

IMPACT

FROM INSIGHT TO INFLUENCE

SSC11 Thematic Analysis Report

Final Report

Prepared for SSC

Prepared by Impact Research

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South Staffs Water



Cambridge Water

[Table of contents](#)

1.	Glossary.....	7
2.	INTRODUCTION.....	9
3.	APPROACH.....	10
	Systematic review.....	10
	Collation Methodology.....	11
	The best practice framework.....	11
	Data sources.....	12
4.	Golden threads.....	14
	Customer information and engagement.....	14
	Collective responsibility and fairness.....	15
	Concern for the environment.....	16
	Protection for vulnerable customers.....	17
	Cost of Living.....	18
	Conclusion.....	19
5.	CUSTOMER PRIORITIES.....	21
6.	BEST VALUE PLANNING AND INVESTMENT PRIORITIES.....	31
	Bibliography.....	31
	Overview.....	34
	Relative appeal/importance of overarching metrics driving ‘best value’.....	35
	What best value means to customers.....	38
	Paying for long term investments.....	39
	Golden Thread Conclusions: Best value planning and investment priorities.....	40
	Demographic Splits: Best value planning and investment priorities.....	41
7.	ENVIRONMENTAL DESTINATION.....	43
	Bibliography.....	43
	Overview.....	50
	Long term challenges, customers’ environmental priorities and expectations of water companies to act on these.....	51
	Attitudes and views regarding the natural environment and SSC’s approach to planning.....	53
	Environmental stewardship and level of ambition.....	54
	Time period for improvements to be funded.....	57
	Impact of abstracting water on the water environment.....	58
	Golden Threads: Environmental destination.....	58
	Demographic Splits: Environmental Destination.....	59
8.	SERVICE LEVEL RESILIENCE TO DROUGHT.....	61
	Bibliography.....	61
	Overview.....	64
	Speed at which customers want to move from 1:200 to a target of 1:500 resilience with regards to emergency drought restrictions.....	64

Drivers of customer support for the level of resilience in the plan.....	65
Planning balances for resilience and trade-offs customers would accept	66
Acceptable levels of resilience expected from SSC willingness to pay for any improvements	67
Temporary use bans (TUBSs) – household.....	67
Non-essential use bans (NEUBs) – non household	68
Drought restrictions such as standpipes, rota-cuts.....	68
Changes to customers’ views on service levels since 2017	71
Support for harmonisation of the service levels across companies in the same regional area (WRE/WRW).....	71
Customer support during drought periods and communications and support required.....	71
Golden Threads: Service level resilience to drought	72
Demographic Splits: Service level resilience to drought	72
9. BALANCING SUPPLY AND DEMAND SIDE OPTIONS.....	74
Bibliography.....	74
Overview.....	76
Customers’ preferences to meet the long-term demand/supply balance challenge to 2050	76
Customers’ preferences for WRMP demand and supply side options to obtain weights for water resource regional planning (WRW and WRE) MCDA decision metrics and at a local level in WRMP24 plans	78
Customer preferences for supply side options.....	78
Golden Threads: Balancing supply and demand side options.....	79
Demographic Splits: Balancing supply and demand side options	79
10. DEMAND SIDE OPTIONS.....	81
Bibliography.....	81
Overview.....	90
Leakage.....	91
Customer aspirations for leakage reduction over the next 25 years to 2050.....	91
Acceptability of the national target of a 50% reduction by 2050	92
Willingness to pay more to achieve the target quicker	93
Reducing customer demand for water	96
Level of ambition for the home of the future for household usage levels and the best way to deliver this	96
Should SSC support the development of low water use homes – partnerships and incentives with new developers?	97
Should SSC continue to run education programmes at schools to raise the value of water? Would customers support additional investment in this area?.....	97
How far should SSC go to encourage NHH businesses to reduce their water consumption?	97
Water recycling.....	99
Metering – including smart tech	100
The fairest way to charge for water, long-term aspirations for metering and universal metering approaches.....	100
Approach to fitting and retrofitting meters	104
Smart metering preferences	104
Supporting low-income families who might struggle to pay their bills.....	105

Usage of “ghost” meters to encourage unmeasured properties to switch to a meter	105
Offering a price cap and/or staggered bill for a period of a year to smooth the bill shock	106
New ways of charging for water and tariffs	106
Other smart technology	107
Behaviour Change.....	108
Golden Threads: Demand side options	110
Demographic Splits: Demand side options.....	110
11. SOURCE PREFERENCES, RESERVOIRS AND WATER TRANSFERS	113
Bibliography.....	113
Overview.....	115
The value placed on new reservoirs	116
Customer concerns about bringing in new water sources to meet the long-term supply/demand side balance	116
Would customers be concerned if their water quality changed from underground source only to one that mixes in surface water or changes to only surface water?	117
Preference for particular types of water transfer	118
Customer spontaneous views of water transfers and how these change when informed	118
Who do customers think should pay for water transfers?	118
Golden Threads: Source preferences, reservoirs and water transfers	119
Demographic Splits: Source preferences, reservoirs and water transfers	119
12. ACCEPTABILITY AND AFFORDABILITY OF WRMP24 PLANS	121
Bibliography.....	121
Overview.....	124
What is driving acceptability or lack of acceptability of the BVP plan?.....	124
Customers’ perception on the affordability of current clean water charges	124
Do customers find the SSW/CAM WRMP draft plan acceptable in the context of WRE/WRW?	125
Customer views between the least cost and preferred BVP	125
Early acceptability testing of WRMP24	125
Acceptability and affordability of the WRMP24 Plan	126
Customers’ perception on the affordability of current clean water charges and future charges in the WRMP24 plan.....	127
Golden threads.....	129
Golden Threads: Acceptability and affordability of WRMP24 plans	130
Demographic Splits: Acceptability and affordability of WRMP24 plans.....	130
13. Acceptability of PR24 Plan	132
Concerns over finances and rising cost of living	134
Value for money.....	134
High level response to business plan	134
Affordability of current and future clean water bill	135
Short term vs long term bill increases.....	136

Intergenerational fairness.....	137
Company Specific Adjustment (CSA).....	137
Golden Threads.....	138
14. CUSTOMER SERVICE.....	140
Customer service introduction.....	143
Overall customer satisfaction.....	143
Trust.....	145
Means of contact.....	150
Perceptions of the SSC brand.....	152
Complaints.....	153
Golden Threads.....	154
Demographic Splits: Customer priorities.....	154
15. WATER QUALITY.....	156
Overview.....	158
Issues affecting Water Taste, Smell & Appearance.....	159
Customer Experience.....	159
Customer Priority.....	161
Hardness/Softness of Water.....	162
Customer Experience.....	162
Water Safety and Temporary Do not Drink Notices.....	167
<i>Customer Experience</i>	167
Priorities.....	168
Lead Piping.....	169
Customer Experience.....	169
Priorities.....	170
Golden Threads: Water Quality.....	170
Demographic Splits: Water quality.....	170
16. SUPPLIER RELIABILITY.....	172
Bibliography.....	172
Overview.....	173
Low water pressure.....	174
Customer priorities and expectations.....	179
Unplanned short interruptions to water supply.....	183
Customer priorities and expectations.....	190
Chance of property flooding from a burst pipe.....	195
Golden Threads: Supply Reliability.....	200
Demographic Splits: Supplier reliability.....	200
17. COMMUNITIES.....	202

Communities introduction	205
Temperature check for SSC involvement with the community	205
Supporting vulnerable customers	205
Supporting ethnic minority groups.....	208
Importance of green spaces in SSC’s community	210
Value of water and demand for SSC educating communities	212
Charity support.....	213
Golden Threads	213
Demographic Splits: Communities	214
18. NET ZERO.....	215
Net Zero Bibliography.....	215
Net Zero introduction.....	217
Views on the environment, climate change, and net zero targets	217
Personal commitment to reducing climate change.....	220
Responsibility.....	222
Level of ambition towards SSC’s Net Zero target	223
Timing of SSC’s Net Zero target.....	227
Intergenerational fairness	229
Specific Net Zero related activities	230
Communications around Net Zero	231
Golden Threads	232
Demographic Splits: Net Zero.....	233
19. Bibliography	234

1. Glossary

Abbreviation	Definition
AMI	Advanced Metering Infrastructure
AMP7	Asset Management Plan 7
AMR	Automatic Meter Reading
BVP	Best Value Plan
CAM	Cambridge Water supply region
CCW	Consumer Council for Water
CSA	Company Specific Adjustment
CO2	Carbon Dioxide
CVF	Cam Valley Forum
Covid-19/Pandemic	The Covid-19 Pandemic impacts that commenced in March 2020 and are still ongoing.
FBP	Future bill payers (consumer who typically those under 30 who do not directly receive water bills)
DEFRA	Government Department for Environment Food and Rural Affairs
HTC	Hobson's Conduit Trust
HE	Historic England
HH	Household (customers)
LTDS	Long Term Delivery Strategy
MCDA	Multi-Criteria Decision Analysis is a sub-discipline of operations research that explicitly evaluates multiple conflicting criteria in decision making. Cost or price is usually one of the main criteria, and some measure of quality is typically another criterion, easily in conflict with the cost.
MOSL	Market Operator Services Limited
NEUBs	Non-Essential Usage Bans for business customers
Net Zero	Cutting greenhouse gas emissions to as close to zero as possible, with any remaining emissions re-absorbed from the atmosphere, by oceans and forests for instance. Often used as shorthand for the UK Net Zero goals, which is for the UK to achieve Net Zero emissions by 2050.
NFU	National Farmers' Union
NHH	Non-household (customers)
NT	National Trust
ODI	Outcome Delivery Incentive: Ofwat provide financial payments to water companies from customers for water companies performing beyond their committed levels of service ('outperformance payments') or from water companies to customers for performing below their commitments ('underperformance payments').
ONS	Office for National Statistics
PR19/24	Price Review 2019/2024
PP	Percentage Point
PSR	Priority Services Register
SGP	South Cambridgeshire Green Party
SH	Stakeholder - an organisation or individual representing a specific cause or area of interest
SME	Small and Medium-sized Enterprises
SRO	Strategic Resource Options
SSC	South Staffs Water (encompassing both supply regions)
SSW	South Staffs Water supply region
TUBs	Temporary Use Bans for household customers
UKWIR	UK Water Industry Research
YWYS	Your Water Your Say
WINEP	Water Industry National Environmental Programme (A programme of actions needed for water companies in order to meet environmental obligations for 2050)

WRAP	Water Resources Advisory Panel
WRE	Water Resources East - water resources regional planning group
WRMP19/WRMP24	Water Resources Management Plan 2019/2024
WRW	Water Resources West - water resources regional planning group
WTP / WTA	Willingness to Pay / Willingness to Accept
VFM	Value for money

2. INTRODUCTION

Impact Research were commissioned to work with SSC for the following:

- To deliver a robust triangulation of customers' and stakeholders' priorities that underpins the narrative of SSC's plans:
 - Robustly triangulate evidence relating to WRMP to support all key decisions
 - Support the development of SSC's Performance Commitment (PC) package
 - Triangulate WTP values to set central, upper and lower values.
- To support the development of SSC plans with triangulated valuations and insights to best deliver 'public value'
- Create an insight matrix from SSC's trackers to assist in the delivery of the PR19 plan and guide PR24
- Enable both SSC challenge panels and board to effectively challenge the approach plus independent review by a third-party expert

This report is one of two resulting from phase one of the project, triangulating foundation evidence to inform development of WRMP24 (and subsequently PR24):

1. **Technical triangulation** – the process of drawing together all relevant data sources and combining them within a formal framework that will ultimately produce the value ranges suitable for the MCDA and investment modelling.
2. **Combined thematic insight** (this report) – articulating these results and wider inputs that cannot be formally included in the above, to guide SSC in the development of their draft plans.

This report summarises the combined thematic insight from a review of a total of 140 pieces of evidence including research reports, literature reviews and white papers from SSCs region, other water companies and relevant third parties. It will be used by SSC to inform and guide the development of their WRMP24 and PR24 plans and will form an evidence base to support the final plans. The report has been updated in 2023 in light of further evidence from customer engagement including business as usual engagement and feedback from wider stakeholders such as Ofwat.

3. APPROACH

Systematic review

The review has been conducted by external consultants Impact Research Ltd, using a systematic framework agreed with SSC from the outset. The process started in 2022, when SSC identified areas that are key to Water Resources Management Planning (WRMP24). Following the completion of the WRMP24 thematic reviews in September 2022 a wider set of areas was agreed to ensure that all the customer and wider stakeholder insights relevant to the development of SSC’s business plan were fully documented and evaluated. Therefore, the analysis and report were structured under these sub-headings, as follows:

WRMP24 key areas – thematic reviews		
1.	Best Value Planning and investment priorities	
2.	Environmental destination	
3.	Service level and resilience to drought	
4.	Balancing demand and supply side options	
5.	Demand side options	Leakage
		Water recycling
		Behaviour change
		Metering – including smart technology
		Supporting low-income and priority households
6.	Source preferences, reservoirs and water transfers – including associated water quality impacts (Cambridge Water focus)	
7.	Acceptability and affordability of WRMP24 plans	
Additional thematic review areas		
8.	Acceptability and affordability of PR24 plans	
9.	Customer priorities – short and long-term	
10.	Customer Services	
11.	Water Quality	Issues affecting water taste, smell and appearance
		Hardness/softness of water
		Water safety and temporary do not drink notices
		Lead piping
12.	Supplier Reliability – including loss of supply and water pressure	
13.	Carbon net zero ambition	
14.	SSC’s role in supporting communities	
15.	Demographics of SSC’s customer base (<i>See SSC13 Demographics Report</i>)	
16.	Identifying difference between customers and stakeholder audiences (<i>See SSC12 Stakeholder and Customer Segment Analysis</i>)	

Each data source was individually reviewed with a particular focus on conclusions and key findings that related to the topics highlighted above.

A total of 140 documents were reviewed for relevant content and included in this final report. These are found listed in section 18.

Collation Methodology

An Excel Spreadsheet was created to serve as the key data collation tool, as illustrated here. A copy of this tool is available on request.

Figure 1.1. shows the tool contained one sheet per topic area and common columns to each, comprised of critical information about the data source including date of data collection, contextual environment, sample size, objectives of study, applicable region and method of data collection.

Each insight source was covered by one line in the sheet (on every worksheet for which there was evidence relevant to that topic). Any insights relating to the topics above were recorded in the sheet using summary bullet points or similar. Any key sub-group differences were also recorded in order that consistencies or differences over time could easily be identified and customer groups highlighted that might be influencing any changes in perceptions. Once all the literature was reviewed, key insights were summarised for the most part in chronological order, highlighting trends over time and key audiences that need to be considered for each topic. Insights gathered from regions outside of SSC’s operating area were summarised towards the end of each subsection in order to differentiate SSC customer views from those outside the region.

As SSC will be submitting two WRMPs, one for each supply region, and its PR24 and LTDS business plans the report draws out where there are significant differences between the two supply regions in stakeholder and customer preferences and views. Where this is not stated the reader should assume the findings reflect the views of customers/stakeholders of both supply regions. A summary is also provided in Section 11 of the report.

The summarised findings were then converted to prose during the report writing process, using verbatim comments and figures for clarification and expansion where appropriate, to answer the objectives set by SSC. Each objective is listed in the review as a subsection, under the wider topic headings. The insights have not in this case been given any particular “weights” in terms of their representativeness in the report e.g. qualitative and quantitative research are presented with equal importance to the reader and respondent expertise on a particular topic has not increased or decreased the validity of any findings presented from that piece of research. The findings have simply been described with any appropriate context for interpretation e.g. the world environment at the time of the data collection or any limitations of the research identified.

This process is highly replicable and can be scrutinised by interested stakeholders as required. This review complies with the best practice framework outlined below to provide a robust and reliable approach to triangulation for this thematic review.

