technical Report, https://www.wrse.org.uk/media/yndafuqx/wrse-regional-plan-customer-research_technical-report_final_september-2023.pdf

Figure T-16: WRSE alternative plan research - Geographic representation of customer participants

T.50 The survey comprised a series of choice exercises to allow participants to pick their preferred profiles for the regional plan:

- Preference over alternative plans without bill impact - an "unconstrained" view of customer preferences based on the profile of each plan.
- Preference over alternative plans with (randomised) bill impact. This provided a "constrained" view on customer preferences reflecting trade-offs between higher/lower bill amounts and the profile of each plan.

T.51 The key findings were:

- Customers' overall preference is for a balanced regional plan - The preferred plan profiles for both households and non-households were the Least Cost, Best Value and Government C (high demand management) plan, all of which featured a mix of strategic resource schemes and higher levels of demand management ambition. Whilst differences in the strength of preference between the three plans were relatively modest – and varied according to level of bill impact – they were clearly preferred over the two other plans tested which were excluding SESRO and lower level of demand management. This is shown in Figure T-17.

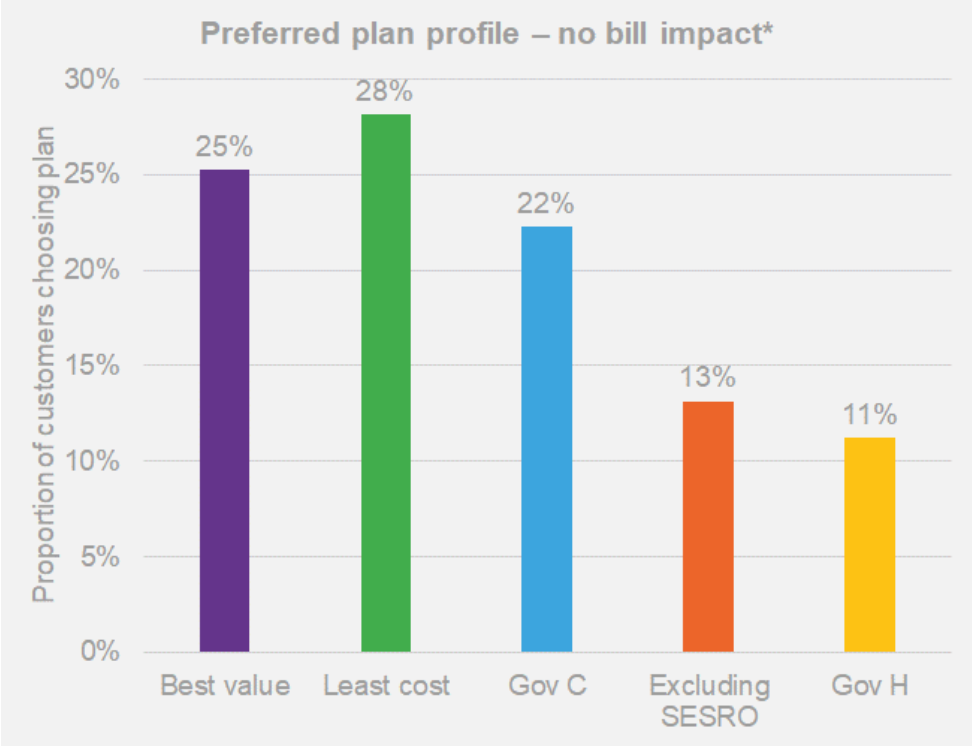


Figure T-17: Preferred plan profiles without consideration of bill impact

**Results: most preferred plan based on choice between alternative profiles (mix of schemes, the intensity of demand management and wider outcomes including resilience to drought and unexpected events, carbon emissions, and impact on customers' water use), excluding bill impact. This represents an "unconstrained" preference result.*

- Customers value the added resilience - this was particularly observed when customers were told that plans would require higher bill increases, where the level of support for the Best Value plan tended to increase reflecting that customers found this to represent better value for money.
- Customers recognise the need to reduce demand and see this as an integral part of the plan however it should be noted that the level of support tailed off at higher bill amounts reflecting that as the cost of a plan increases for customers, it became increasingly important for it to incorporate strategic resources that contribute to enhanced resilience – i.e. effectively paying for added "insurance" for security of future water supplies.
- The split in views between the Least Cost and Best Value plans were in part attributable customer socio-economic and demographic characteristics. The Best Value plan tended to be supported more by younger respondents (24 or younger) and those in higher Socioeconomic Groups (SEGs), whilst the Least Cost plan was typically favoured by older respondents (55+) and lower SEGs. The distinctions tended to reduce when customers were told plans would require higher bill increases, where support for the Best Value plan increased across all age groups and SEGs

T.52 The preferences of customers in the Thames Water area specifically, reflected the findings of the wider South East region. Figure T-18 shows the preferences for household customers in the Thames Water area for the alternative plans.