The best practice framework

SSC has committed to the over-arching recommendations of the triangulation framework put forward by CCW’s extensive review of PR19 triangulation work¹, the essential features of their recommended best practice for triangulation are as follows:

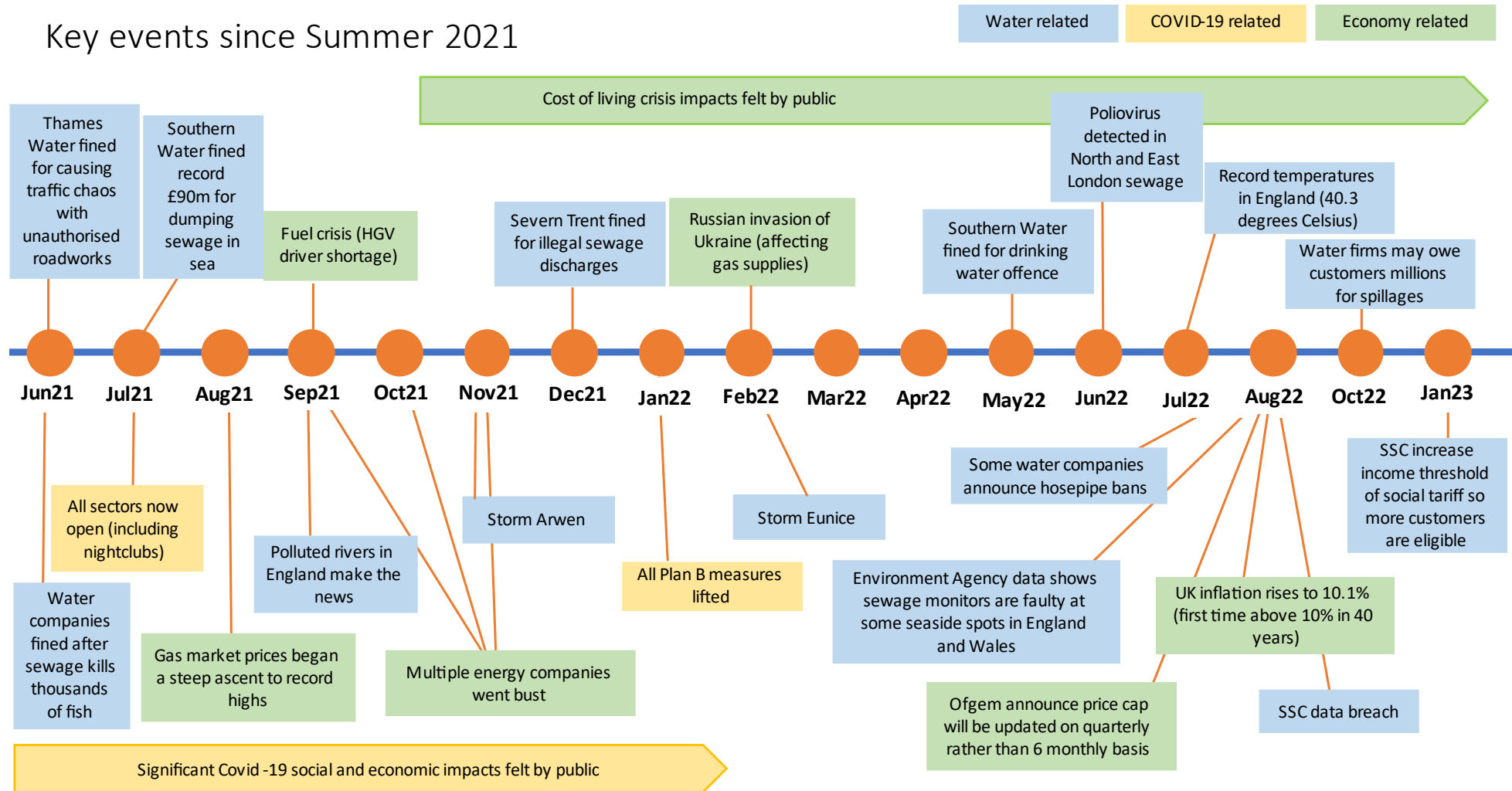
¹ CCW and SIA Partners, April 2021, TRIANGULATION- A REVIEW OF ITS USE AT PR19 AND GOOD PRACTICE

2021 Grouping	Key activities	How the review has met recommendations
A strategic approach to collecting customer evidence	<ul style="list-style-type: none"> • Undertaking a phased and iterative approach • Developing a consistent and transparent decision framework • Putting in place assurance of the process • Linking Business as Usual (BAU) insight to strategic goals 	<ul style="list-style-type: none"> • The review has taken place in two distinct phases; data collation and review into a pre-agreed framework, summarising of key insights against SSC objectives. • SSC has reviewed the draft document in line with objectives, and provided supplementary context or evidence where appropriate. These reviews did not compromise the independence of the report. • BAU insight has been included, and been expanded to include more substantial evidence from BAU activities.
Collecting, collating and synthesising customer evidence	<ul style="list-style-type: none"> • A centralised process within the company • Capturing relevant granular metadata for insight 	<ul style="list-style-type: none"> • Data has been collected from SSC evidence as well as external company publications. Each insight has been recorded in the framework, ready for synthesis into the thematic review document.
Weighting and combining customer evidence	<ul style="list-style-type: none"> • Transparent approach • Use of a standard approach • A clear approach to demonstrating balanced decisions • Defined decision-making framework 	<ul style="list-style-type: none"> • The framework used allows for full transparency of where the data has been sourced, the themes under which each insight falls and therefore how it has been synthesised into the thematic review. • The insights have not been weighted as such in this review as it has not been deemed necessary to create a quantitative framework for assessing strength of evidence. In most cases evidence does not conflict, however where there are disparities the context, audience and any mitigating factors are outlined to guide the reader in interpretation of the significance of such conflicts.
Validating outputs	<ul style="list-style-type: none"> • Using multi-factor validation (internal, external and independent review) • Running sensitivity and scenario testing • Making research findings publicly available • Independent review of the triangulation process 	<ul style="list-style-type: none"> • Multi factor validation, sensitivity and scenario testing are not appropriate for a thematic review as these relate to Willingness to Pay studies and therefore have not been included here. • The review will be published and many of the studies sourced as evidence are already in the public domain. • The review was part of an independent assessment by Jacobs on behalf of SSC which will review how well SSC's draft WRMP24 plan reflects the customer and stakeholder feedback that was gained. Feedback from this review noted that the thematic reviews were very detailed and comprehensive.
Incorporating validated findings into the decisions	<ul style="list-style-type: none"> • The key enabler at this final stage is the use of a robust and transparent decision framework 	<ul style="list-style-type: none"> • The framework used for data collation and synthesis will be available on request.

Data sources

A total of 140 pieces of research/insight evidence were reviewed for inclusion in the thematic review, comprising market research reports, literature reviews and a broad spectrum of qualitative, quantitative and secondary analytical insights. The reports date from 2017 to very recently published reports in the Summer and Autumn of 2023. This time period has been extraordinarily unusual in terms of world events, with the COVID-19 pandemic significantly affecting everyday life from March 2020, through 2021 and into 2022. The end of 2021 and 2022 have seen ongoing cost-of-living increases sparked during the pandemic that has now started to persist in many customers minds and affect perceptions and behaviours as a result. Furthermore, increasing global concerns over climate change and the invasion of Ukraine by Russia create concerns for customers that were either absent or of much lower priority during preparations for WRMP19 and PR19. The timeline in **Figure 2.1** illustrates some key events since 2021 that summarise the context in which the research has been conducted during this time and therefore may have an impact on data responses as a result.

Figure 2.1: Key Events since Summer 2021



4. Golden threads

SSC's customer research has identified four 'golden threads' that occur consistently over time:

- The need for customer information and engagement
- Call for collective responsibility and fairness
- Concern for the environment
- Protection for vulnerable customers.

These golden threads are part of all the literature reviewed and, in many cases, it is possible to see how the changeable context of the research conducted over the last three years has heightened or diminished some of these golden threads. In each of the sections in this report we draw out findings related to the golden threads and summarise the main points related to each.

In the sub-sections below, we analyse whether there is any evidence of shifting priorities for each golden thread along with the reasons which may be driving these changes in perceptions. We conclude by looking across all golden threads to determine whether the overall balance of prioritisation has shifted from one golden thread to another in recent years. As well as the four golden threads listed above, we have also added a fifth for the analysis in this section, which is "**Cost of Living**", as this is currently a key golden thread which warrants attention.

Customer information and engagement

The *Customer Priorities Tracker in 2020* showed that uncertainty caused by COVID-19 led to a thirst for more communications to keep people informed and updated on developments. However, *Customer Priorities Tracker - Wave 2 Qual, May 2022* has suggested that customer engagement may recently have become more challenging; the Cost of Living crisis, along with a host of other national and global events (sometimes referred to as Permacrisis, which includes negative news stories about political turmoil, inflation, climate crisis, pandemic, war and conflict, etc.), means that people may now be avoiding the news and social media and becoming more inwardly looking – and therefore becoming more selective about the comms that they digest. This doesn't mean that engagement has been deprioritised; instead, it suggests that it may be more challenging and requires more effort to achieve cut-through (e.g. a need for greater brand connection to ensure messaging is seen to be relevant and therefore lands with its target audience).

In fact, several reports highlight the importance of effective engagement to educate customers on key issues and to keep them informed about costs and water bills. Customers participating in the *WRE Customer Engagement qualitative research in 2021* saw communications as vital to educate the public about the need to reduce water use, especially as there's a perception that the public don't always know that there is a need to conserve water. The *SSC PR24 Social Tariff Research 2023* also found there to be a lack of awareness about the need for water conservation, which could act as a barrier to customers buying in to the 'Essential Use' affordability tariff that is to be trailed in 2024. A similar message about water shortages awareness came through in the *Customer Priorities Tracker - Wave 2 Qual, May 2022*, where it was felt that education on water shortage is an immediate short-term priority, along with provision of information to help customers manage and control bills. Likewise, jurors on the *Net Zero Citizen Jury 2023* also emphasised the need for wider education regarding water efficiency as well as transparency and clarity with regards to bill increases.

On the subject of clarity of costs, the *SSC PR24 Social Tariff Research 2023* report that customers would like greater transparency on the funding of financial support schemes, especially in terms of information about how much a water company and its shareholders contribute to such schemes.

Finally, there is recognition about the role of communications to enhance SSC's reputation. The *WRE Customer Engagement research 2021* reveals a sense of a lack of interaction from the water industry which has led to low familiarity and therefore low levels of perceptions and reputation. This lack of familiarity is also evident among future customers; the *South Staffs Young Innovators' Panel 2023* talk about the water industry not being top of mind and therefore when talking about environmental measures they are more likely to think about energy saving rather than water saving. Another potential impact of low familiarity could be lower willingness to pay; the *Impact Company Specific Adjustment research in 2023* highlights how those who have a greater understanding of CSA are more willing to pay for it; in other words, education and familiarity building can lead to tangible benefits for SSC.

One form of reputation building through greater engagement may be to partner with local businesses on community schemes – indeed SMEs taking part in the *Customer Priorities Tracker - Wave 2 Qual, May 2022* mention that they would be willing to partner with SSC on schemes which support local businesses and communities (a result of the cost-of-living crisis leading to NHH developing greater social conscience to help support local communities through current hardships).

Collective responsibility and fairness

Collective fairness continues to be a priority for customers, with no sense of this diminishing during COVID-19 nor the cost-of-living crisis – if anything, these two events have only increased people’s sense of collective responsibility and fairness. The *WRE Customer Engagement* report in 2021 describes how COVID-19 shed light on social inequalities which reshaped people’s beliefs to create a greater sense of altruism and citizen mentality. The report describes how customers believe it’s now more important to protect those on lower incomes and that plans should be fair and affordable to all. This sense of altruism has continued among NHH during the cost-of-living crisis, whereby local businesses are very concerned about their rising costs, but are also very conscious that their own customers are also struggling; they empathise and sympathise with customers and are therefore trying to limit how much to pass on rising costs to customers (*WRE NHH engagement 2022*).

This balancing act between competing considerations is also evident among future customers. In the *South Staffs Young Innovators’ Panel 2023*, panellists supported the principle of increasing bills to enable water companies to act on the environment; however, they also stressed that this needs to be balanced with fairness to ensure that water is affordable during the current cost-of-living crisis and that there is adequate support available to those who are struggling financially.

Fairness on costs is also a priority when customers discuss universal metering. The *SSC Deep Dives Report in 2021* showed that a vast majority of customers are supportive of universal metering because it is regarded as a fairer way to pay. Similar support for universal metering as the fairest way to pay was also found in the *SSC WRAP online groups 2022*, while AMI (Advanced Metering Infrastructure) was also seen from a collective responsibility and an ‘in this together’ perspective. However, there need to be some consideration for financially vulnerable customers as there are some concerns that universal metering would be less fair on this group of people if it means increased costs (expressed in the *SSC Deep Dives Report in 2021*).

Fairness is also a key issue for customers when it comes to investment decisions. The *SSC LTDS Research 2023* found that customers believe the fairest way of paying for the removal of lead pipes (from the network and supply pipes) would be to spread the cost across the entire region. There is also widespread support towards prioritising lead pipe removal from those at most risk first (e.g. care homes, hospitals and schools) – another example of the importance that customers place on collective responsibility.

With regards to consulting customers about business plans, the *Customer Priorities Tracker - Wave 1 Qual, Oct 2020* conducted an exercise to determine which groups of customers should be most consulted. While the report states that the exercise was challenging and warrants further discussion and greater context, the outcome suggests that the majority believe that all customers should be consulted on key policy and investment decisions which directly impact them – this is seen to be the most fair and democratic option. However, a few participants also believe that those with ongoing service issues should also be consulted – since these customers have informed experiences to draw upon, participants of the research felt it to be fair to upweight their views as part of consultations.

The *SSC PR24 Social Tariff Research 2023* reports that both customers and stakeholders are supportive of the Assure scheme and the concept of cross-subsidy, which is seen to be an example of collective responsibility to help customers in financially vulnerable circumstances afford their water bill.

Finally, fairness is also a key consideration when it comes to water transfers. While the *SSC WRAP online groups 2022* saw water transfers through the lens of collective responsibility, customers who took part in the *SSC Deep Dives Report in 2021* wanted to ensure fairness to donor regions and want to ensure that there are adequate and clear communications made available to these water regions.

Concern for the environment

Concern for the environment, sustainability and carbon emissions is consistently brought up as a top priority across all groups of customers. Despite this, throughout the COVID-19 pandemic and cost-of-living crisis there has been a relative shift in the prioritisation of environmental concern in favour of other more immediate priorities.

SSC Priorities HH Tracker Years 1-3 reports a marginal increase in the priority weighting attached to environmental areas from 19.8 to 21.6, but this is not significant. There was found to be less focus on sustainable business practices over this period. Despite this, the environment still maintains a consistent level of importance, especially in terms of protecting water sources, water saving, and recycling. What we do observe in October of 2020 (in the *SSC Customer Priorities Tracker Wave 1* qualitative research) is that environmental concern was perceived as a future concern by many, citing uncertainties and economic fears caused by the COVID-19 pandemic to be a more immediate worry.

Overall, in 2021 environmentalism is seen as a core business activity, with customers still having a strong desire for its prioritisation. Options that are poor for the environment are often rejected by customers and plans that are potentially more costly but better for society and the environment are favoured. Customers showed an increased concern for climate change and its impact being seen in customers, especially regarding flood risks (*WRE Customer Engagement, Sept 2021*). In August of the same year, participants highlighted their main concerns on the water environment, consisting of pollution, water shortages, loss of habitats/species, and flooding.

Natural environments are seen as highly important to customers, with 70% stating that they frequently visit these spaces, an increase from 62% in 2018, suggesting that the importance of the environment has grown in this time. Many participants highlighted the value they place on these environments to connect with nature, natural beauty and engage in outdoor activities, including water-specific activities. Participants in this study specifically mentioned concern for the deterioration of these spaces, emphasising the concern in protecting them. Participants in this study were generally comfortable paying for environmental improvements, thereby suggesting concern for the environment supersedes monetary concern to some extent (*Public views on water environment July 2021*). *SSC WRMP24 WRAP THEME 1* further highlights this concern, as ambitious water environment targets were generally smiled upon, with the cost of protecting these environments being seen as worth it for future investment. This was specifically seen in CAM, where “minimising the environmental impact of supplying water” was a top priority, participants in this area also had more detailed knowledge of the local water environment and supported faster timetables when compared to SSW, suggesting a stronger concern for the environment in this area.

During 2022, there is still a high concern for the environment, with a high degree of emotional connection and high WTP values associated with environmental add-ons seen in *SRO Public July 2022*, especially from rural farmers in CAM, and future customers in both regions. These future customers specifically appeared to have a more long-term view of the environment in 2022 when compared with other groups. The impacts of climate change and protecting local natural environments including water environments were still top-of-mind concerns for many customers (*SSC Quant MCDA Feb 2022*), with 60% of customers placing protecting lakes, rivers, reservoirs, fish and other aquatic wildlife in their top 3 priorities (59% SSW, 65% CAM), and climate change concern being second out of 5 environmental priorities listed to customers (53% top 3, 50% SSW, 61% CAM) (*SSC Theme 1 and 3, April 2022*). However, despite this there is more of an emerging shift towards concern for cost during this period, worry for future gas supplies and prices as well as the continuing pandemic was raised as a higher concern than the impact of pollution and reducing carbon emissions, and customers reported leaning marginally more towards “keeping customer bills as low as possible” and “ensuring all customers have all the water they want to use at an affordable price” over environmental options such as “not taking too much water out of rivers and streams” and “doing more to reduce the company’s carbon footprint – even if it costs more” (*SSC Quant MCDA Feb 2022*). A clear desire can be seen to not increase bills over environmental concerns, and while environmental concern does still exist it appears to be moderated by pricing.

During *SSC Theme 1 and 3 April 2022*, concern for ‘the level of pollution in the air and water’ and ‘carbon emissions’ fell from being the 3rd and 5th top concerns respectively in January of 2022 to 4th and 6th top concerns in February, due to a rise in concern for poverty and inequality. It is worth noting that these factors did not become less important (as indicated by % of customers selecting this option in their top 3 concerns), however, poverty-related factors became more important over this time period. During this same study, customers were most favourable of mid-level improvements, where the environment was aided, but the cost was not too great (51%), over not making

any environmental changes at all (34%), or going beyond to work with other organisations to make a great number of improvements (15%). It is of particular note that those who chose not to make any environmental changes overwhelmingly cited not wanting their bills to go up as their reason for this, and those who selected mid-level improvements stated that they wanted a balance between the environment and cost. This doesn't necessarily mean that cost was a higher priority than the environment for customers, but it does suggest it was a moderating factor on environmental ambition. We also observe in *SSC Customer Priorities Tracker Wave 2* qualitative discussions that "the environment is taken more seriously than ever and understood better BUT has been pushed to a longer-term issue and dwarfed by short term, personal economic concerns."

The above evidence suggests that the environment is being pushed more towards a long-term priority, with customers looking to prioritise shorter-term economic concerns. In addition, agreement with the statement "I would only reduce my personal water use if it saved me money" has risen from 23% to 32% over the period of February 2022 to December 2022, suggesting more people's behaviour is influenced by the cost-of-living (*Environmental Awareness Index Report February 2023*). During *LTDS June 2023*, environmental ambitions were often ranked relatively lower than other ambition areas such as water quality and lead pipe removal, with WINEP ranking 8th out of 10 options, and achieving net zero carbon ranking 10th. Despite this, drought resilience was ranked 5th, with the main reason for this being related to climate change and the environment (35% of participants who chose this). Additionally, net zero was the 3rd top priority among NHH participants and 2nd for future customers highlighting indicative differences between segments of customers.

Both the *SSC Quant MCDA research* in 2022 and the *LTDS research* in 2023 asked customers, using a sliding scale, to state whether they prefer "Investing now for the long-term future even if it costs customers more" versus "Keeping customer bills as low as possible" (with both surveys using a consistent wording)². Both surveys showed that, overall, there's a slight preference towards the latter option (keeping bills low), with little variation in opinions between the 2022 and 2023 surveys. However, both surveys showed that the two water regions veer significantly on this; while SSW on average show a fairly clear preference towards keeping bills low, opinions are far more balanced in CAM. This suggests that customers in the CAM water region are more open to accepting investments now in the long-term future than they may be in SSW, while immediate short-term financial considerations are more important at the moment in SSW.

Meanwhile, in the *SSC Young Innovators Panel* in August of 2023, future customers (aged 16-18) showed greater concern for the long-term prospects of environmental issues, citing a feeling of pessimism and inability to help. However, many of the ideas suggested to help often revolved at least partially around monetary incentive rather than purely environmental concerns, as highly rated ideas for water environment-based developments revolved around water saving or the building of hydroelectric plants in order to save consumers money. This idea of environmental concern through the lens of another issue can also be seen in other studies, where environmental issues with the strongest support from HHs and NHHs often resolved situations where water security was put at risk, thereby focusing on these issues mostly where there is some directly relevant impact on themselves (*SSC AAT Qual Debrief, June 2023*).

Overall, over this period, environmental concern has transformed from a core concern for investment now to a longer-term issue and, for some customers, a secondary concern. However, when informed about the decline in river health and bio-diversity, customers are clear that the environment cannot be ignored and investments do need to be made to prevent any further deterioration to it. This transformation mainly appears to be due to a rise in financial concerns appearing throughout 2022 and into 2023. In more recent studies, a concern for the environment is still present, however is often seen through a financial lens.

Protection for vulnerable customers

There are some mixed views expressed with regards to whether protecting vulnerable customers has increased or diminished as a customer priority over the past year or so. Certainly, the COVID-19 pandemic elevated a sense of citizen mentality leading to a belief that we the need to look after the vulnerable and protect those on lower

² It should be noted that on both surveys, this question was asked in relation to investments and not specifically about the environment.

incomes (*Customer Priorities Tracker Wave 1 2020* and *WRE Customer Engagement 2021*). However, fast forward to 2022 and 2023, have those sensibilities prevailed the cost-of-living crisis? On this, there are competing evidence.

The recent *SSC Accent Priorities Household Tracker* found customers are attaching greater priority to bill-related measures, reflecting their own needs in terms of affordability; a majority state that they are now 'very concerned' about their ability to pay future energy costs (52%, up from just 11% before the pandemic). The *Customer Tracking Research 2022/23* reported similar increases in hardships and concerns; only two-thirds of those in low-income bands agree that their water charges are affordable, which is a decline from three-quarters the previous year. However, despite rising concerns about their own circumstances, the *Priorities Household Tracker* found that customers are at the same time placing weight on the need to support the vulnerable, through financial support, service support and PSR.

When discussing metering options in the *SSC WRAP online groups report (2022)*, customers expressed concerns about the potential impact of changes on vulnerable customers – a theme which was consistent with the wave 1 research in 2021. However, in the wave 1 research, when asked to rank various aspects according to priority, "Looking after vulnerable customers" featured lower down the list relative to many other aspects, including environmental measures. This was a consistent finding in both SSW and CAM; nevertheless, "Schemes to lower water bills for those who are struggling" was ranked in joint third place in SSW, but in ninth place in CAM (where reducing leakages and minimising environmental impact was more highly ranked).

However, the *Customer Priorities Tracker - Wave 2 Qual, May 2022* found that the cost-of-living crisis means that people are thinking more about their own situations and are less altruistic than in 2020. It also found that participants of the research were less likely to spontaneously mention vulnerability than in 2020, suggesting a shift in attitudes.

The *SSC PR24 Social Tariff Research 2023* found that customers believe there needs to be a more holistic approach when it comes to protecting vulnerable customers, one which water companies has a role to play as part of a wider multi-agency support network.

Meanwhile, there is evidence that vulnerability is placed ahead of at least some measures of the environment. When asked to rank 10 LTDSs (25-year Long Term Delivery Strategies), tackling water poverty was ranked highly by HH customers in the quantitative survey, coming in at 3rd place, ahead of drought resilience (5th), water industry national environmental programme and biodiversity protection (8th) and achieving net zero carbon (10th). Driving the prioritisation of tackling water poverty was a sense that "costs are increasing / can't afford water bill" and "everyone needs water / water is a basic right". However, tackling water poverty is less of a priority among NHH customers (6th compared with 3rd among HH), where it slips behind achieving net zero carbon (3rd top priority among NHH) (*SSC LTDS Research 2023*).

Cost of Living

Customers are currently attaching greater priority to bill-related measures than in previous years. This often reflects their own needs in affordability and need for financial support, and the majority of customers are now 'very concerned' (52%) about their ability to pay future energy costs compared to a few years ago (11%) prior to the COVID-19 pandemic (*SSC Priorities Household Tracker Years 1-3*).

Personal finances have long been a concern for customers, with increased economic fears and instability due to COVID-19 being a core concern in October of 2020 (*Customer Priorities Tracker Wave 1*) before the cost-of-living increase started.

The impact of the cost-of-living crisis can be observed having an impact on customer priorities as far back as November 2021, with participants finding it difficult to make a decision on the fairness of universal metering due to concerns that although it would benefit the vulnerable, it would also harm those who cannot afford the extra cost on bills, stating that any decision would hurt someone. Furthermore, minimising the cost of the smart metering program was the second highest priority in CAM and 3rd highest in SSW out of 5 during this study, and most customers stated that they do not want to pay more than an agreed cap of 25% if their bill is higher with a water meter, demonstrating that cost and bill prices were a core concern here (*SSC Deep Dives Report*).

In February/March of 2022, the cost-of-living crisis can be seen impacting other priorities further, with ‘future gas supplies and prices’ being rated a much higher concern than pollution and reducing carbon emissions in *SSC’s quant MCDA Study*. This concern can be seen continuing into April of 2022, with 70% of customers placing ‘future gas supplies and prices’ at a top 3 priority from 59% the previous month, 49% placing future water supply and prices in their top 3 compared with 41% the previous month, and 41% placing poverty and inequality in their top 3 compared with 35% the previous month, surpassing concern for both the level of pollution in the air and the COVID-19 pandemic. HHs in the SSC area during this period stated that while many of them are able to pay their water bills, they are concerned and pessimistic about their future financial situation, with 63% of SSW participants stating they are concerned about paying bills in the next 12 months (54% in CAM). With some participants stating this may reduce their willingness to select costly improvements in service (*SSC Water Report December 2022*), demonstrating that the cost-of-living crisis was impacting participants’ valuations on other priorities during this time.

NHHs have also experienced this heightened awareness of the cost-of-living, with increased prices (more energy than water) being a key concern for businesses (*WRE NHH engagement final, August 2022*).

In March of 2023, more than half of water bill payers (56%) stated that they were struggling to pay one or more of their HH bills fairly frequently over the past year, an increase since October 2022 (*Cost of Living Wave 3 Report, March 2023*), suggesting this is becoming more and more of a priority. In the *SSC AAT Qual Debrief, June 2023*, just 45% of participants from SSW felt their combined water bill was easy to afford, which is somewhat lower than in CAM (where 62% found it easy). These AAT findings are based on a small base (50 participants) and should therefore be treated as indicative; however, the trend of SSW customers finding it more difficult to afford bills than in CAM does chime with various economic profiles of the two regions that are outlined in the *Impact’s Demographic report 2023* (e.g. gross annual incomes in the CAM region are above the national average, and increasingly so, while they are below the national average in SSW; similarly, a far greater proportion of households in the SSW region are in deprived deciles neighbourhoods than in CAM).

On the subject of affordability, the *SSC PR24 Social Tariff Research 2023* found that the cost-of-living crisis is making it more difficult to customers to pay their bills. However, the support available through Assure was seen to be fit-for-purpose. In fact, despite customers being affected by the cost-of-living crisis, there was general support towards increasing the cross-subsidy level from the current amount of £5 with 58% finding that a £8 cross-subsidy would be an acceptable amount. This support, in part, reflects a sense empathy and of collective responsibility in protecting the vulnerable during this current squeeze on the cost of living.

Others put forward mixed views concerning water bills specifically, as they state that these bills are not their biggest concern, and acknowledge that water bills are (in general) lower than other ones (*SSC AAT Qual Debrief, June 2023*), with other customers going so far as to claim that their water charges are more affordable than previous years (*Customer Tracking Research Report, 2022/2023*).

Overall, the cost-of-living increases and bill affordability have had a profound impact on the prioritisation of other areas and the general standard of living over the previous few years. The aforementioned reports summarise the extent of this impact and the notable shift in customer concerns about their ability to manage current and future energy costs. Financial worries have been a recurring theme for customers; however, the pandemic and subsequent economic instability have only intensified these anxieties.

Conclusion

As was the case with the COVID-19 pandemic, the cost-of-living increases is influencing how customers prioritise and view the golden threads. However, while the pandemic led to a greater sense of altruism and citizenship, the cost-of-living crisis has caused more of an inward-looking mentality, as more customers become more focused on their own expenses and a heightened prioritisation of the affordability of bills at the expense of some other golden threads, particularly the environment.

Up to 2021, we saw the environment growing in importance with some willingness to pay for environmental protection, but the cost-of-living crisis has seen customers now leaning slightly more towards keeping bills as low as possible rather than environmental protection, particularly in SSW. However, it is not the case that the environment has become less important – customers continue to be as concerned about the environment as before, but poverty-

related factors have overtaken it when it comes to immediate concerns. This means that the environment is generally more likely to be seen as a long-term issue rather than a core concern for immediate investments.

To some degree protecting the vulnerable follows a similar shift as the environment, as people become more focused on their own households. However, COVID-19 and the cost-of-living increases have made people more aware of social inequalities thus increasing empathy with those who are struggling financially. As a result, tackling water poverty remains one of the top priorities for customers, well ahead of environmental measures.

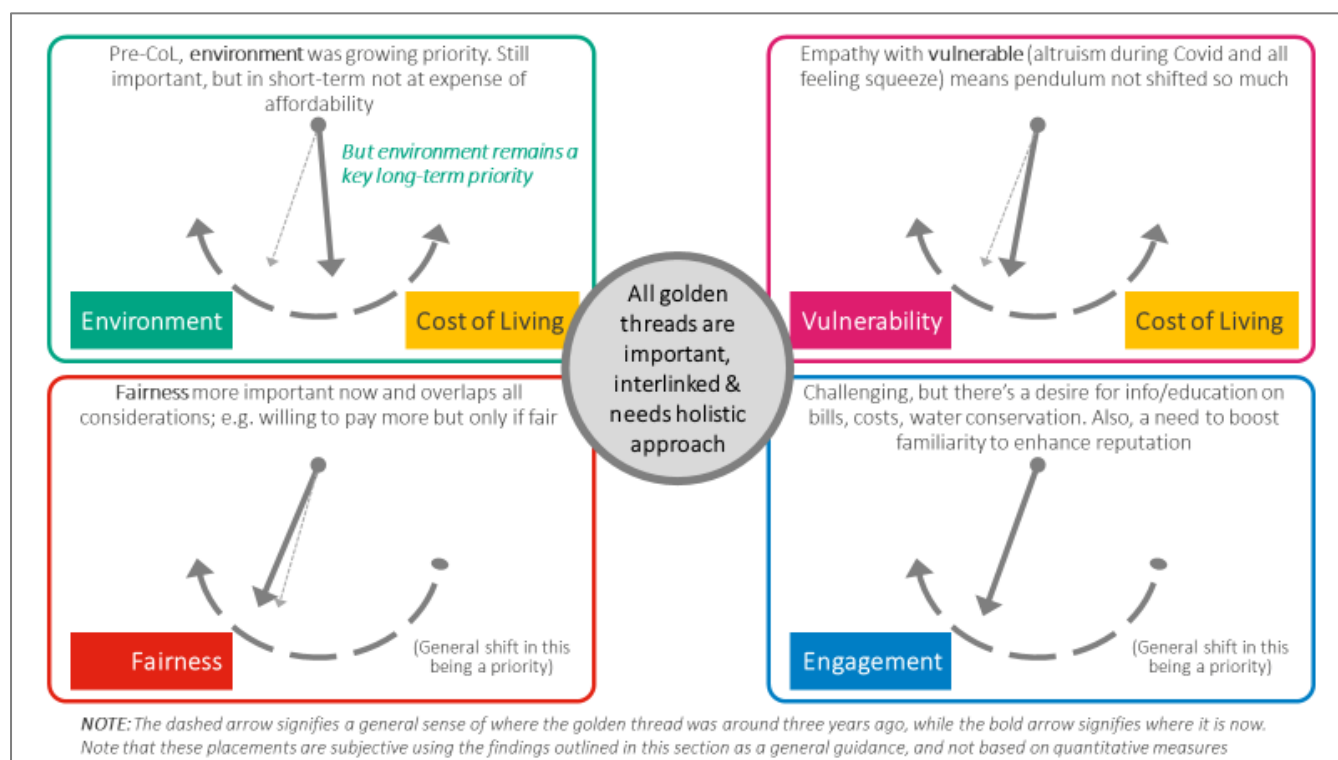
Linking in with this is collective responsibility and fairness, which has not diminished at all during the COVID-19 and the cost-of-living increases – if anything, the sense of fairness has become stronger. This overlaps with several considerations; for example, future customers are willing to pay more to help protect the environment but only if that is fair across all customers and does not impact those who cannot afford bill increases.

To underline this sense of overlapping prioritisation, stakeholders in the WRE Customer Engagement research in 2021 stated that they believe the various objectives are very much interlinked and they, therefore, find it difficult to identify priorities. Instead, they are keen to see more of a holistic approach across the golden threads.

Finally, underpinning all golden threads is engagement. While the recent environment has made customer engagement to be more challenging (due to a sense that the various crises are making people turn away from news and becoming more selective in what they digest), there is a genuine desire and need from customers for communications to continue, particularly to educate customers on issues such as costs, bills and the need to reduce water usage. However, to ensure comms are well received, SSC and the wider water industry need to build greater brand connection. This will be challenging as currently familiarity (and, consequently, wider reputational measures) with the sector has fallen over the last year.

Figure 2.2 below summarises the points made above. Please note that the locations and directions of the arrows are subjective and not based on actual quantitative data; the aim of the figure below is to help visualise roughly how priorities have shifted over the past three or so years based on a qualitative review of various key documents.

Figure 2.2: Review of shifts in Golden Threads over time



5. CUSTOMER PRIORITIES

Report	Published Date	Participants	Sample Size	Project Objectives
SSC – Customer Promises Tracker Annual Report (2023) (Turquoise)	March 2023	HH and NHH customers	Total: 1,134 HHs: 837 CAM 269 SSW 569 NHHs: 297 CAM 93 SSW 204	To monitor ongoing customer satisfaction, deliver on-going customer sentiment tracking, probe awareness and usage of key services and track changes in the way customers wish to interact with SSC.
SSC – Customer Priorities Research Tracker Quantitative Insights Year 3 (2023) (Accent)	May 2023	HH customers	Total: 1,072 CAM: 372 SSW: 745	Provide a benchmark against which customers’ priorities will be tracked for both wholesale and retail services. Explore any differences between uninformed/informed priorities and qualitative/quantitative insights. Understand the customer impact of the cost-of-living crisis (2023).
SSC – Tracking Customer Priorities, Desk Review (2020) (Accent and PJM Economics)	September 2020	n/a	n/a	The first stage of a three-part programme. Its key aim was to lay the groundwork for the remaining two stages of research (qualitative and then quantitative by reviewing the following: <ul style="list-style-type: none"> · current SSC understanding of its customers’ priorities · methodologies for customer priorities measurement · Ofwat expectations for PR24
SSC – LTDS Report (2023) (Turquoise)	July 2023	HH, NHHs and future customers	Qualitative: 34 HHs, 12 NHHs, 6 FBPs Quantitative: 980 HHs (including 82 FBPs), and 100 NHHs	To understand customers’ attitudes and perceptions towards SSC’s long-term vision to 2050 and their spontaneous preferences in terms of long-term delivery. Also, exploring SSC’s performance and future targets in 10 key ambition areas, and to understand the main reasons that drive customer preferences, and to explore the issue of intergenerational fairness.
SSC LTDS Triangulation – A Decision-making Framework (2023) (Impact research)	August 2023	n/a	n/a	Develop a decision-making framework for SSC to evidence that its long-term delivery strategy (LTDS) ambition and strategy reflects customers’ priorities.
SSC - Demographics Report (2023) (Impact Research)	August 2023	n/a	n/a	Data from a variety of sources aimed at creating a demographic profile of the South Staffs and Cambridge water regions. Looking at the two regions separately as well as the local authorities which form most of the two regions. As well as SSC and England as a whole.

Customer priorities introduction

Over the past three years, SCC customers' stated priorities have remained fairly consistent, with 'reliable supply' being the top priority each year but becoming a little less strong in the last year (2023), relative to other service attributes. Regional differences between its two supply areas are not significant.

“Keeping the water drinkable” – SSC customer on their top priorities from SSC – Customer Priorities Research Tracker Quantitative Insights Year 3 (2023) (Accent).