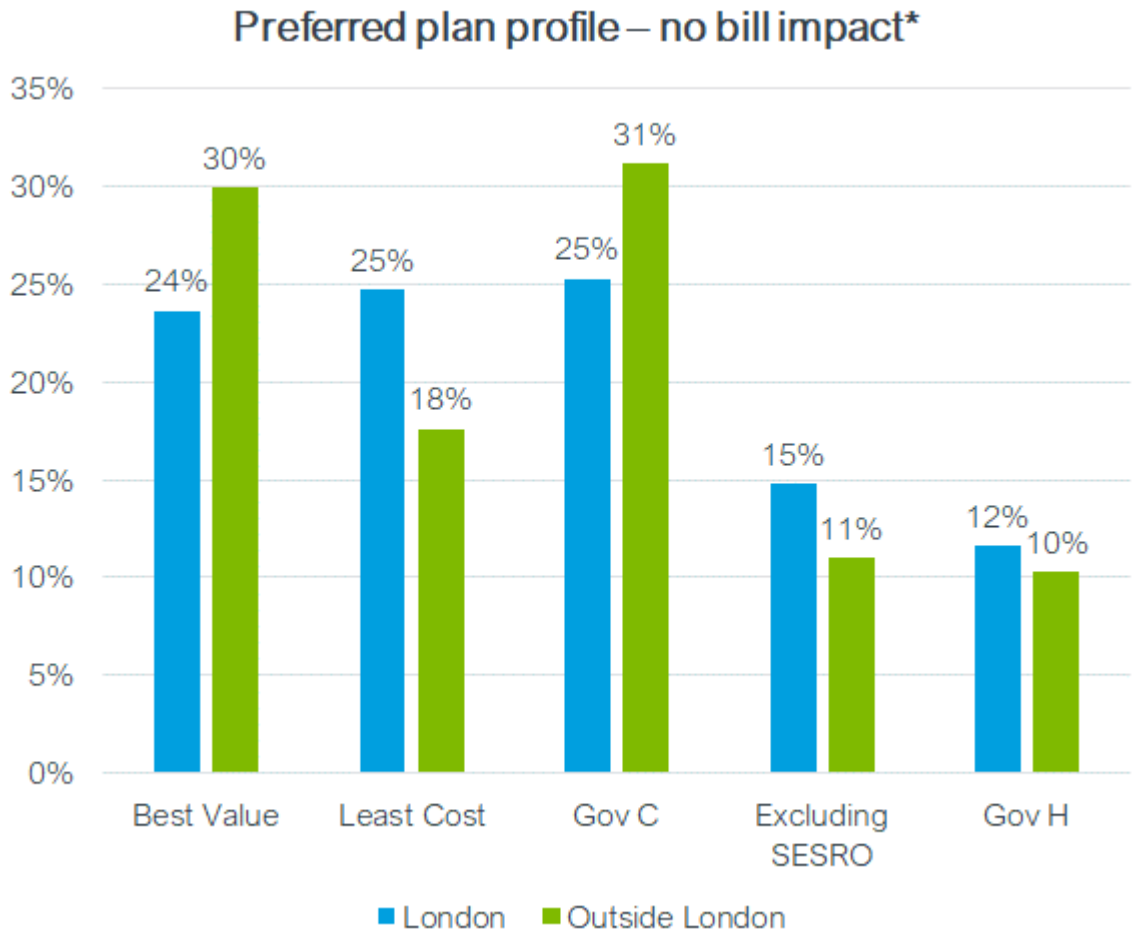


Figure T-18: Thames Water customers – preferred plan profile

**Results: most preferred plan based on choice between alternative profiles (mix of schemes, the intensity of demand management and wider outcomes including resilience to drought and unexpected events, carbon emissions, and impact on customers' water use), excluding bill impact. This represents an "unconstrained" preference result.*