Alongside this, customer satisfaction tracking reveals what customers are prioritising through revealed drivers of satisfaction and other key indicators. 'Trust' and 'value for money' consistently play a big role as drivers of customer satisfaction. In 2023, affordability became the leading driver, overtaking 'quick resolution of issues,' but other aspects like pressure, high-quality water, and leakage also gained importance.

“Lower the bills. Our water bills are so expensive, the company should be focusing on reducing costs as much as possible & driving down bills.” – SSC customer on their top priorities from SSC – Customer Priorities Research Tracker Quantitative Insights Year 3 (2023) (Accent).

Comparing stated and revealed priorities in 2023 shows some differences. Some aspects, like 'quick resolution' and 'water pressure', are less 'top of mind' for customers, being strong drivers of satisfaction but receiving less mentions in stated priorities. In contrast, 'reliability of supply' and 'leakage' are more emphasised in stated priorities. This contrast in stated and revealed priorities helps to identify those attributes that customers are most likely to want to receive reassurance on (the 'stated 'top of mind' issues) and those that have less of a profile but need to be delivered well (the underlying, 'revealed' priorities).

Looking at service performance versus importance, 'pressure' is a significant underlying driver of satisfaction, even if it's not highly stated, and performs very well in terms of satisfaction. 'Quick resolution' is an issue with a middling performance set against strong derived importance. Finally, 'Leakage' is of the greatest concern due to its low performance and high importance (both stated and derived).

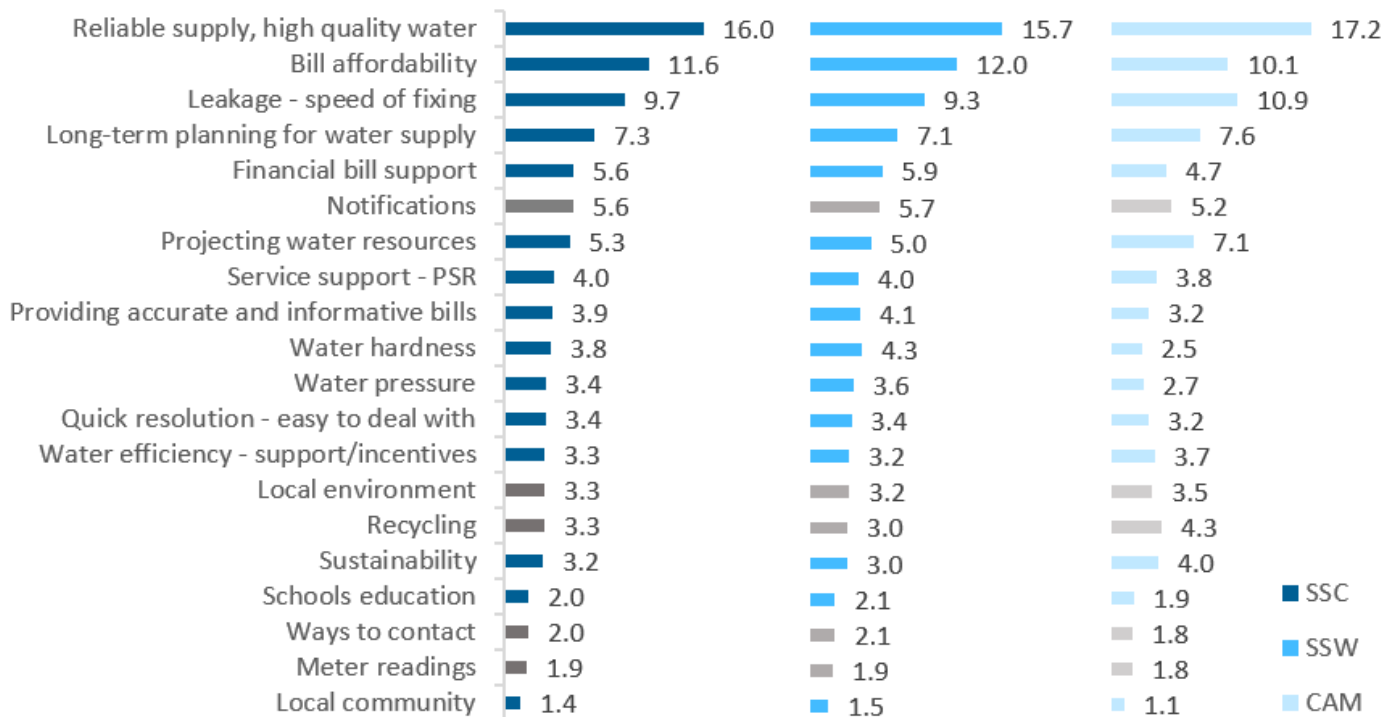
“Water is such a precious commodity and so it's important to maximise it, rather than to waste it through leaks.” – SSC customer on their top priorities from SSC – Customer Priorities Research Tracker Quantitative Insights Year 3 (2023) (Accent).

What Customers say are their priorities

The SSC – Customer Priorities Research Tracker Quantitative Insights Year 3 (2023) (Accent) has been running for three years now, using a trade-off method called 'Maximum Differentiation' (Max Diff) to quantitatively measure the priorities of HH customers for different aspects of SSC services. This is accompanied by conventional survey questions related to satisfaction and experience of the service.

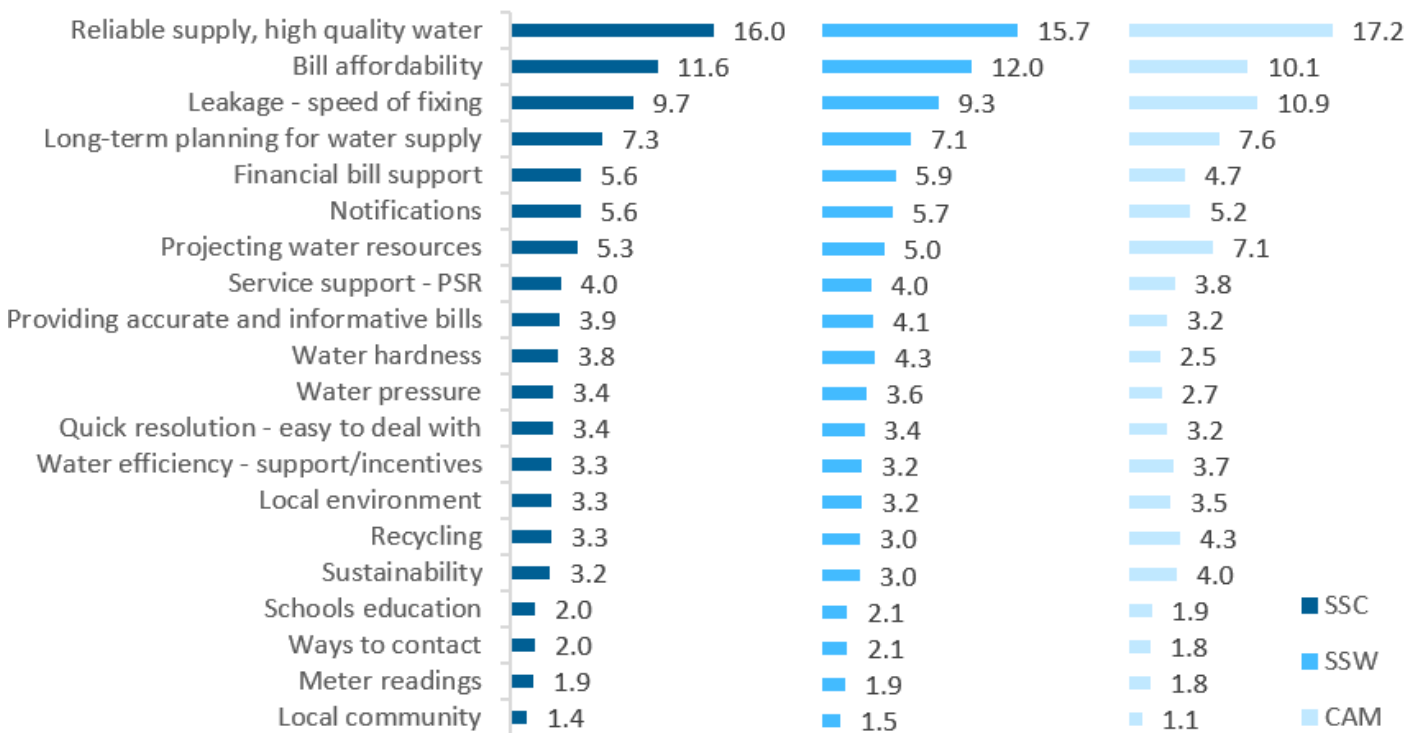
Figure 3.1 shows the relative informed priorities scores taken from the Max Diff responses, where the values sum to 100 within each year. Customers were provided with information on information about each topic area prior to making their responses. 'Reliable supply' has the highest priority in each year, but it is least strong in 2023, as a range of lower order items have become a little stronger. Note that 2021 values are not directly comparable because 'providing accurate and informative bills' was not included that year. Items in grey are those measures not considered to be compatible with the main customer satisfaction measures that are recorded in the SSC Customer Tracking Research. The main observation is that the rank order of these stated priorities remains very consistent over time.

Figure 3.1: Customers' stated (Max Diff) informed priorities 2021-2023 - SSC Priorities Research Tracker



As Figure 3.2 below indicates, the differences between supply regions are not large, with the rank order of priorities being very consistent for SSW and CAM. Customers in CAM emphasis reliable supply, leakage, protecting water sources and sustainability more than those in SSW, where affordability and water hardness have greater weight. However, none of these differences are statistically significant.

Figure 3.2: Customers' stated (Max Diff) priorities – 2023 Regional differences - SSC Priorities Research Tracker



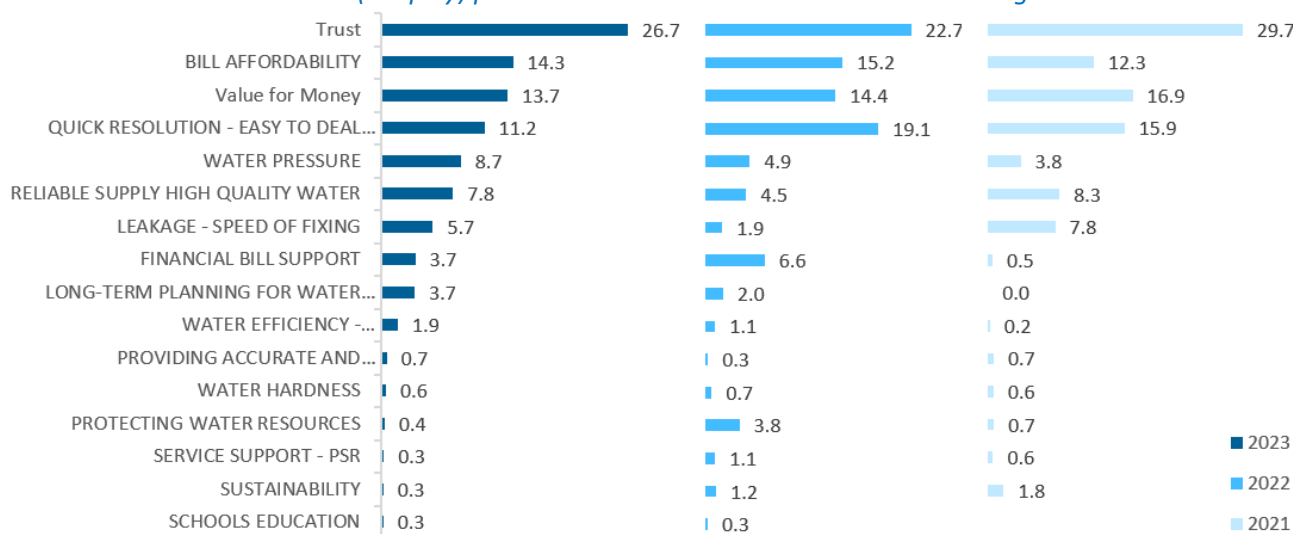
What customers reveal to be their priorities (Driver Analysis)

The SSC – Customer Promises Tracker Annual Report (2023) (Turquoise) has been running for six years and provides continuous customer satisfaction and other key performance indicators (KPIs). This allows Turquoise (the independent agency who run the Tracker) to infer priorities from the relationship of KPIs with the measure of

satisfaction. The annual reports delivered to SSC provide a number of such models (drivers of satisfaction, run separately for a selection of service measures and brand measures, and separate models for drivers of value for money and for trust). For this thematic review we have taken the original tracking data and estimated a new model of overall satisfaction as the dependent variable, using as the independent variables the KPIs that are collected each year. This amounts to 14 service-related items plus 'trust' and 'value for money'. We have used the same Shapely Regression approach to estimate these drivers of satisfaction; this is a technique that handles correlations more effectively than conventional regression techniques¹.

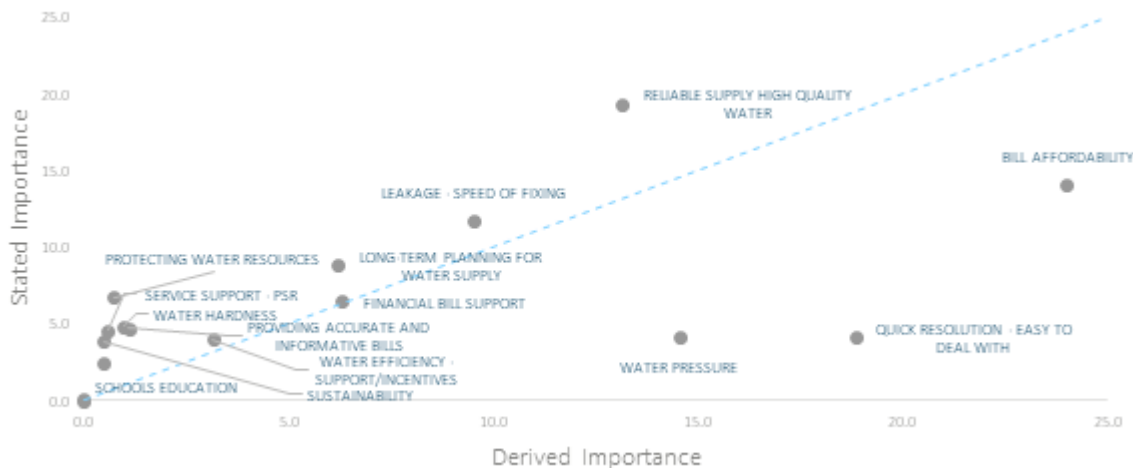
Figure 3.3 shows the results for each of the last three years. Trust was the most popular priority by a wide margin, which is consistent with models produced by Turquoise. 'Value for money' also featured strongly. Among the service-related items, affordability is consistently strong, but only became the leading item in 2023. Before that, 'quick resolution' was the strongest. In 2023, it still remains important, but other items such as pressure, high quality water and leakage feature more strongly.

Figure 3.3: Customers' revealed (Shapely) priorities – 2021-2023 - SSC Customer Tracking Research



We compare the two alternative measures of customer priorities (stated v derived) in Figure 3.4, where only variables common to both approaches are listed, standardised to total 100 and shown for 2023 only. This comparison shows what customers say they want prioritised (stated) against the issue that materially drive overall satisfaction (derived). Both sets of information are valid, but the stated priorities can be thought more as issues that customers need reassurance on being delivered well, whereas the derived priorities are the issues that need to be delivered well to drive up overall satisfaction.

Figure 3.4: Customers' stated (Max Diff) priorities v Customers' revealed (Shapely) priorities (2022/23).



The figure above compares the objective (derived) drivers of overall satisfaction (horizontal axis) with 'top-of-mind' (stated) drivers of satisfaction (Y). Items below the line are the strongest actual drivers of overall satisfaction but are less likely to be consciously identified as such by customers.

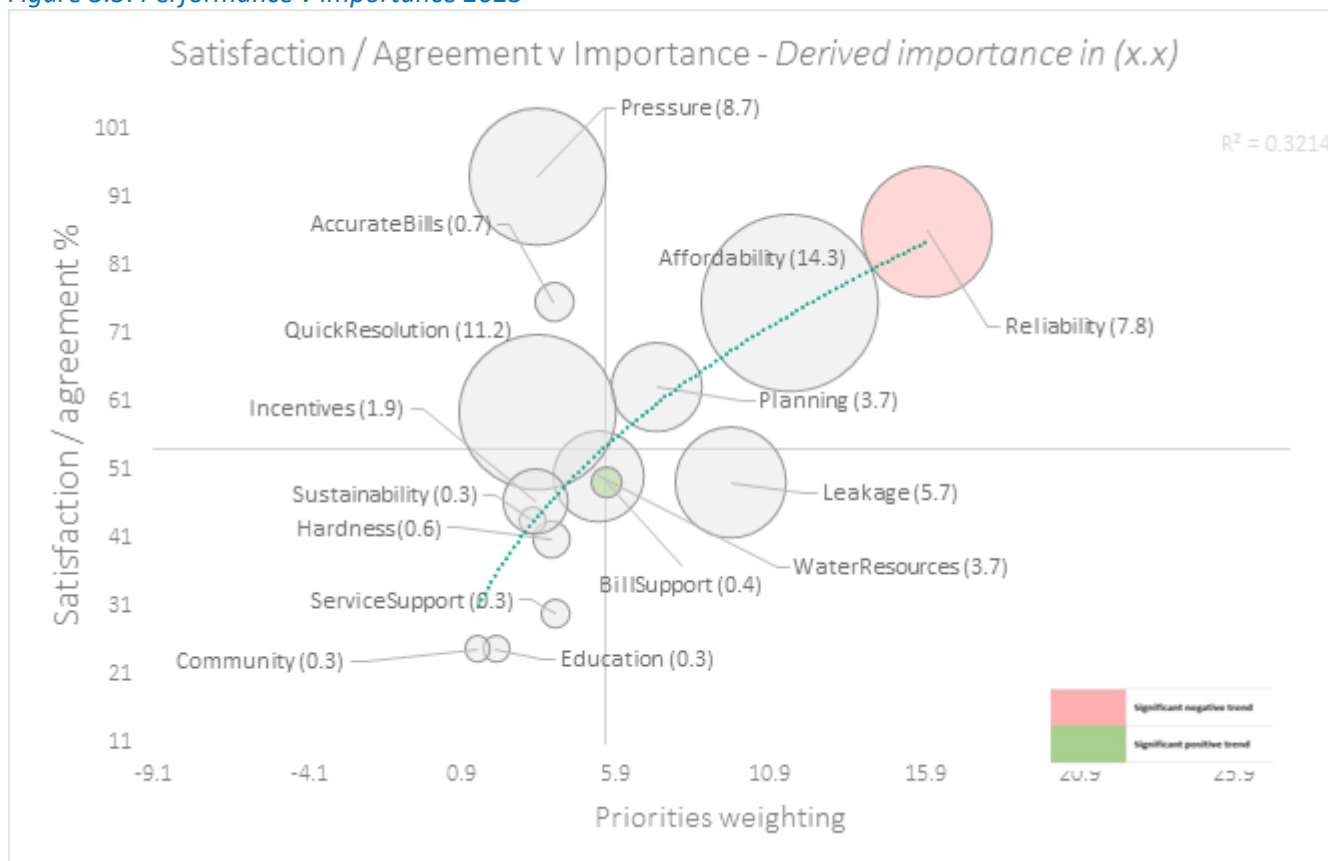
The most noticeable contrast between the two measures of priority can be seen with the ‘quick resolution’ and ‘water pressure’ metrics, which are strong drivers of overall satisfaction but are less ‘top of mind’ in customers’ stated priorities. This may indicate that these are issues that can impact on customers’ direct experience of the quality of service they personally receive.

‘Reliability of supply’ and ‘leakage’ feature a little more strongly among stated priorities than as drivers, reflecting the possibility that these are items that feature more readily in the public consciousness but have slightly less direct impact on the quality of service they experience. ‘Bill affordability’ is strong on both measures of priority, most notably for derived importance.

Performance v Importance

The final step is to consider how the perceived performance of SCC compares to these measures of importance. In Figure 3.5 below, performance is represented on the vertical scale as the % of customers expressing satisfaction or agreement² in the *SSC – Customer Promises Tracker Annual Report (2023) (Turquoise)*. Importance is represented in two ways: on the horizontal scale as the stated (Max Diff) values, (*SSC – Customer Priorities Research Tracker Quantitative Insights Year 3 (2023) (Accent)*) and by the ‘bubbles’ as the Shapley (derived) values (*SSC – Customer Promises Tracker Annual Report (2023) (Turquoise)*).

Figure 3.5: Performance v Importance 2023



The dotted line defines an ‘average’ relationship between performance and importance, where those items above the line are performing well relative to their importance; those below the line are performing relatively poorly. It is important to note that this chart covers the views of SSC’s household customers.

The main observations to draw from this chart are that:

- Pressure performs very strongly, being a very important derived driver of satisfaction, even if it is more middling in terms of stated importance
- Quick resolution is more of an issue, with a middling performance set against strong derived importance, even if it is more in line with a middling stated importance
- Leakage is of most concern, being low on performance but important both in terms of derived and stated.
- All other aspects perform broadly in line with their importance.

One further piece of information on the chart is the trend of the performance over time, calculated for the last five years³. The indication here is that reliability, while still performing well, has declined over that period (indicated in red). In contrast, awareness of the bill support SSC offers has average performance, but this has improved over the period (indicated in green).

Changes in priorities over time

A review of customer priorities⁴ that drew from sources as far back as the PR14 period established that by 2020, the following attributes were regarded as core priorities or ‘hygiene’ factors:

- high-quality and reliable water supply
- fair, accurate and affordable bills
- great customer service
- reducing leakage on pipes
- protecting the natural environment – habitats and water sources and
- helping those customers who may need extra support – both through financial support and other support when needed.

In addition to these key delivery attributes, other important priorities also emerged as future “hygiene factors”:

- giving customers more control of their water usage (e.g., smart metering) and providing education on how to use water responsibly, particularly for the younger generation (16-25)
- planning for population growth and managing the impact of climate change
- ensuring long-term resilience of assets to meet future demand (whilst balancing this against the need to ensure affordability of bills)
- meeting the challenge of rising energy costs by lowering carbon footprint
- investing in innovation to drive improvements in operational and the services.

Some key variations across customer groups were observed:

- SSW customers placed more importance on water quality and affordable bills
- Cambridge customers placed more importance on reducing leakage and protecting the environment.
- Business customers placed more importance on reducing leakage, followed by broadly similar levels to a wide range of attributes.
- Hard-to-reach customers placed more importance on providing financial and other support to vulnerable customers.
- Customers aged above 60 years were more likely to choose leakage as one of their top priorities.
- Future customers consistently placed more importance on protecting the environment and delivering services through digital platforms.

Against this summary we can assess the latest priorities reported in the preceding sections of this report, and the picture remains very consistent, with issues such as reliability of supply, affordability, leakage and management of water resources remaining highest on the list. Regarding customer sub-groups, regional differences remain similar (SSW customers more focused on affordability, Cambridge customers on leakage reduction and the environment), but it is Cambridge customers who now show a relatively stronger emphasis on water quality, when a few years ago it was more SSW customers (see *Figure 3.2*).

When splitting customers by SSC's segmentation, high priority is often assigned to the issues most commonly faced by those customers, e.g., lower income customers, those of lower social grades and vulnerable customers tend to prioritise bill support; and low income customers and those who have experienced service issues with limescale prioritise mitigating hardness. A full table of priorities by segment can be seen in *Figure 3.6*.

Figure 3.6: Full table of priorities by segment

Bill Support	Incident Notification	Protecting Water Resources
<ul style="list-style-type: none"> DE social grades Low-income households Vulnerable customers 	<ul style="list-style-type: none"> Younger customers (18-35) SSC segment E 	<ul style="list-style-type: none"> SSC segment B SSC segment D Service issue: traffic disruption
Accurate Bills	Mitigating Hardness	Water Pressure
<ul style="list-style-type: none"> SSC segment E 	<ul style="list-style-type: none"> Service issue: Limescale Low-income households 	<ul style="list-style-type: none"> High-income households

Furthermore, when split by attitudes, concerns and feelings:

- customers who were highly concerned about water scarcity and resources gave high priority to protecting these resources
- those who were concerned about carbon emissions gave high priority to sustainable business policies, and
- those who were concerned about poverty and unemployment gave high priority to financial bill support.

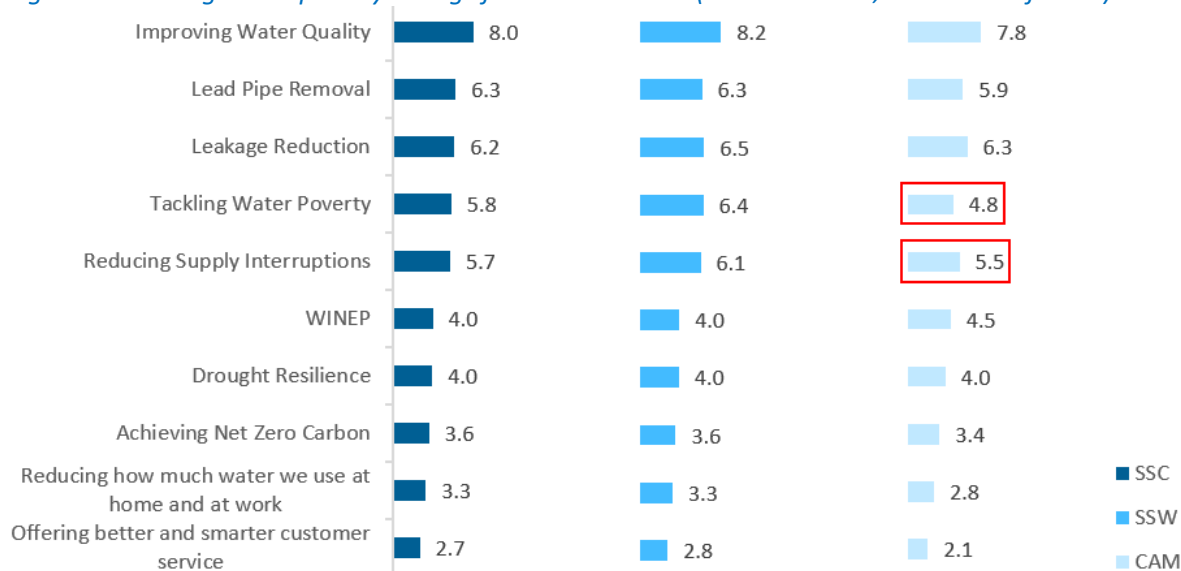
Additionally, it is noted that no customers showed any priority differences based on day-to-day life characteristics or overall satisfaction. Finally, when asked about the reasoning for their choices, the majority of customers noted that their prioritisation was not influenced by the given information. Of those who stated that they were influenced, the most influential piece of information was reported to be content relating to the environment and to sustainability, with the second most popular response being information about affordability and bill support.

‘Seeing how many people the company supplies water for and the importance of protecting the environment’- SSC customer on why they stated they were influenced most by information about environmental protection, sustainability, climate change and water conservation

Future Priorities

Recent research for SSC⁵ drew on the customer priorities research, LTDS tracker and PR24 WTP triangulated values to determine household customers’ future priorities to the year 2050, for 10 ambitions considered by SSC for their long-term investment planning. Figure 3.7 shows the relative priority scores (on a scale of 1 – 10), for all SSC and by supply region.

Figure 3.7: Triangulated priority ratings for SSC ambitions (HH Customers, on a scale of 1 -10)



While priorities are mainly similar for the two regions, Cambridge shows a relative lower priority towards tackling water poverty and reducing supply interruptions. This is likely due to lower levels of deprivation in the Cambridge region as shown by the deprivation decile analysis conducted in the *SSC - Demographics Report (2023) (Impact Research)* with 31% of South Staffs postcodes falling into the bottom two deprivation deciles and 16% falling in the top two, compared with 1% of households falling into the bottom two deprivation deciles in Cambridge, and 40% of households falling into the top two.

Figure 3.8: Index of Multiple Deprivation deciles from Impact SSC Demographic's Report (2023)

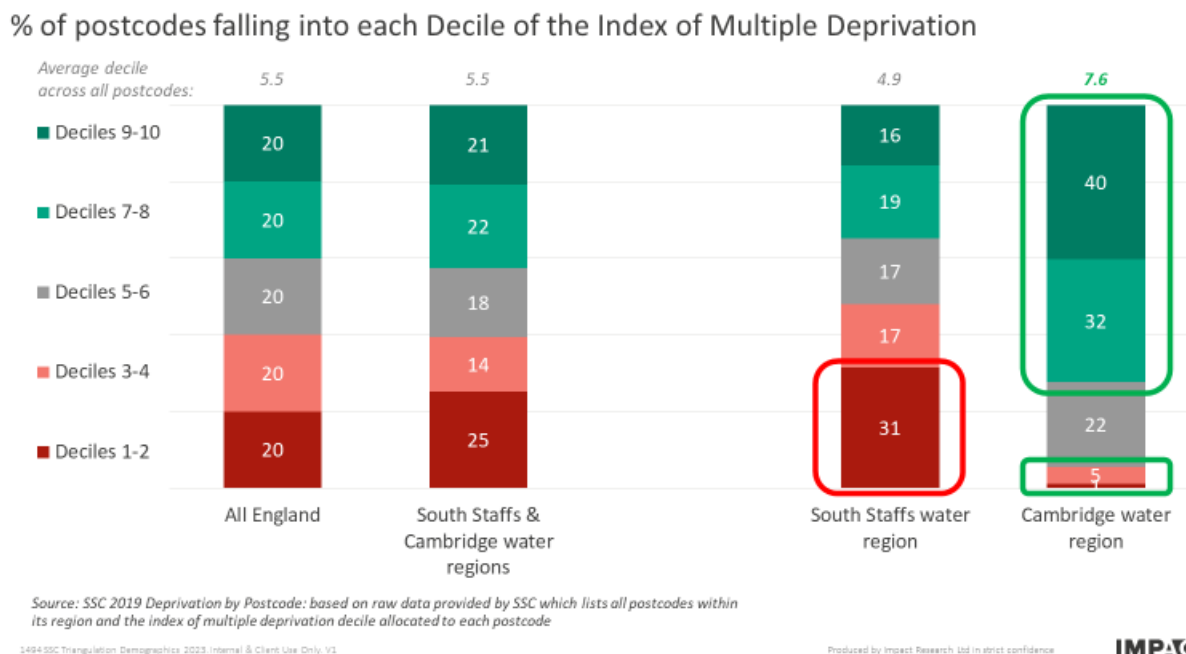
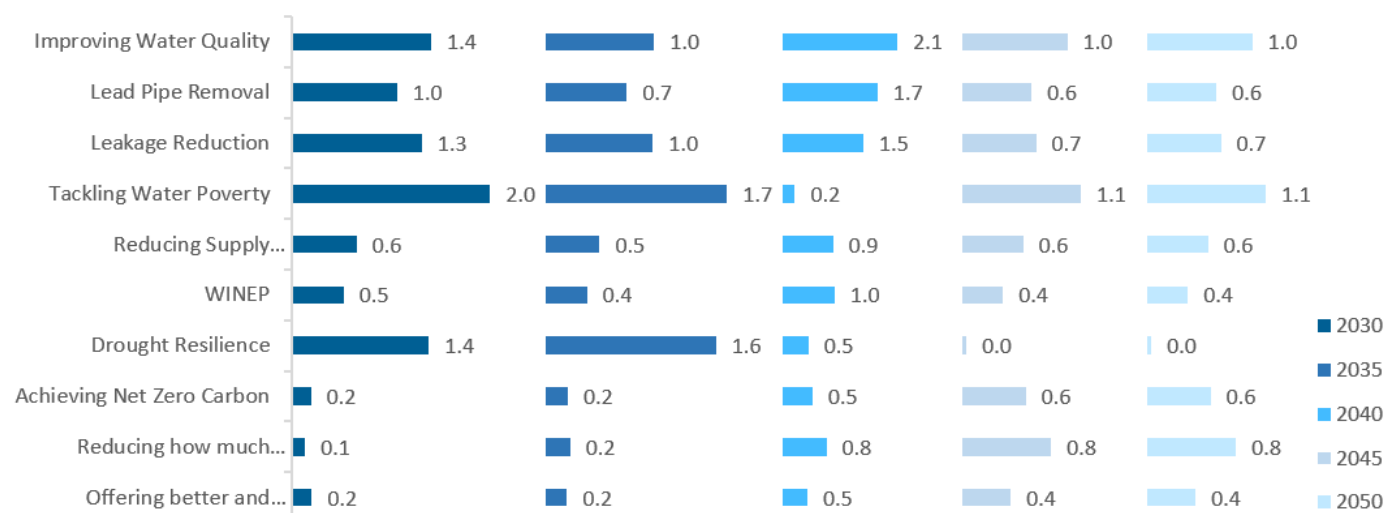


Figure 3.9 shows these priority ratings distributed over the period 2030 – 2050. This draws out some important variations. For example, drought resilience is relatively low down the rank order of priorities for delivering on SSC’s ambitions, but has a strong focus on delivery in the earlier years; reducing interruptions, while a higher priority, customers preferences are that this can be delivered over a longer period, with almost half the score allocated to 2050+. In the *SSC – LTDS Report (2023) (Turquoise)* reconvened workshops there was a consistent view, particularly in CAM region, that SSC was already delivering a strong performance which was improving over time. It was therefore felt that pushing harder was not needed. This was, in part, driven by the fact that many customers had not been directly impacted by a supply interruption. However, business customers were notably different in that they could see the impact an interruption would have on their business operations so had a wish for SSC to deliver its ambition to reduce supply interruptions faster.

Priority ratings are not provided for customer sub-groups beyond the regional split, but it was possible to compare the timing of when customers would want the ambitions to be delivered, as indicated in Figure 3.10. This indicates, for example, that while over three quarters of customers want delivery of leakage reduction by 2040, the urgency is greater in SSW than in Cambridge. Similarly, future customers place more urgency on improving water quality. Regarding lead pipes, this ambition was strongly related to water quality in the way the values were triangulated, so the driving issue is delivering on water quality. Interestingly, Cambridge customers show more urgency with regards to tackling water poverty, even though their priority rating is lower than for SSW customers.

Figure 3.9: Future Priorities over time, 2030 – 2050 (HH Customers)



NB: The sum of each row corresponds to priority values in Figure 2.6, minus the proportion of respondents who said they would not support the ambition.