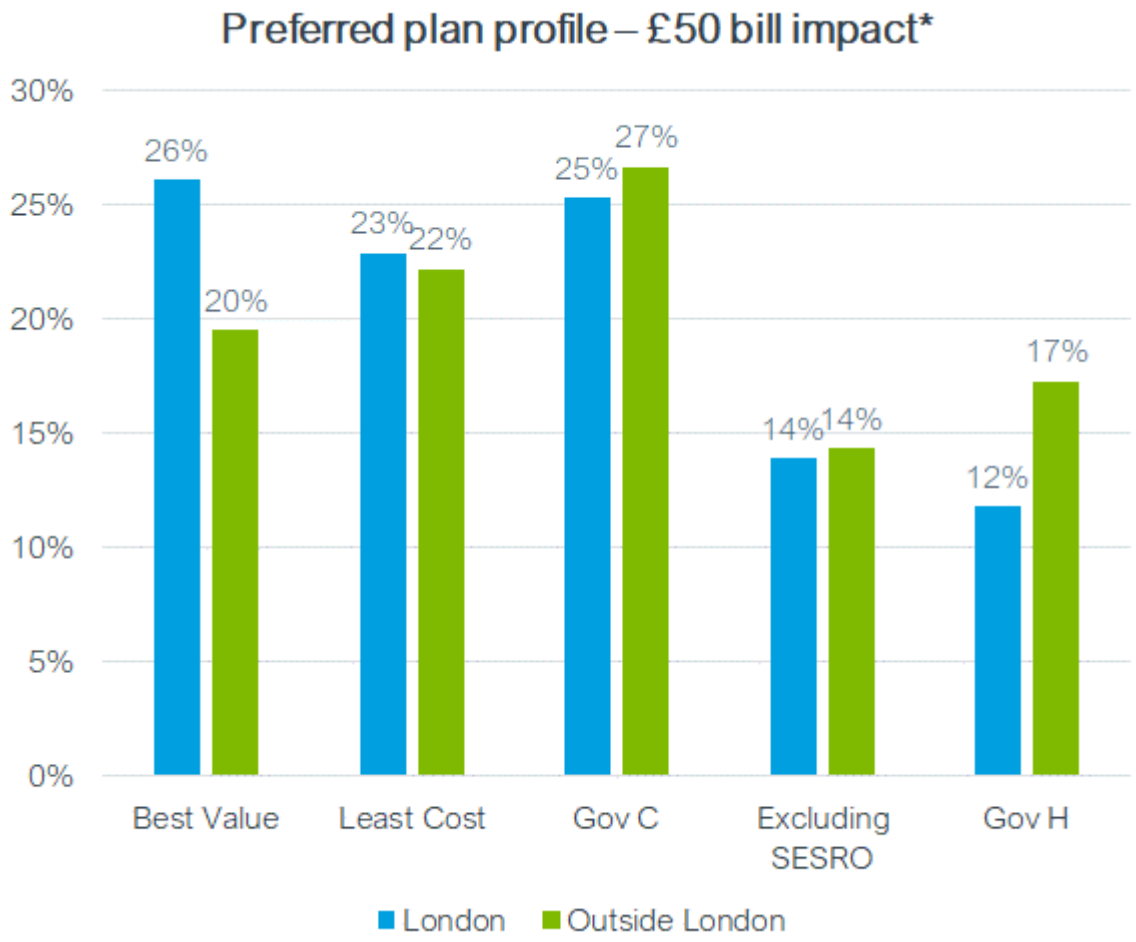


Figure T-19: Thames Water customers – preferred plan profile - £50 bill impact

**Results: most preferred plan based on choice between alternative profiles and bill impact (average annual amount over 2025 – 2100 planning period). This represents an "unconstrained" preference result. A random bill impact amount was assigned to each plan (between £5 - £250 per year) and varied across respondents. Reported results are for most preferred plan at £50 bill impact.*

Collaborative research - Strategic resource options

T.53 Engagement and research has been undertaken to inform the development and future design and promotion of the strategic resource options (SROs) being investigated by Thames Water and other water companies. The research studies were undertaken as a

collaboration across eleven strategic resource options (as part of the studies completed to inform the Gate two regulatory submission to Ofwat[21].

T.54 Two research studies were commissioned as follows:

- How a scheme could deliver wider public value, not only for the community in which the scheme is delivered but at a national level. We wanted to understand customers' support and willingness to pay for such benefits and whether this was dependent on scheme type and distance from the customers impacted
- The impact a change in water source would have on those customers who received it, identify the concerns they would have and how we, as water companies, could communicate the changes

Providing wider benefits[22]

T.55 The study was designed to explore customers' preferences on the wider benefits that could be included as part of new water infrastructure development and how much customers would be willing to pay for the added benefits.

T.56 The objectives of the research were to understand:

- What added value customers perceive is important as part of infrastructure development, to understand preferences for the added value (and if those preferences change depending on the geographical location/type of scheme)
- How much are customers prepared to pay
- What language should be used to explain the added value

T.57 The research was a multi-stage programme of research and involved a literature review, qualitative and quantitative analysis. It was conducted jointly by research agencies, Accent and PJM Economics, both MRS registered and specialists and recognised in the water industry for this type of economic-led engagement.

T.58 The literature review identified that despite a large set of guidance documents and frameworks the concept of public value is not fully and universally embedded in the water companies' culture and there is little empirical evidence on perceptions and preferences regarding public value in the UK water sector.

T.59 The qualitative phase of the research involved a reconvened method to introduce and explore generic 'Public Value' and then test what is important for large infrastructure projects within the water industry. There were 24 online Zoom groups with household, non-household and future customers across six water companies as shown in Figure T-20.

[21] Gate two submissions and final decisions - Ofwat
[22] Customer preferences on added value for large resource schemes, Accent & PJM economics August 2022

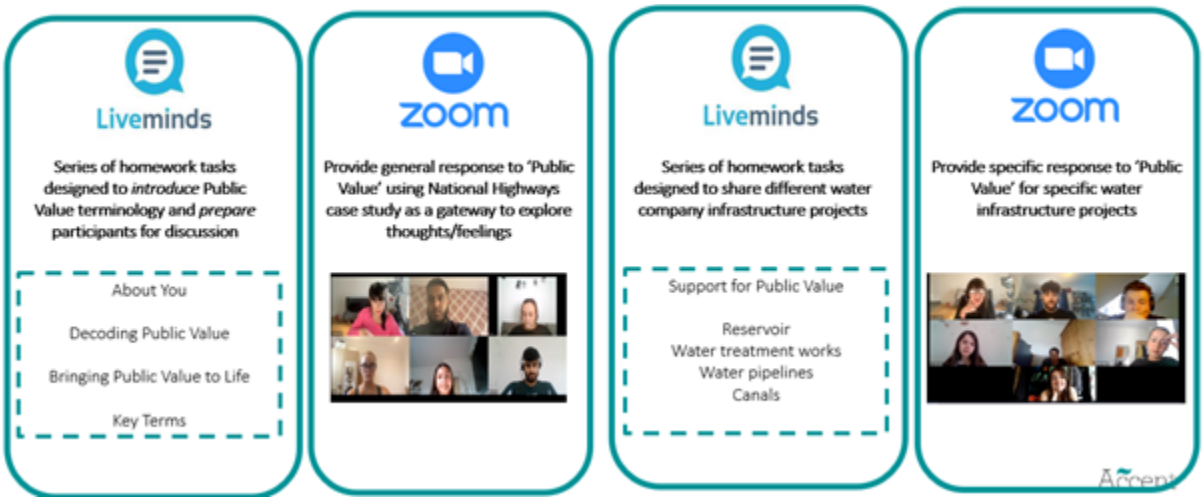


Figure T-20: Public Value research: Overview of the qualitative phase

T.60 The quantitative phase engaged 5,902 household customers and 553 non-household customers through online and face to face interviews and the data were weighted to UK census data (households) and UK business population estimates (non-households) to be reflective of the population. The quantitative research focused on estimating customer willingness-to-pay (WTP) valuations of 26 possible project additions at potential new water supply sites via a stated preference survey. The survey included a pairwise choice exercise[23], to obtain willingness-to-pay values for each of 26 project additions (economic, social, or environment). It also included a contingent valuation exercise providing a measure of maximum WTP for project additions in total. The following types of site were covered: reservoir; canal to transfer water; pipeline to transfer water and a treatment works. The distance from the participants' location to the sites was a part of the scenarios shown and was specified as either local (five miles) or far away (50 miles).