Figure 3.10: Timings for delivery ambitions: % wanting delivery by 2040

	All SSC	South Staffs	Cambridge	Female	Male	Future Customers	Aged 30-70	Vulnerable + Low income	All Domestic (HH+ FC)
Leakage Reduction	77%	82%	56%	75%	71%	60%	79%	80%	76%
Lead Pipe Removal	63%	64%	56%	60%	63%	100%	37%	90%	62%
Tackling Water Poverty	62%	57%	81%	60%	71%	60%	68%	70%	68%
Achieving Net Zero Carbon	54%	57%	44%	60%	46%	40%	47%	90%	59%
WINEP	46%	43%	56%	40%	54%	20%	47%	80%	53%
Improving Water Quality	44%	43%	50%	40%	50%	100%	32%	50%	47%
Offering better and smarter customer service	43%	43%	44%	40%	46%	60%	32%	60%	44%
Reducing how much water we use	33%	29%	50%	55%	21%	20%	37%	40%	35%
Reducing Supply Interruptions	25%	25%	25%	25%	25%	20%	26%	30%	26%

Golden Threads: Customer Priorities

Golden Threads	The need for customer information and engagement	Water quality consistently heads the list of priorities, something that needs to be sustained over time, particularly for future customers. Leakage reduction and lead pipe removal are important objectives, also to be sustained over time. Communication around how SSC is performing against these areas is important to build trust that SSC is delivering on these core priorities.
	Protection for vulnerable customers	Important, with customers expressing a view that support, financial and those relating to the priority services register must be provided.
	Cost of living	Bill affordability ranks highly, as does tackling poverty, though this appears to be mainly a shorter-term objective, as a response the current cost-of-living crisis.
	Concern for the environment	Generally considered important but less urgent in terms of priority since 2022, with the exception of drought resilience, which is a more immediate priority for improvement, possibly in the light of recent experience of a dry summer in 2022.

Demographic Splits: Customer priorities

The table below provides a brief summary comparison of each of the key demographic groups, related to customer priorities. Please see the appendix for detailed tables of each split.

Demographic group(s)	Key findings/ comparisons
SSW vs CAM	Appendix A.2.1 summarises SSW and CAM preferences in relation to customer priorities. SSW and CAM customers showed fairly similar priorities, with differences appearing in relation to hard water and affordability (with SSW prioritising these areas), and reliable supply, leakage, protecting water sources, and sustainability (with CAM prioritising these areas). CAM also saw a relative lower priority for tackling water poverty and supply interruption in analysis of their preferences.
HH vs NHH	Appendix A.2.2 summarises HH and NHH priorities in relation to priorities. Both HHs and NHHs think that reducing leakage should be a high priority, but NHHs seem to value slightly more than HHs.
FBP vs current bill payers	Appendix A.2.3 summarises future customer preferences in relation to customer priorities. Future customers were only mentioned once in the priorities chapter, but it is clear they prioritise protecting the environment and delivering services through digital platforms. The digital platforms point seems unique to FBPs, but CAM HH customers agree on the environmental point, and also place the environment as a high priority.
Vulnerable vs other customers	Appendix A.2.4 summarises vulnerable customers' preferences in relation to customer priorities. Vulnerable customers, specifically those who are hard-to-reach and those above 60, were more likely to prioritise providing financial and other support to vulnerable customers and leakage reduction, respectively.

6. BEST VALUE PLANNING AND INVESTMENT PRIORITIES

Bibliography

Report	Published Date	Participants	Sample Size	Project Objectives
CCW and Ofwat– Water Consumer Views (2022)	April 2022	HH, NHH and future customers	Online focus group: 12 Depths: 16	Research aimed at understanding water consumers' views on water and sewerage services, what is important, views on Ofwat's proposed common PC areas for PR24, any new areas for exploration and to test descriptions and measurements of PCs.
SRO Schemes Research – Public Value (2022) (Accent)	July 22	HH, NHH, and future customers	Qual: unknown Quant: 5,902 HH, 533 NHH	To understand what added value customers perceive is important as part of infrastructure development. To understand preferences for the added value – what should be the balance between options such as economy, jobs, apprenticeships, leisure, education and carbon sequestration etc? Do the preferences change depending on the geographical location/type of scheme or other factors? How much are the customers prepared to pay? What language should be used to explain the added value?
SSC – Customer Preferences on Added Value for Large Resource Schemes (2022) (Accent)	April 2022	n/a	n/a	Literature review to understand what types of public value customers perceive are important and preferences among those types (and if preferences change depending on the geographical location/ type of scheme or other factors). To understand how much are customers prepared to pay. To understand what language should be used to explain public value.
SSC – Customer Priorities Desk Research (2020) (Accent)	September 2020	Various	13 reports	Review current SSC understanding of its customers' priorities, as reported in SSC research outputs. Review methodologies for customer priorities measurement, including a review of research conducted by other water companies for PR19. Review Ofwat expectations for

Report	Published Date	Participants	Sample Size	Project Objectives
				PR24, as set out in Ofwat’s recent Time to Act strategy paper.
SSC – Customer Priorities Research Qual Year 3 (2022) (Accent)	May 2022	HH, NHH customers and future customers	32 HH, 12 NHH	Explore what matters to customers now and in the future to root SSW/CAM plans in the customers’ world. Understand what customers want and expect SSW/CAM to focus on in the short term and long term to 2050. Track and measure any changes in short- and long-term priorities and what is driving these changes.
SSC – Customer Priorities Tracker Qual Year 1 (2020) (Accent)	October 2020	HH customers	c60 in total	To understand customers’ uninformed and informed priorities in the short and long term. To understand what factors drive any changes in priorities including whether there are any wider “Water Industry” trends. To understand whether there have been changes since Summer 2017 and what has driven those changes.
SSC – Customer Priorities Tracker Quant Year 2 (2022) (Accent)	March 2022	HH customers	Total: 1,054 SSW: 701 CAM: 353	Provide a benchmark against which customers’ priorities will be tracked for both wholesale and retail services. Explore any differences between uninformed/informed priorities and qualitative/ quantitative insights. Understand the customer impact of Covid-19 and, from 2022, the cost-of-living crisis.
SSC – Customer Tracking Annual Report (2023) (Turquoise)	March 2023	HH and NHH customers	Total 1,134 CAM: 837 HHs (268 CAM, 569 SSW), 297 NHHs (93 CAM, 204 SSW)	To monitor ongoing customer satisfaction, deliver on-going customer sentiment tracking, probe awareness and usage of key services and track changes in the way customers wish to interact with SSC.
SSC – NERA Willingness to Pay for Water Services at PR24 (2022)	December 2022	HH, NHH customers and future billpayers	Total: 1250 CAM: 424 SSW: 833 Future billpayers: 54	Aimed at designing, implementing and analysing a stated preference survey in order to gain an estimate of customer WTP for service improvements from SSC with the overall aim of informing their PR24 business plan. HH, NHH and future customers were of specific focus.

Report	Published Date	Participants	Sample Size	Project Objectives
SSC – ODI Research (2023) (Accent and PJM Economics)	March 2023	HH and NHH customers	Total: 807 HH: 609 NHH: 198 Medically vulnerable: 109 Communications vulnerable: 90 Life-stage vulnerable: 89 Financial vulnerable: 27	Aimed at analysing further segmentation of SSW and CAM Water customer values on top of previous Collaborative ODI research by Ofwat and CWW
SSC – ODI Research Pilot (2022) (Accent)	June 2022	HH and NHH customers	552 total interviews	A review of methodological options aimed at informing ODI rate for PR24.
SSC – PR19 Foundation Research June (2017) (Accent)	June 2017	HH and NHH customers	Total: 93 HH: 70 NHH: 23	To understand customer priorities for service delivery both now and over the longer term (prompted and unprompted) and to check these against previously established priorities in PR14 work.
SSC – PR19 Data Triangulation Study SSW WRMP (2018)	2019	HH, NHH and future customers	9000+	Appendixes for SSWs PR19 triangulation research. A review of all SSW customer engagement activity relating to their WRMP focusing largely on customer priority.
SSC – WRMP and Long-Term Resilience Customer Engagement Insight Full Report (2017) (Community Research)	September 2017	HH and NHH customers	Workshops 62, business and stakeholder round tables 21, survey: 300 in SSW, 200 in CAM	To use the research findings from Phase One to support the development of SSC's WRMP19 in both supply regions, specifically understanding customers' views on; levels of service, leakage, water efficiency, metering, and (if possible) environment impact, and initial thoughts on options for the future and to use the findings from Phase Two to inform investment choices, by giving customers the opportunity to feed into SSC's strategic challenges.
SSC – WRMP Themes 1 and 3 Quantitative Insights (2022) (Accent)	April 2022	HH and NHH customers	Total: 1,180 CAM: 427 SSW: 753 HHs: 1,028 NHHs: 152	Core purpose of this study was to provide evidence of customer response and support for; managing droughts, universal metering, leakage, environmental ambition.
SSC – WRMP24 - WRAP Theme 1	August 2021	HH, NHH and future customers	Total: 47 HHs: 28	To explore household, future and SME businesses customer preferences in terms of;

Report	Published Date	Participants	Sample Size	Project Objectives
Research Findings (2021)			NHHs: 10 Future customers: 9	environmental ambition, levels of service/resilience ambition, water efficiency ambition, and best value planning criteria. To ensure a “golden thread” of customer preferences in these strategic areas, which sets the context for the remainder of the engagement programme.
Water UK – Omnibus Research (2022) (Savanta)	December 2022	UK general adult population	2,061	To examine the public’s opinion of the water industry (including on nationalisation) and the effect of the cost of living.
WRE – Club Customer Engagement report (2021) (Blue Marble)	September 2021	HH and NHH customers, and stakeholders	HH: 20 (CAM 5, Essex & Suffolk 5: Anglian 10). NHH: 14 (Anglian 8, Essex & Suffolk 3, CAM 3) Stakeholders: 20 organisations across the 3 companies	To understand consumer context (general environmental priorities, current awareness of long-term challenges and implications for water suppliers, perception of water suppliers). To explore expectations and priorities re environmental planning. To explore response to the ‘best value’ plan objectives. To explore options preferences (ranking of preferences and what drives importance). To explore intergenerational economics (response to affordability options to understand generational expectations).
WRW - Updated Regional Plan (2023)	March 2023	n/a	Triangulation of 120 pieces of research	To ensure the customer input in the regional plan is up-to-date by including the latest knowledge (by conducting a triangulation of the most recent customer and stakeholder research).

Overview

The top three to five customer priorities have remained consistent across WRMP and broader customer priorities since those identified for WRMP19: quality and reliability of service, affordability and reducing leakage. Environmental concerns, customer service and support for vulnerable customers have also been top priorities; however, in the last couple of years, although these are still important long-term priorities, they have slipped further down the rankings for customers, as significant concerns for their own personal financial circumstances have increased; customers now feel nervous about prioritising others when the future seems uncertain for their own household or business. Certain stakeholder groups would also like to see greater consideration to their specific areas of interest; for example, the NFU mentioned food production, Historic England mentioned the historic environment, and MOSL mentioned the non-household market.

Relative appeal/importance of overarching metrics driving ‘best value’

During the engagement conducted for *PR19 and WRMP19 (SSC – PR19 Foundation Research June (2017) (Accent); SSC – WRMP and Long-Term Resilience Customer Engagement Insight Full Report (2017) (Community Research)*, customer priorities were focused on continuity and quality of supply and service, keeping bills affordable and reduction of wastage and leakage. This was found to be consistent across both the South Staffs and Cambridge regions.

Since the PR19 period commenced, further research into customer priorities has been conducted and showed that household and non-household customers including hard-to-reach and future bill-payers' priorities had a high degree of consistency across engagement mechanisms. Initially, the *SSC – Customer Priorities Desk Research (2020) (Accent)* showed these priorities were divided into core priorities and future ‘hygiene’ factors that customers want to be delivered upon. These ‘hygiene factors’ included:

- high-quality and reliable **water supply**
- fair, accurate and affordable **bills**
- great **customer service**
- reducing **leakage** on pipes
- protecting the **natural environment** – habitats and water sources
- helping those customers who may need **extra support** – both through financial support and other support when needed.

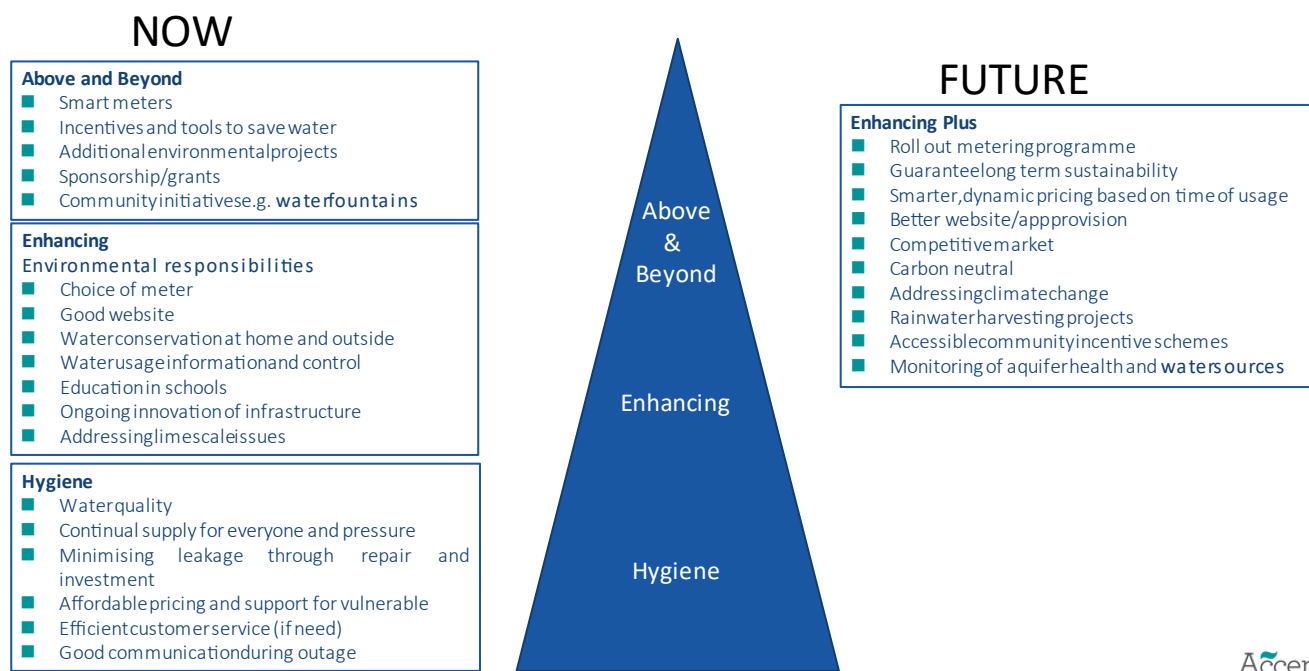
Future hygiene factors to be delivered to customers included:

- giving customers more **control** of their water usage (e.g. smart metering) and providing **education** on how to use water responsibly, particularly for the younger generation (16-25)
- planning for **population growth** and managing the impact of **climate change**
- ensuring **affordability of bills** vs ensuring long-term **resilience of assets** to meet future demand
- meeting the challenge of **rising energy costs** by lowering carbon footprint; and
- investing in **innovation** to drive improvements in operational and customer services.

The *SSC – Customer Priorities Tracker Qual Year 1 (2020) (Accent)* Report showed more granular detail on the factors customers expected to be delivered by three sub-groups; ‘hygiene factors’, ‘enhancing factors’ and ‘above and beyond’. The hygiene factors were very similar to the earlier 2020 qualitative study, with the exception that this study showed environmental responsibilities to be an enhancing factor, rather than a hygiene factor. The full rankings are shown in Figure 4.1.

Figure 4.1: Range of priorities generated from SSC – Customer Priorities Tracker Qual Year 1 (2020) (Accent)

Range of priorities generated - now and future



In the *SSC – WRMP24 - WRAP Theme 1 Research Findings (2021)*, when asked to prioritise company actions at the end of the exercise, the provision of reliable, clean drinking water, minimising the environmental impact and reducing leakage were the top three in both supply areas. This was consistent with priorities identified in previous studies, including environmental concerns once again as a key priority and expected by customers. A synthesis report of WRW research found that, in 2021, customers’ main priority was clean, safe, reliable and affordable water.

The updated *WRW - Updated Regional Plan (2023)* found that more people were becoming concerned with affordability, due to the wider economic situation, inflation, and the rising cost of fuel, energy and food. Although this is particularly of concern to low income and vulnerable HH customers, almost all customers are voicing this as their number one concern. Across water customers more generally (not just SSC), the environment was seen as an important focus, but (for the majority) it has been pushed to a longer-term priority area for investment when balancing the need for investment and keeping bills affordable due to the proliferation of economic concerns.

The *SSC – NERA Willingness to Pay for Water Services at PR24 (2022)* study did find robust evidence of customers being willing to pay for improvements in supporting wildlife and nature highlighting that customers do want to see increased investment to restore the water environment. WTP was also seen for three other attributes, in line with customer priorities observed in previous studies; risk of temporary ‘do not drink’ notice, water lost to leakage from pipes, and chances of property flooding from a burst pipe. The finding that customers are willing to pay for improvement in such attributes is consistent with the results of other WTP studies conducted for PR24. That is, customers are typically willing to pay for improvement in environmental attributes or attributes that relate to particularly adverse and inconvenient outcomes, but are less likely to be willing to pay for improvement in other areas.

The *SSC – Customer Preferences on Added Value for Large Resource Schemes (2022) (Accent)* study also found people consider service aspects which can affect them directly are most important. For example, supply interruptions and bill affordability. Also, people view elements of service with an immediate impact or consequences as a higher priority than those with consequences that will not be felt until the more distant future, e.g. the appearance, taste and smell of water was seen as more important than biodiversity. However, this does mean that service priorities which are ranked lower are not important to customers, but simply that participants were asked to place them in a set order so some had to come lower down the priority list. This point can be applied to much of the other research reports covered in this document.

The *SSC – WRMP Themes 1 and 3 Quantitative Insights (2022) (Accent)* delved into how SSC should balance various investment priorities and SSC customers overall slightly favoured keeping bills as low as possible for customers above all else. CAM customers as a population were more evenly split between keeping bills low and investment into other areas.

The *SSC – Customer Preferences on Added Value for Large Resource Schemes (2022) (Accent)* highlighted the top three priorities for best value planning to be ‘affordable water bills over the long term’, making ‘the most from what we have’ (reducing leakage, encouraging customers to use less) and ‘a plan that is adaptable in case of new/emerging conditions’. Adaptability emerged as a more important factor than in previous studies, likely in response to learnings from the Covid-19 pandemic that have affected every aspect of customers’ lives and demonstrated the importance of anticipating unexpected events and building in flexibility to adapt when necessary.

By *SSC – Customer Priorities Research Qual Year 3 (2022) (Accent)* identified the top four priorities as reliability and quality of water supply, bill affordability, leakage reduction and long-term planning, in line with the year 2 study. At this point in time the Covid-19 pandemic had peaked and started to recede in terms of its social and behavioural impacts. Indeed, two in five customers reported their water consumption had returned to pre-pandemic levels, though a similar proportion still thought they use more than before the pandemic (likely due to home working being more common). However, a cost-of-living crisis initially sparked during the pandemic has taken over public consciousness as a primary concern, with many feeling more financially vulnerable than ever before. Significantly higher numbers of customers in year 3 reported concerns with paying their household bills when compared to year 2. This applied to both the present time and when thinking about the next 12 months.

The qualitative research conducted as part of the *SSC – Customer Priorities Research Qual Year 3 (2022) (Accent)* showed that ‘optimism when moving out of pandemic was short lived and was replaced by significant cost of living concerns (for both HH and NHH customers). The generalised cost of living crisis made many people think more about their own situation compared with the more altruistic qualitative picture in October 2020. The Environment was taken more seriously than ever in this study and understood better but has been pushed to a high priority longer-term issue and dwarfed by short term, personal economic concerns. High level response to SSC’s “Looking to Future” plan to 2050 was very positive, mapping back spontaneous long-term priorities to this made customers feel SSC were covering the challenges raised and meeting future expectations. Most customers opted for what they see as a compromise of a linear, natural bill profile to 2050, with minorities supporting increased front-loaded short-term investment or back-loaded long-term investment. Customers expect more to be delivered as part of basic service compared to 2020.

The final report of the 3-year *SSC Customer Priorities Research* project identified some ‘super hygiene priorities’, which are considered as a ‘must do’ for SSC to deliver. These priorities are reliability of water quality and affordability. These two customer priorities have remained top across the three year project, and throughout responses to open-ended questions. Ultimately, water needs to be affordable to everyone regardless of their financial circumstance. Support for bill affordability was a slightly higher priority in SSW vs. CAM, and amongst DE social grades vs. higher social grades. In the *SSC – Customer Tracking Annual Report (2023) (Turquoise)*, low-income customers appeared to be significantly more likely to agree that their clean water bill was affordable compared to higher earning groups, with 66% of the lowest HH income bracket of under £17,050 per year rating their bills as affordable, compared with 75% the previous year.

Another way of indirectly evaluating customer priorities is through Willingness to Accept work. The *SSC – ODI Research Pilot (2022) (Accent)* asked customers how much money they would need to receive in compensation in order to accept a specific service issue. Although not a typical measure of priority order used in previous price reviews, the results provide some interesting points. For example, amongst HH and NHH customers, sewer flooding had the highest impact of all service issues, and unsurprisingly, longer supply, were considered more impactful than shorter interruptions. Looking at the results by service area, it is clear that CAM customers had higher WTA values for most scenarios compared to SSW customers. Furthermore, younger people (aged 18-29) tended to have lower WTA values than older people. Financially vulnerable customers had lower values than those who were not in financially vulnerable positions.

Only a few of the services attributes tested in the ODI WTA study directly relate to the WRMP24 themes, notably, to the Service level Resilience to Droughts area. For example, HH customers in the SSW regions were willing to accept a

compensation level of £291 (£288 in CAM) if they were to experience emergency drought restrictions for 2 months, whilst NHH customers in SSW region found a level of £7,460 (£34,213 in CAM) to be acceptable for the same issue. In terms of relative importance, this attribute came second for both HH and NHH customers, behind unexpected water supply interruption (24h). In addition, the difference was not statistically significant at the 95% level of confidence.

Hosepipe bans were also tested in the ODI study, which could also come under the WRMP droughts area. For both HH and NHH customers, this came near the bottom of the priority order, with HH customers being willing to accept a compensation amount of £48 for having a hosepipe ban for 5 months, whilst NHH customers in SSW were willing to accept compensation of £445, and NHHs in CAM £2,273 to experience the same incident.

Figure 4.2: Willingness to Accept values for service issue scenarios between South Staffs and Cambridge, from SSC – ODI Research (2023) (Accent and PJM Economics)

Scenario	Households		Non-households	
	SSW	CAM	SSW	CAM
Emergency drought restrictions (2 months)	£291.1	£287.6	£7,460	£34,213
Unexpected water supply interruption (24h)	£302.3	£308.5	£10,196	£42,805
Do not drink notice (48h)	£207.7	£215.4	£4,848	£24,247
Unexpected water supply interruption (6h)	£170.2	£174.9	£3,883	£14,659
Boil water notice (48h)	£195.2	£206.3	£3,213	£12,635
Discoloured water (24h)	£132.8	£130.9	£1,933	£7,800
Water taste and smell (24h)	£117.2	£119.9	£2,652	£11,539
Significant pollution incident nearby (4 weeks)	£118.1	£125.2	£1,548	£6,439
Significant pollution incident elsewhere (4 weeks)	£102.5	£112.8	£955	£3,543
Discoloured water (6h)	£97.5	£100.7	£1,828	£7,219
Water taste and smell (6h)	£106.2	£105.9	£2,119	£7,934
Planned water supply interruption (6h)	£75.7	£73.6	£3,324	£12,625
Unexpected low water pressure (6h)	£69.8	£66.5	£1,486	£5,865
Low flows in rivers elsewhere (2 months)	£66.1	£67.6	£586	£2,703
Minor pollution incident elsewhere (1 day)	£62.0	£67.6	£467	£1,443
Minor pollution incident nearby (1 day)	£61.0	£62.5	£736	£2,714
Low flows in rivers nearby (2 months)	£57.2	£59.4	£598	£2,310
Hosepipe ban (5 months)	£48.0	£48.1	£445	£2,273

What best value means to customers

The *WRE – Club Customer Engagement report (2021) (Blue Marble)* found that the principle of a ‘best value plan’ (not necessarily the cheapest, but the best for society and the environment) won majority approval. However, consumers wanted SSC to prioritise the core business activities (which included protection of the environment, managing flood risk and drought resilience) over the ‘added value’ elements (boosting the local economy, consulting customers and creating public amenities etc). However, it is noted that the terminology can be confusing to consumers as ‘best value’ in other contexts means the cheapest and they do not always equate the idea of best value plan as affecting customer bills directly. Customers in lower socio-economic groups (C2DEs) tended not to be aware that investment choices impact their water bills.

Options should meet three criteria: financially viable; low carbon; and effective in the long term. Options that appear short term stop gaps and/or poor environmentally, were largely rejected (including drought permits). Recycling water and (low carbon) desalination were the most acceptable of the ‘new’ supply options. Water transfer and tankering water in from other countries had least appeal.

SSC should develop a holistic approach to all aspects of water supply and waste management. Stakeholders wanted to see a joined-up approach, and this could help consumers appreciate what appear to be contradictions (higher awareness of flooding undermines the drought message). In its response to the *Cambridge Water WRMP Consultation* in May 2023, the NFU wished for greater multi-sector collaborative work, which would include sectors such as agriculture, horticulture, landowners and land managers; this would help maximise potential opportunities such as those listed under the WINEP options.

In the *SRO Schemes Research – Public Value (2022) (Accent)* report, which looked at public value going above and beyond core investments, it was found that across customers of all the water companies who were involved, social grades and life stage, there was limited/no prior understanding of the phrase ‘Public Value’. At best, there was an assumption that it means a company would make a positive contribution (economic, social, environmental) to local and national society that would improve public well-being.

“I have never really come across the term public value. I would think of the term providing a product or service which will add value to the general public’s life. These things will either provide happiness, stability or a necessity” Affinity Water, Future customer.

At worst, there was confusion, disengagement and a sense that any company talking about ‘Public Value’ is ‘CSR washing’. Water companies should be mindful about using the ‘Public Value’ phrase without detailed explanation. ‘Added Value’ is an easier phrase to understand and is seen as delivering ‘Over and Above’ the core project objectives.

In response to the *WRMP24 consultation in 2023*, Ofwat states that greater evidence is needed in SSC’s plans to demonstrate that the range of options available is appropriate to the scale of the challenge. There also needs to be clarity on the objectives of the plan, including on how those objectives are related to the best value metrics. This clearly highlights the importance of offering best value to the regulator.

Paying for long term investments

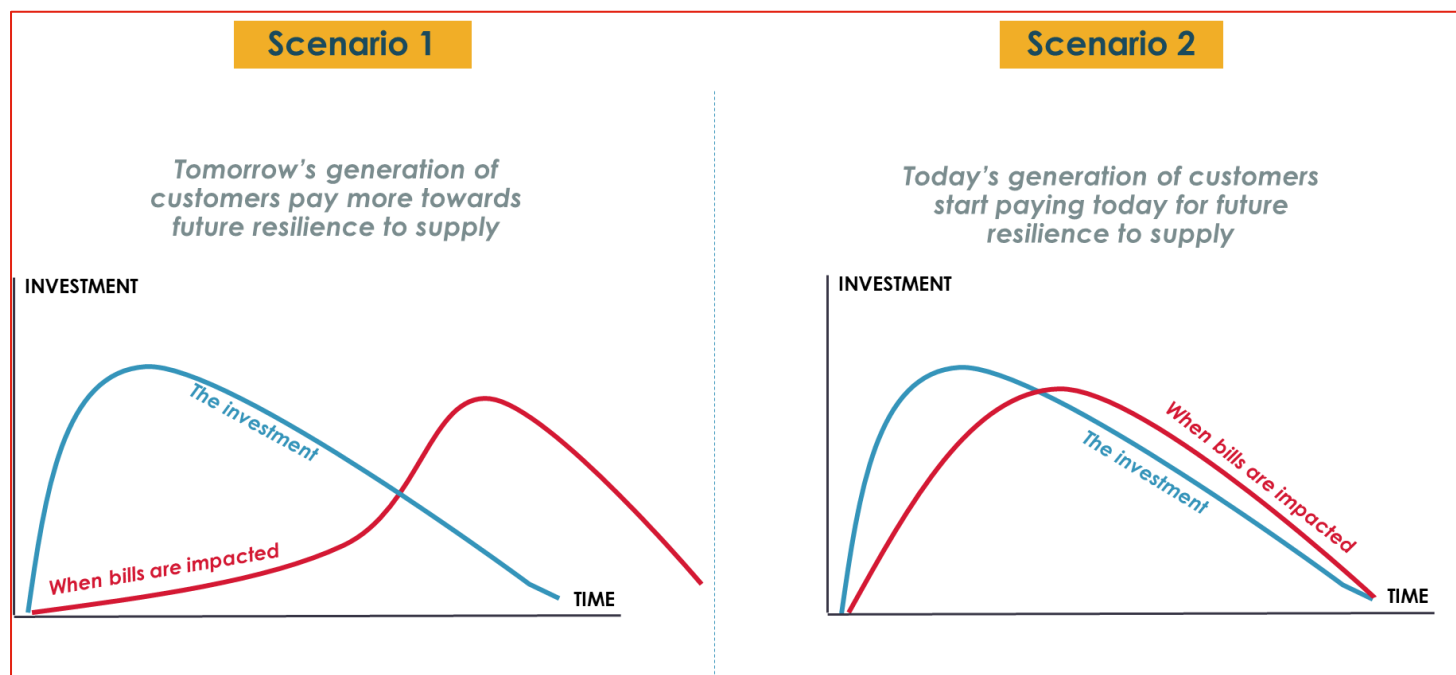
The issue of how to fund long term investments was first investigated in the *SSC – WRMP24 - WRAP Theme 1 Research Findings (2021)* which found that customers were generally happy to pay for investments that will benefit future generations. They recognised that they already benefit from contributions paid for by previous generations for the benefit of all. Making sure the environment is fit for future generations is the responsible thing to do, not least because current customers have contributed to the problems. Young current customers might actually benefit themselves in future. Future customers, like current customers, were mindful of and concerned about the potential bill impact from investment were no different from other customers in their views about intergenerational fairness.

“We have to take responsibility for the environment surrounding us and pay for whatever is necessary to protect it. We have to leave it in a better state than we encountered it, not leave huge bills for our children to pay. We also have to stop being selfish and only focus on keeping our current bills low.” Anna (billpayer)

The minority who opposed this view felt the cost should be borne by future customers as it is not fair for current customers to pay for something they will not benefit from.

The *WRE – Club Customer Engagement report (2021) (Blue Marble)* explored how customers felt long term investments should be funded, whether investment should commence earlier to spread the cost over a longer time or wait delayed until closer to the time the investment is required, which means the generation that benefit the most from investment, will pay more for it. Customers found it hard to decide which is the fairest solution to this ethical conundrum and there was no clear consensus. Customers were shown these two scenarios graphically, as shown in 4.3.

Figure 4.3: Intergenerational Fairness Investment Scenarios



The bill increases appeared abrupt in both scenarios and there was a desire for a middle option with a flatter curve.

"I think what's fairer is if these humps on the graph could be flattened a bit, and the timescale elongated (...) that would be fairer because the rewards will be reaped for a considerable length of time so the increase in tariff should be spread over a longer period." CAM Non bill payer

Scenario 1 for many, felt unfair to be paying for something you are not using at that time and some older customers thought that they would die before they would see any benefit from their contribution. Economically vulnerable customers chose this scenario because they cannot currently afford a rise in bills, and some younger customers considered that they would be more financially stable and able to pay later on in life.

"I'd go for scenario one because it's hard to pay for something that you don't know is tangible, it's hard to see what you're being charged for without seeing the end product." CAM Non bill payer

For some, scenario 2 felt logical because customers pay for the investment whilst it is being made. Some older customers would rather pay instead of their children and grandchildren, even though they may not see the benefits themselves. ABC1s in particular pointed out that we have caused the problem of climate change rather than future generations and therefore should bear the cost.

"I think if we want improvements we are going to have to start paying for them now. I'm happy to start investing now as it feels urgent. It would be really unfair to pass onto our grandchildren the cock up we made." E&S C2DE

The topic was not explored in great detail and insight here provides an indicative view only and therefore this would be an area for further investigation for PR24.

Golden Thread Conclusions: Best value planning and investment priorities

<p>Golden Threads</p>	<p>The need for customer information and engagement</p>	<p>When fully informed of SSC's "Looking to Future" plan to 2050, customers are very positive, making them more confident that SSC were covering future challenges expectations</p>
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	Call for collective responsibility and fairness	Customers are generally more wary of what may be considered ‘stop gap’ or ‘short term’ measures to meet future demand for water, as these potentially offer less value in the long term. However, those on lower incomes will be more focussed on measures that keep bills affordable.
	Concern for the environment	The environment remains an important issue to address, especially due to growing awareness of the effects of climate change, but since early 2022 is seen by many customers as a longer-term issue to address, dwarfed by short term, personal economic concerns.
	Protection for vulnerable customers	In the same way as concern for the environment, this remains important to customers but, from 2022, is slipping relative to more immediate concerns at an individual household level, such as bill affordability.
Emerging thread	Cost of living	The enduring theme is that since early 2022, affordability of bills and wider concerns related to the cost of living are taking more prominence in customers’ priorities.

Demographic Splits: Best value planning and investment priorities

The table below provides a brief summary comparison of each of the key demographic groups, related to best value planning and investment priorities. Please see the appendix for detailed tables of each split.

Demographic group(s)	Key findings/ comparisons
SSW vs CAM	Appendix A.3.1 summarises SSW vs CAM priorities in relation to best value planning and investment priorities. In general, both regions showed a high desire for bill affordability, with CAM customers sometimes additionally showing interest in other investment areas.
HH vs NHH	Appendix A.3.2 summarises HH and NHH priorities in relation to best value planning and investment priorities. In most cases, HH and NHH customers are aligned in terms of which investments they think should be prioritised.
FBP vs current bill payers	Appendix A.3.3 summarises future customer preferences in relation to best value planning and investment priorities. Future billpayers are notably more likely to be tech-savvy and prioritise online access to real-time information through apps and websites. They also seek proactive information to reduce bill costs and overall water usage. Their top priorities include reducing water waste and improving water quality. Environmental concerns play a notable role in their choices as consumers and potential employees. Protecting the environment is their highest-rated priority and a core "hygiene factor." They prefer digital platforms for service delivery and align with other customers on intergenerational fairness and concerns about bill impacts from investments, which is to ensure that all generations pay an equal contribution over time. Many future billpayers have limited interaction with their water provider due to their living situations. They express varying levels of desire for improvements in different service attributes, with a preference for enhancements related to environmental issues and

	infrastructure such as developing improvements to the hardness of water, lead piping, and prevention of flooding due to burst pipes.
Vulnerable vs other customers	Appendix A.3.4 summarises vulnerable customers' priorities in relation to best value planning and investment priorities. In most cases, vulnerable customers were more likely to be concerned with affordability of the service following investment plans and its impact on the bill.
Stakeholders vs customers	Appendix A.3.5 summarises some of the key themes relevant to best value planning and investment priorities from the stakeholder consultation undertaken during the WRMP24 planning process. Whilst each stakeholder might have different priorities, as their businesses / organisations focus on different things, most stakeholders are interested in SSC's approach to best value planning. Stakeholders would like more information relating to SSC's approach to best value planning, including a greater understanding of the analysis SSC used to determine was is 'best value'. In comparison, SSC customers are generally less engaged and curious about BVP.