T.61 In both the qualitative and quantitative work, environmental project additions were valued highly and there was a high emotional resonance with these additions and the narrative of supporting wildlife/new wetlands/habitats is consistent across all the customers who participated.

T.62 The top three most highly valued project additions by households were:

- 'Specialist habitats created for wildlife' (£3.87 annually, on average)
- 'New wetland area' (£3.24 annually, on average)
- 'Space provided for sustainable agriculture' (£2.61 annually, on average)

[23] Pairwise choice exercises and contingent valuation exercises are recognised statistical methods for understanding customer preferences through a survey.

Base: 5,902 participants. Annual WTP in terms of a higher water bill for project additions at sites five miles from home (weighted estimates). The error bars show 95% confidence intervals calculated using the delta method.

Figure T-21: Public Value research: A summary of Willingness to Pay values across all types of schemes for household customers

T.63 The biggest variation in the qualitative work was by project type. This is consistent with the quantitative work where valuations of project additions differ considerably across different types of sites and by distance, while the extent of variation across companies is small.

T.64 In the quantitative work, overall, project additions at treatment works were valued most highly, followed by reservoirs, canals, and pipelines. This could be due to reservoirs/canals being naturally more positive/pleasant.

T.65 Qualitatively, people felt that the social project additions at water treatment works would be less valuable because they would be unlikely to want to visit, but environmental and economic benefits were supported.

T.66 The Willingness To Pay (WTP) for a 'package' of project additions was lower than the sum over individual project additions, indicating that capping may be needed for individual project additions to ensure that total WTP is not exceeded.

T.67 These findings will help inform the further development of the design stages for the SROs to reflect the preferences of our customers.

T.68 The research has provided important insight to inform the design of the new water resource schemes ensuring the opportunities to provide public value are considered in the early design stages of the schemes and the nature and extent of the added value is in accordance with their preferences.

Communicating changes to the source water for customers' water supply[24]

T.69 Changing the source of the water customers receive through their taps, whether through geographical redistribution, development of new sources, or recycling, will be an outcome of balancing supply and demand across the South East. We need to be confident that we understand how customers interpret and respond to the different water source changes that may form part of our water network in future.

T.70 This was a collaborative project across 11 strategic resource options designed to explore customers' views on potential changes to the source of their drinking water supply and the information and communications that they would want to receive in relation to such a change.

T.71 This research was undertaken by Britain Thinks, a leading UK, MRS registered, market research agency.

T.72 The research comprised three stages: a review of the evidence base on source changes, both nationally and internationally; and a qualitative review of customer views, including product testing and the co-design testing of a communications framework; and a quantitative research phase.

T.73 The study involved 96 customers in the qualitative phase, spending a full day learning about and exploring the various options for water supply and transfer and discussing their views. They were then re-engaged online to help co-design a communications framework. This was tested with 1,762 customers and 198 non-households, during a quantitative phase, of which 436 customers were Thames Water customers. The methodology is shown in Figure T-22.

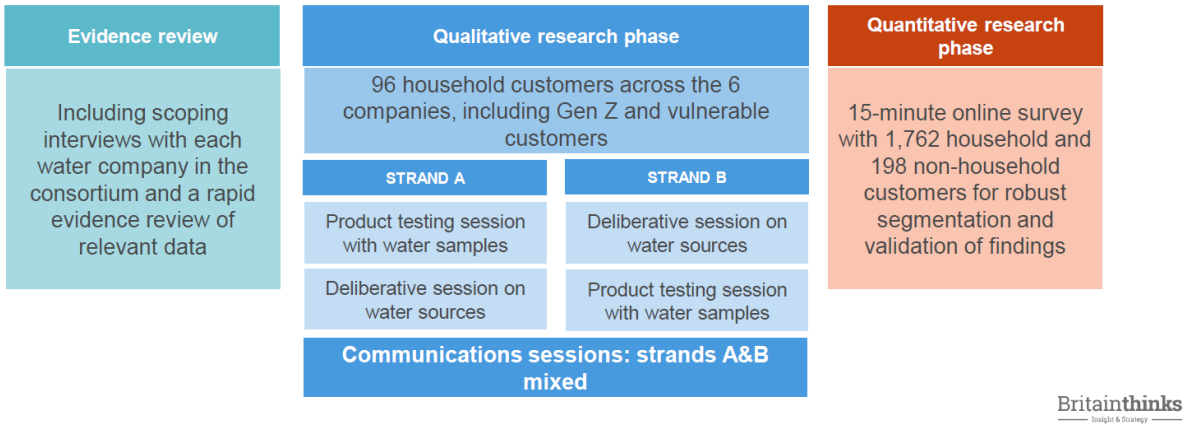


Figure T-22: Water sources research: Methodology overview

T.74 The key findings were:

- 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
- 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.

[24] Water Club: Changes of source, Britain thinks, June 2022.

Information on the topic is easily understood, however, this is not always enough to unseat long-standing perceptions that water is abundant in the UK

- 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
- 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
- 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 the impact
- In terms of communication, overall, the 'human' frame (explaining the impacts of the change in terms of how it impacts the customers' daily use, e.g. taste, limescale etc) combines the qualitative and quantitative findings together the most effectively. Quantitatively, environmental and human framings are slightly preferred to practical framings to communicate a water source change, however, in qualitative sessions, environmental framing is felt to lack impact, indicating that, overall, human framing works best
- Most household customers want initial notification three to six months in advance of the change, although non-household customers are more likely to want an earlier notification of a change. Most respondents then want to be reminded again of the change, at a point closer to the time, but generally only once
- An email message and a letter, separate from the water bill, are the preferred forms of communication about source changes, consistent across sources. Most customers claim they would click through to look at additional information. Whilst this number may be lower, providing comprehensive information to those who may want it is key
- 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 bills, taste, the process, the reason behind the change, safety, environmental impact, and information from an independent source
- Whilst there is a need to communicate on any source change, water recycling and desalination need more engagement due to a higher level of spontaneous concerns. For water recycling, these concerns are centred around taste, hygiene and safety. Figure T-23 shows source-specific findings

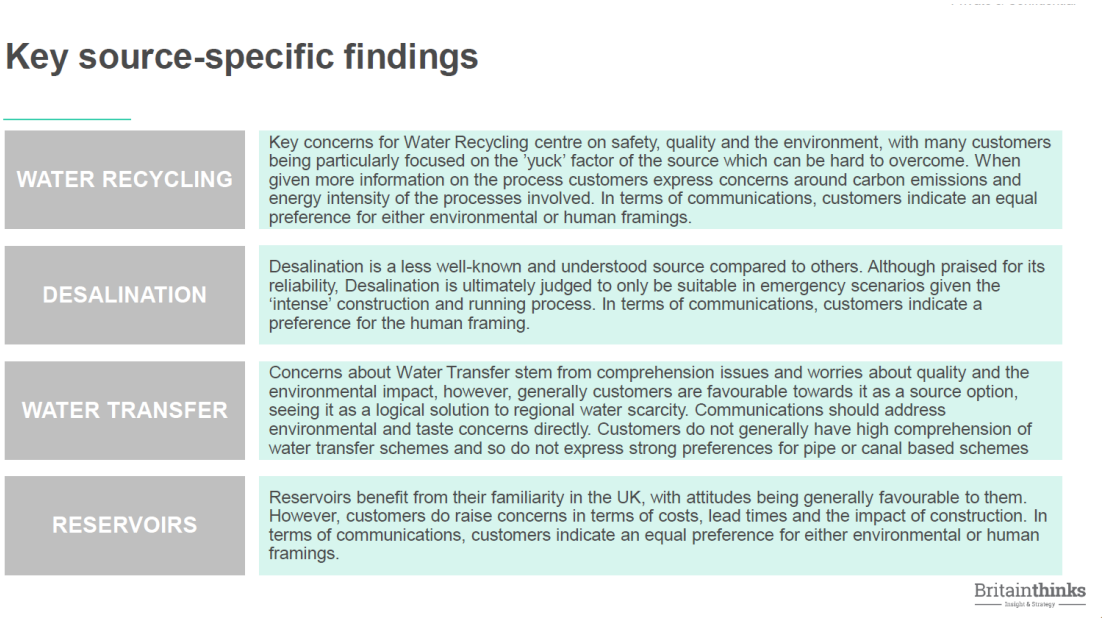


Figure T-23: Water sources research: Source specific findings

T.75 One of the key outputs from this research was a communications framework which took all the learning to produce a practical tool to use when we do decide to change a water source, and the language, framing and timing of communications we should employ. Figure T-24 shows the key implications for communications for water recycling, with similar information provided for desalination, water transfers and reservoirs.

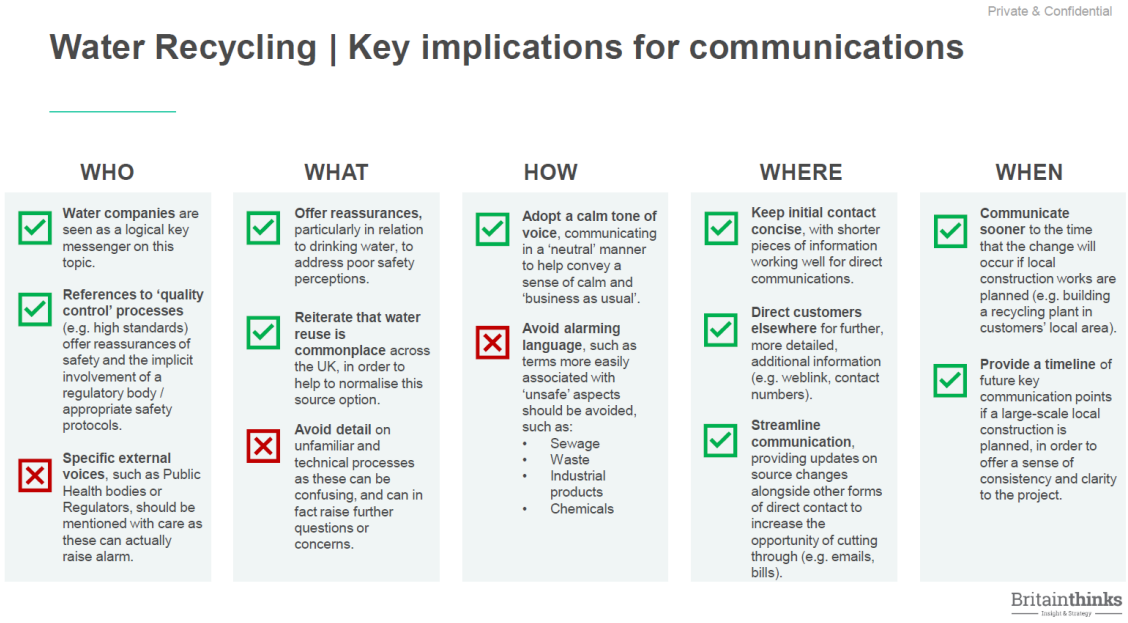


Figure T-24: Water sources research: Water recycling key implications for communications

Communicating about water recycling with London customers [25]

T.76 The research on source water changes undertaken with Britain Thinks highlighted that water recycling evokes the strongest negative response from customers, largely driven

[25] Thames Water, Customer Voices, Water recycling, Verve, June 2022

by safety concerns. We explored this further with customers in London and undertook a focused research study with our online customer community to test the acceptability of water recycling and the communications they would want, including the format and scope of the information, to ensure they would be informed and confident in the safety and quality of their water supply if water recycling was used in the future. This was an aspect that was specifically raised by DWI to ensure successful promotion of recycling schemes if they are taken forwards.

T.77 This research was undertaken by Verve, a leading UK, MRS registered, market research agency. The methodology is presented in Figure T-25.

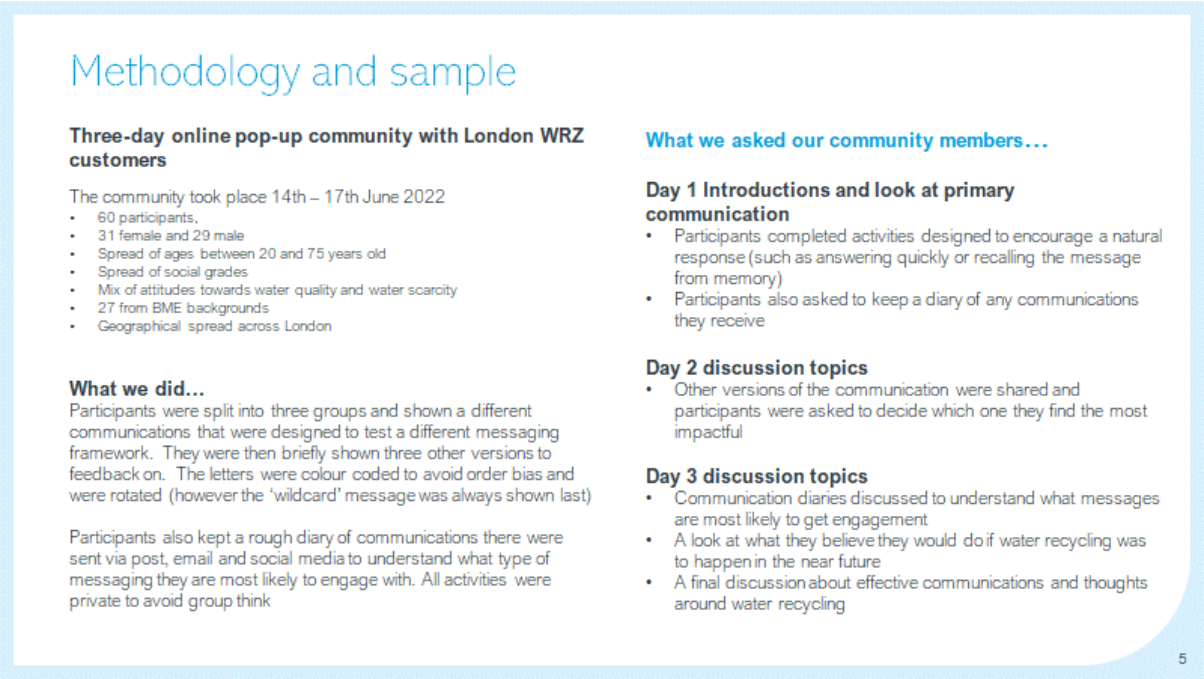


Figure T-25: Water recycling testing communications: The methodology and sample

T.78 The research highlighted that all messaging needs to feel honest in the current culture of misinformation and untruths; the communications need to be clear and simple to avoid misunderstandings and communicating as early as possible will give people with concerns the most time to adjust; the 3 key areas that are important to customers are:

- What is the situation – London could potentially experience an interruption in water supply if we take no action
- What is the solution – A clear explanation of water recycling and what that involves
- What are the consequences – What this means for individuals, the wider community, and the environment

T.79 A summary of the findings is shown in Figure T-26.

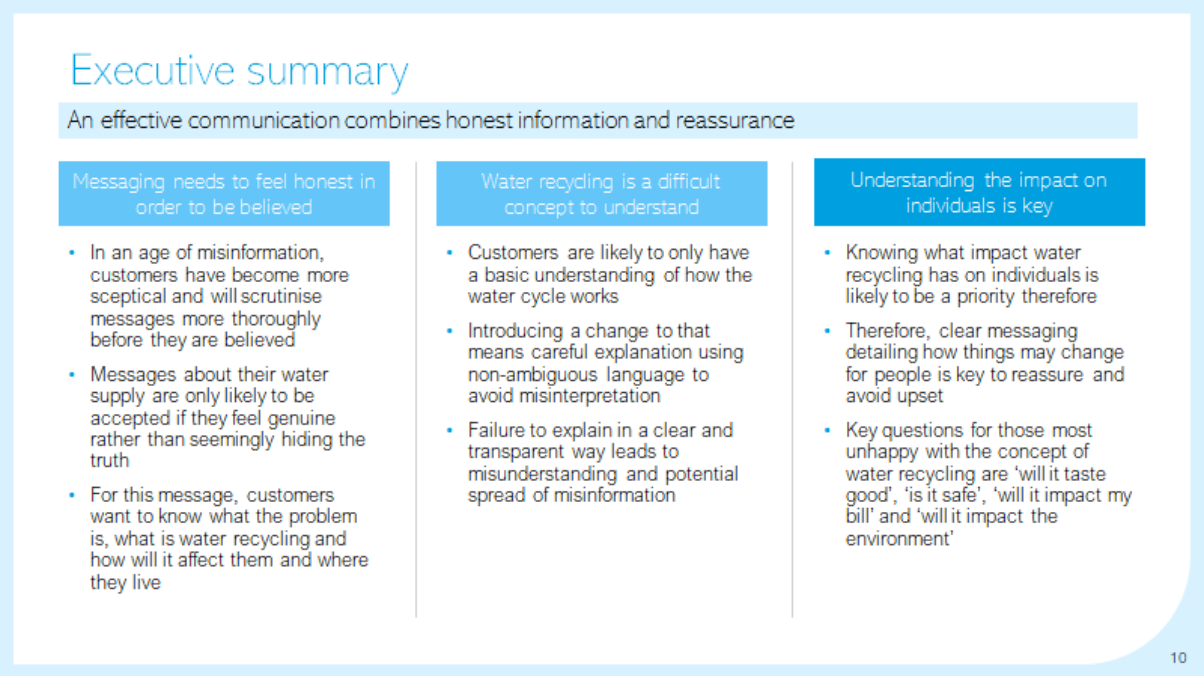


Figure T-26: Water recycling: A summary of the framework for effective communications

Overview of our customers' priorities and preferences

T.80 In this section we present a summary of our customers' priorities and preferences in relation to long-term water resource planning drawn from the suite of research studies undertaken, and summarised in this appendix.

	Customers' priorities and preferences - Headlines	Source
The plan – principles, challenges and approach	Most customers are unaware of the challenges faced for future water supply. When they are informed, customers support plans and investments that will safeguard service levels and the environment for future generations. Customers are fully supportive of the collaborative approach to developing the plan in the South East. There is a strong expectation that the plan will deliver beyond the minimum statutory requirements and protect the environment.	TW WCC&SW[26] WRSE Part 1[27] and 2[28]
Levels of service	There is a willingness to support plans and investments that will safeguard service levels. Restrictions on water supply in response to drought or extended dry periods are considered to be of lower importance to customers than some other performance commitments. The restrictions which would be introduced in a more severe drought are considered by customers to be of more importance than a hosepipe ban or non-essential use ban and there is support to increase these levels of service. Customers expect a 24/7 resilient and reliable service and expect us to plan to mitigate and recover from hazards including weather related events, terrorism and cyber-crime and provide a resilient service into the future. They trust in our expertise and expect Thames Water to be able to deal with such hazards – they are more concerned with impacts on their water and wastewater service rather than the cause of the problem	WRSE Part 1[4] Ofwat collaborative research to test the draft common performance commitments[3]

[26] What Customers, Communities and Stakeholders Want, v 17, Thames Water, March 2023 4
[27] Customer Preferences to Inform Long-term Water Resource Planning, Synthesis of Findings – Summary Report for WRSE, Eftec & ICS, March 2021
[28] Best Value Criteria – Customer Research for WRSE, Eftec, May 2021

	Customers' priorities and preferences - Headlines	Source
Solutions - overall	Customers' preference is for a balanced regional plan – which aims to achieve reductions in leakage and demand as a priority, as well as investing in new water resource schemes. Leakage reduction, demand measures, and new supply sources are not seen as substitutes, it is the timing and ordering of options that matters most to customers. First, companies must get their "own house in order" by reducing leakage and helping customers to save water. After this, the right supply options for customers are ones that are reliable, avoid environmental harm, and provide wider benefits including enhanced local amenity and recreation opportunities.	WRSE Part 1[4] WRSE Part 2[47]
Leakage reduction	Leakage reduction is a priority for customers. Customers feel that current levels of leakage are too high. Customers support ambition to tackle leaks and the majority support the target to halve leakage by 2050, whilst some have suggested that we should be more ambitious. Leakage is a priority for customers but lead pipes and sewage spills were higher priority	Thames Water's Vision 2050 TW WCC&SW[3] TW public consultation[29] Long-term delivery strategy research[30]
Metering	Customers support the on-going roll-out of smart water meters recognising their importance in managing our resources efficiently, although they would prefer to choose whether to have a meter rather than it being compulsory.	TW WCC&SW[3]
Water efficiency	Customers support action to reduce the demand for water. Customers would like help to understand their usage and actions to reduce their water consumption. However some customers feel they already 'do their bit' and think it unfair to ask this of customers when leakage levels are so high. Some cautioned whether targets are achievable.	TW WCC&SW[3]
Investment in new sources of water	Overall customers support investment in new water supply schemes where they can be shown to deliver benefits for the future. Customers have consistently provided their preferences on new water supply options. They prefer new supply options that are tried and tested, have a net positive environmental impact and deliver wider public value (e.g. recreation and amenity). For	TW WCC&SW[3] WRSE Phase 1[4]

[29] 7120 Water Resources Management Plan, Verve, May 2023
[30] Long term delivery strategy research September 2023 (thameswater.co.uk)

	Customers' priorities and preferences - Headlines	Source
	the draft WRMP24 the reservoir, then the new abstraction scheme in west London are supported ahead of the Severn Thames Transfer. A concern with inter-regional transfers is reliance on other parties and a perception that these schemes will simply shift water availability problems around the country rather than dealing with them directly. Customers recognise that new infrastructure projects will cause local disruption and there will be local opposition, however they consider these schemes must progress for the benefit of wider society.	Water Club: Change of Source', June 2022 Britain Thinks[6] Public consultation[48]
Protecting the environment	Customers believe that improved water supply resilience should not be at the expense of the environment. There was little support for taking more water from the rivers and groundwater in normal circumstances. Customers think our overall goal ('Ensure there is enough water in the future, without taking too much from rivers and harming the environment') is not only commendable but essential to the future of both customers' wellbeing and the environment. A sizeable minority believe that action should be taken more urgently or provide customers with assurance that we will not cause significant damage to waterways during this process of balancing water supply vs. environmental needs. Though customers feel that sustainable abstraction was important, when presented with a range of our priorities they prioritise core delivery issues such as replacing aging mains and pipes and upgrading the sewer network over sustainable abstraction. Sustainable abstraction was ranked second last by customers. That said, customers support the environmental ambition set out in the draft WRMP24 with the opportunity to adapt and take account of evidence and data as further studies are undertaken.	WRSE Part 1[4] & 2[5] Thames Water's Vision 2050 and public value[31] TW Enhancement case research[32]
Providing wider value	A majority of customers are in support of public value and believe such activities are an important part of how the business should conduct itself and what it should deliver. However there is a clear prioritisation towards core services and environmental elements. The elements that are de-prioritised tend to be the less tangible or less service	SRO Collaborative project on public value[33] Thames Water's Vision 2050 and public value[8]

[31] TW Customer Voices, Public Value research, Verve, May 2022
[32] Thames Water's Enhancement deep dive on sustainable abstraction, Verve, March 2022
[33] Customer preferences on added value for large resource schemes, Accent & PJM economics August 2022

	Customers' priorities and preferences - Headlines	Source
	related, such as 'connecting you with your local surroundings' and 'bringing communities together'. These findings were reflected in the public value research undertaken for the strategic resource options which identified that for new water supply options, environmental project additions were valued highly.	

Table T-2: A summary of our customers' priorities and preferences in relation to long-term water resource planning

Consideration of customers' priorities in developing the WRMP24

T.81 In this section we explain how we have taken account of the priorities and preferences of our customers, set out in the preceding section, in developing the WRMP24.

Topic	How we have considered customers' priorities
The plan – principles, challenges and approach	Working collaboratively we have developed a plan that will achieve long-term security of supply for the whole of the South East region. The plan is a best value plan for customers that will deliver beyond the minimum requirements, will ensure we are ready for the changing climate with additional capacity to ensure against wider uncertainty and disruption and will protect and improve the environment.
Levels of service	We have aligned our levels of service for Temporary Use Bans with the other South East water companies to help ensure clear and consistent messaging during an extended dry period, noting the frequency of these is of lesser concern to customers than severe water restrictions. We have ensured our plan will deliver enhanced levels of service, to cope with a 1:200 drought by the early 2030s and a 1:500-year drought by the 2040s. This improved level of service will also help to protect the environment as drought permits will need to be used less frequently.
Protecting the environment	Our plan aims to work towards our long-term aspiration to cease all abstraction that adversely affects sensitive streams by 2050. This is in line with the preferences of our environmental regulators, stakeholders and the majority of our customers. However we recognise there are some concerns over the cost. And we will progress studies and adapt our approach as we learn more. This evidence based approach is in line with customers' preferences.
Leakage reduction	We have committed to at least halve leakage by 2050 in the WRMP24. This is in line with Government's expectation and is also in line with customers' preference to tackle leakage as a priority. Some customers suggested we should be more ambitious. We consider that the pace of the programme reflects our experience of what is deliverable and efficient for customers. We will continue to review the pace and extent of our programme as part of the five yearly reviews of the plan.
Metering and efficient use of water	We have extended our ambition to work with customers and other organisations to achieve significant reductions in water demand, to 110 litres per person per day in the WRMP24, this is in line with the government's policy target and meets regulatory guidelines. Our approach includes ongoing roll out of smart meters and a wide programme of measures to support our customers to use water efficiently.

Topic	How we have considered customers' priorities
	Demand reduction makes up around 80% of the water shortfall in the WRMP24, this is in line with the preferences of our customers however customers have also recognised that we need to be resilient and were cautious around the levels of reduction that can be achieved. We have set out there is a risks around multi-party delivery and achievement of this target and will monitor progress.
Preferences for options	Customers have given feedback on their preference for new water supply options over several stages of research. These preferences have been used to develop a customer preference metric, which is one of the best value metrics, directly used by the WRSE investment model and in programme appraisal to determine the best value regional plan. Specifically in relation to our draft WRMP24 customers set out their preferences for a new reservoir, and a new scheme in west London ahead of inter-regional transfers. This preference order is consistent with our previous customer research and reflects the strategic schemes included in the WRMP24.
Ensuring promotability of new water supply options	Whilst customers recognise the construction of new infrastructure will bring local impacts, they urged that progress is made to take the new water supply options forwards, recognising the consequences of not planning properly now for the future. Customers told us that they had concerns around water recycling over and above some of the other new source options. We engaged with customers to test the format and scope of communications they would want to ensure they would be informed and confident in the safety and quality of their water supply. This will ensure we are confident we can explain, and successfully promote water recycling schemes to our customers. We have also recommended in our WRMP24 that work continues on alternative strategic resource options as reserve options to mitigate risks.

Topic	How we have considered customers' priorities
Acceptance and affordability	Overall our customers supported our draft WRMP24 and considered that action should be taken sooner rather than later to ensure a secure and sustainable water supply. This was reflected in research undertaken for the South East which found that customers supported a balanced plan which delivered a high demand reduction programme alongside new resource development, with preference for a reservoir in the South East regional plan and our WRMP24. Research for the Business Plan has shown that customers prefer plans which invest to future-proof core infrastructure and ensure longer term network resilience delivering more than "just what's required" with affordability protection for those who need it, and this will be part of our social tariffs and financial support measures for customers. This is in accord with our WRMP24.

Table T-3: How we have taken account of the priorities and preferences of our customers


Thames
Water