7. ENVIRONMENTAL DESTINATION

Bibliography

Report	Published Date	Participants	Sample Size	Project Objectives
Cambridge Water Stakeholder Roundtable (2021) (Community Research)	October 2021	Stakeholders: Attendees from a wide range of organisations, including local and national environmental organisations, a social housing provider, a local authority planning department, a university and an MP	18 stakeholders	To consider stakeholder views at a formative stage of the plan development process.
CCW and Ofwat– Water Consumer Views (2022)	April 2022	HH, NHH and future customers	Online focus group: 12 Depths: 16	Research aimed at understanding water consumers' views on water and sewerage services, what is important, views on Ofwat's proposed common PC areas for PR24, any new areas for exploration and to test descriptions and measurements of PCs.
CCW – Desktop Review of Behaviour Change Campaigns (2023)	April 2023	n/a	n/a	Review of campaigns aimed at households, both large and small, on reducing water usage, reducing flushing of unflushables, and disposal of fats oils and greases in the sink.
CCW – Environmental Awareness Index (2023)	February 2023	HH customers	1,466 HHs	The second phase of the Environmental Awareness index, tracking results in 2022. Aimed at understanding attitudes around environmentally

Report	Published Date	Participants	Sample Size	Project Objectives
				damaging water behaviours including supply and demand, things flushed down toilets and fats, oils and greases poured down sinks.
CCW – Public Views on the Water Environment (2021) (Community Research)	July 2021	HH and future customers	Total: 62	The Consumer Council for Water (CCW) wished to conduct research into how people value and understand the water environment, their preferences for how it should be managed, and their views on current policy directions, taking account of the difference in policies between England and Wales.
CCW – Water Matters (2023) (DJS Research)	April 2023	General UK HH customers	Total: 5,502 CAM: 150 SSW: 150	Tracking survey which tracks the views of household customers on the services they receive from water companies in England and Wales.
Garden Water Behaviour Change (2022)	October 2022	HH customers	15 HH, with 3 each from South Staffs and Cambridge, South East Water, Northumbrian Water Group, Portsmouth Water, and Southern Water	Aimed to understand garden water usage in customers, specifically to what extent hot weather changes water usage, what drivers and barriers there are towards behavioural change in this area as well as developing a tool/messaging to enable customers to change behaviour.
Severn Trent – Environmental Destination and Compulsory Metering (2022) (Accent)	May 2022	HH and NHH customers	1,000 customers overall: 817 HHs and 183 NHHs. (490 metered,	To understand customer views and support on universal metering and

Report	Published Date	Participants	Sample Size	Project Objectives
			434 unmetered customers)	environmental ambition.
South Staffs Water – Stakeholder Roundtable Feedback Summary (2021)	October 2021	Stakeholders: Attendees from councils, Citizens Advice, Natural England, Waterwise and consumer industry representatives	8 stakeholders	To consider stakeholder views at a formative stage of the plan development process.
SRO Schemes Research – Public Value (2022) (Accent)	July 22	HH, NHH, and future customers	Qual: unknown Quant: 5,902 HH, 533 NHH	To understand what added value customers perceive is important as part of infrastructure development. To understand preferences for the added value – what should be the balance between options such as economy, jobs, apprenticeships, leisure, education and carbon sequestration etc? Do the preferences change depending on the geographical location/type of scheme or other factors? How much are the customers prepared to pay? What language should be used to explain the added value?
SSC – Appendix E - Customer Research Findings Summary CAM WRMP (2018)	2018	HH, NHH and future customers	7,000+	n/a
SSC - Cambridge and South Cambridgeshire Green Party Consultation Response to CCW's draft WRMP (2023)	May 2023	Stakeholder	n/a	Consultation response to CAM's WRMP draft business plan.

Report	Published Date	Participants	Sample Size	Project Objectives
SSC - Cambridge City Council and South Cambridgeshire District Council Joint Consultation Response to CAM's draft WRMP	n/a	Stakeholder	n/a	Consultation response to CAM's WRMP draft business plan.
SSC – Customer Priorities Infographic (2022)	May 2023	HH and NHH customers	HH: 44 Vulnerable: 5	To provide insight presenting customers' priorities for now and the future.
SSC – Customer Promises Tracking Research Report (2022) (Turquoise)	April 2022	HH and NHH customers	1,106 customers overall: 814 HHs and 292 NHHs	To monitor ongoing customer satisfaction against the key metrics that engagement has shown to be important to customers; these include hard and soft measures. To deliver on-going customer sentiment tracking against key brand statements. To probe awareness and usage of key services and track changes in the way customers wish to interact with SSC. To monitor and track the impact of Covid-19 pandemic on customers – new objective added in 2020/21.
SSC – Customer Tracking Annual Report (2023) (Turquoise)	March 2023	HH and NHH customers	Total 1,134 CAM: - 837 HHs (268 CAM, 569 SSW), 297 NHHs (93 CAM, 204 SSW)	To monitor ongoing customer satisfaction, deliver on-going customer sentiment tracking, probe awareness and usage of key services and track changes in the way customers wish to interact with SSC.
SSC H2Online - Community Feedback WRMP (2019-2022) (Explain)	2022	HH customers	Panel responses vary over time CAM 360+ SSW 315+	To build an engaged community of customers, going beyond gathering insight to establish and

Report	Published Date	Participants	Sample Size	Project Objectives
				sustain two-way engagement. To ensure that the PR24 engagement programme delivers a further step-change in customer engagement.
SSC – ODI Research (2023) (Accent and PJM Economics)	March 2023	HH and NHH customers	Total: 807 HH: 609 NHH: 198 Medically vulnerable: 109 Communications vulnerable: 90 Life-stage vulnerable: 89 Financial vulnerable: 27	Aimed at analysing further segmentation of SSW and CAM Water customer values on top of previous Collaborative ODI research by Ofwat and CWW
SSC – PR19 Data Triangulation Study SSW WRMP (2018)	2019	HH, NHH and future customers	9000+	Appendixes for SSWs PR19 triangulation research. A review of all SSW customer engagement activity relating to their WRMP focusing largely on customer priority.
SSC – PR24 CSA Research (2023) (Impact Research)	September 2023 (Unpublished)	HH and HH customers	43 customers via 6 qualitative focus groups. 10 in-depth HH interviews and 4 NHH. 1,314 HH and 149 NHH quantitative survey	This research was conducted in order to gather insight into customer willingness to pay and acceptance of SSC's CSA plans as well as to understanding the main supporting and opposing factors towards this plan.
SSC – LTDS Report (2023) (Turquoise)	July 2023	HH, NHHs and future customers	Qualitative: 34 HHs, 12 NHHs, 6 FBPs Quantitative: 980 HHs (including 82 FBPs), and 100 NHHs	To understand customers' attitudes and perceptions towards SSC's long-term vision to 2050 and their spontaneous preferences in terms of long-term delivery.

Report	Published Date	Participants	Sample Size	Project Objectives
				Also, exploring SSC's performance and future targets in 10 key ambition areas, and to understand the main reasons that drive customer preferences, and to explore the issue of intergenerational fairness.
SSC - NFU Consultation Response to CAM's draft WRMP (2023)	May 2023	Stakeholder	n/a	Consultation response to CAM's WRMP draft business plan.
SSC – Stakeholder Roundtable: Helping Businesses Save Water (2022)	March 2022	Stakeholders: Universities and local industry	6	To work with businesses in the Cambridge area to find out what can be done with retailers to further support, promote and implement water efficiency in NHH in the next 5 years and beyond (challenges, visions, opportunities).
SSC - WRE Consultation Response to CAM draft WRMP (2023)	March 2023	Stakeholder	n/a	Consultation response to CAM's WRMP draft business plan.
SSC – WRMP and Long-Term Resilience Customer Engagement Insight Full Report (2017) (Community Research)	September 2017	HH and NHH customers	Workshops 62, business and stakeholder round tables 21, survey: 300 in SSW, 200 in CAM	To use the research findings from Phase One to support the development of SSC's WRMP19 in both supply regions, specifically understanding customers' views on; levels of service, leakage, water efficiency, metering, and (if possible) environment impact, and initial thoughts on options for the future and to use the findings from Phase Two to

Report	Published Date	Participants	Sample Size	Project Objectives
				inform investment choices, by giving customers the opportunity to feed into SSC's strategic challenges.
SSC – WRMP MCDA Quantitative Insights (2022) (Accent)	July 2022	HH and NHH customers	Total: 1,015 CAM: 445 SSW: 570 HH: 887 NHH: 128	Explore customers' attitudes and views regarding the natural environment and SSC's approach to planning.
SSC – WRMP Themes 1 and 3 Quantitative Insights (2022) (Accent)	April 2022	HH and NHH customers	Total: 1,180 CAM:427 SSW: 753 HHs: 1,028 NHHs: 152	Core purpose of this study was to provide evidence of customer response and support for; managing droughts, universal metering, leakage, environmental ambition.
SSC – WRMP24 - WRAP Theme 1 Research Findings (2021)	August 2021	HH, NHH and future customers	Total: 47 HHs: 28 NHHs: 10 Future customers: 9	To explore household, future and SME businesses customer preferences in terms of; environmental ambition, levels of service/resilience ambition, water efficiency ambition, and best value planning criteria. To ensure a "golden thread" of customer preferences in these strategic areas, which sets the context for the remainder of the engagement programme.
SSC - Your Water Your Say	n/a	n/a	n/a	Transcript of a customer engagement event run by SSC.
WRE – Club Customer Engagement report (2021) (Blue Marble)	September 2021	HH and NHH customers, and stakeholders	HH: 20 (CAM 5, Essex & Suffolk 5: Anglian 10). NHH: 14 (Anglian 8, Essex & Suffolk 3, CAM 3)	To understand consumer context (general environmental priorities, current awareness of long-term challenges and implications for water

Report	Published Date	Participants	Sample Size	Project Objectives
			Stakeholders: 20 organisations across the 3 companies	<p>suppliers, perception of water suppliers). To explore expectations and priorities re environmental planning. To explore response to the 'best value' plan objectives. To explore options preferences (ranking of preferences and what drives importance). To explore intergenerational economics (response to affordability options to understand generational expectations).</p>
WRW - Updated Regional Plan (2023)	March 2023	n/a	Triangulation of 120 pieces of research	To ensure the customer input in the regional plan is up-to-date by including the latest knowledge (by conducting a triangulation of the most recent customer and stakeholder research).

Overview

As seen in the drivers of best value, environmental concerns are high on the agenda for most customers, having come to the forefront since engagement conducted for PR19 and WRMP19, these usually feature within the top five priorities for customers. Yet despite being a priority, customers were not willing to pay much towards achieving environmental goals and therefore, since 2020 when the pandemic initiated a rise in the cost-of-living, environmental concerns have slipped down the priority list for some, particularly during 2022, replaced by areas that serve personal interests more and protect the financial impacts on them as customers.

To illustrate this, 'environmental ambition' has slipped from most customers wanting SSC to achieve the top level (level 3 as recently as 2021) to more recently favouring a lower level of ambition (level 2 in 2022). (The levels shown to respondents are shown in Appendix B.1.1.) Of course, those who value environmental factors highly still prioritise the environment (higher in the Cambridge region, future customers), despite the cost-of-living impacts seen in 2021-2022. Additionally, the Cambridge region tends to place more value on environmental factors compared to South Staffs Water region, the environment has stayed higher up the priority list and Cambridge customers tend to be slightly more in favour of a faster timetable of delivery of their preferred level of environmental destination.

Stakeholders are especially keen for SSC to reach, and even exceed, environmental targets, with a particular focus on the need to reduce abstraction and to protect local chalk streams. Goals are mainly focused around having a tangible effect on the local and global environment, with a high level of emphasis placed on more ambitious targets with a shorter timeline rather than simply completing current goals set by regulators.

Long term challenges, customers' environmental priorities and expectations of water companies to act on these

In the SSC – WRMP and Long-Term Resilience Customer Engagement Insight Full Report (2017) (Community Research), the environment was not a top-of-mind concern for most customers, many of whom did not make a link between their water company's actions and the environment. Only when prompted to do so, avoiding negative environmental impact became more of a priority. Even with this in mind, motivation for solving environmental problems is relatively low following campaigns stressing negative environmental impact, unless this threat is seen by the customer as personal or imminent (CCW – Desktop Review of Behaviour Change Campaigns, 2023) or there was a financial incentive (CCW – Environmental Awareness Index, 2023). However, the SSC – WRMP and Long-Term Resilience Customer Engagement Insight Full Report (2017) (Community Research) showed there was already a shift in customer views emerging towards prioritising environmental performance more highly, and customers wanted SSC to go further to protect the natural environment and that the business plans need to reflect this. This need was highlighted by falling environmental performance customer perception scores. However, SSC and wider industry willingness to pay studies showed that many customers were not willing to pay significant amounts to protect habitats and rivers (compared to areas like leakage, reliability of supply and water quality). Customers were keen to see evidence of the impact that SSC's activities to protect and improve the natural environment had on their community; for example, it was not enough simply to measure the amount of land protected by SSC. This view is not however, limited to SSC customers with CCW – Water Matters (2023) (DJS Research) finding that slightly less than half of customers across England are satisfied with what their water company does to protect the environment (44%). This was largely due to a dissatisfaction with pollution and sewage in the water, with satisfaction of the cleaning of wastewater properly before it is returned to the environment dropping from 55% in 2021 to 53% in 2022, compared with 76% in 2013.

According to CCW – Environmental Awareness Index (2023), female customers, homeowners, water bill payers, as well as those living in Wales or rural areas had the highest awareness of their own effect on the environment. Other environmentally conscious groups were identified in Garden Water Behaviour Change (2022), finding an “eco enthusiast” group motivated by a desire to be less wasteful, as well as a “green gardeners” group, motivated by a love of nature and environmental altruism. Both of these groups were highly inclined to seek water from alternate sources from hosepipes and were more knowledgeable on the environment and more aware of issues surrounding it compared to others, but differed in their water usage, with “green gardeners using significantly more water than “eco enthusiasts”.

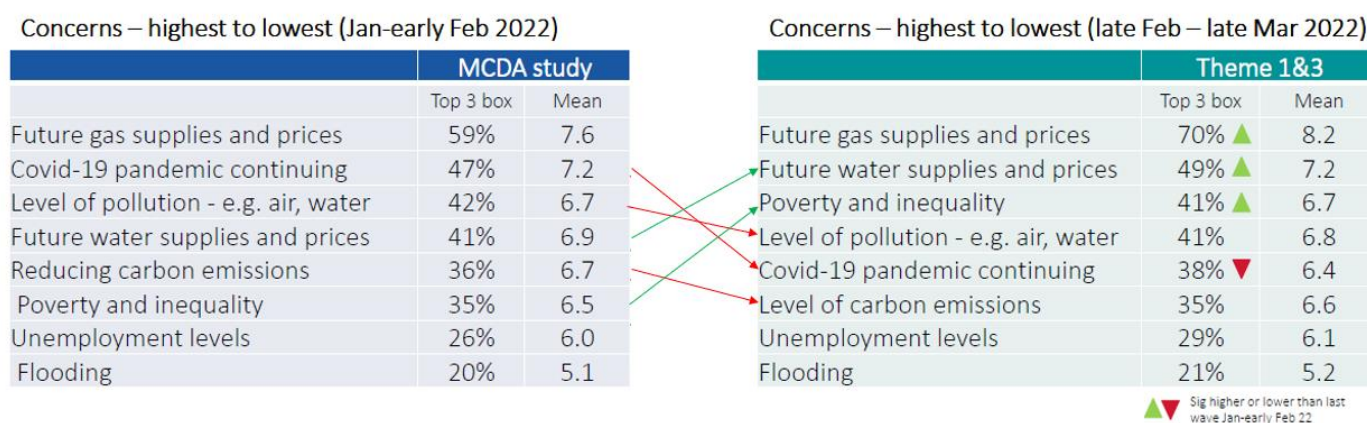
On a general level, customers tend to place more priority on factors that directly, and currently affect them (CCW and Ofwat – Water Consumer Views (2022)). To this end, biodiversity and other environmental service elements tend to be seen as lower priority than more direct and immediate elements such as appearance, taste and smell issues (SSC – ODI Research (2023) (Accent and PJM Economics)). This is further seen in SSC – Customer Promises Tracking Research Report (2022) (Turquoise) where protecting water resources (including working to protect the environment by not taking more water from rivers and underground water sources than needed and helping to ensure sources aren't damaged by pollution) were on the middle-lower end of customers' priority lists, with water quality aspects and bill affordability taking up most of this priority. The largest environmental concerns appear to relate to ecological protection, with a worry about pollution (especially in when it affects human activity such as drinking water) and a care for future generations being seen as highly important, likely due to their immediate nature or heavy news coverage over recent decades.

The CCW – Public Views on the Water Environment (2021) (Community Research), found that water environmental issues were very much seen as part of the wider environment agenda. Following the provision of background information, when asked which water environment-related problems were of most concern, pollution elicited by far the most concern, corroborating with the Customer Priorities Tracker. Climate change, biodiversity loss and water shortages were also widely mentioned. Several factors affected participants' level of concern - how quickly problems might emerge, how easy they will be to reverse, how widely they might spread, and what actions are and could be taken. Again, they considered impacts on both people and the environment/wildlife. Participants tended to have very low levels of awareness of who has responsibility for managing the water environment. Participants from Wales seemed to be more aware of water companies' role in protecting the water environment as they were more likely to mention their water company's role unprompted, before being informed. When asked for their views on who should play a role in addressing issues, the broad consensus was that it was a collective responsibility with multiple actors

needing to play their part. The response of Governments was felt to be crucial in terms of leadership and setting an overarching strategy, as well as in terms of regulation and enforcement. The majority of participants felt that water companies playing an active role was entirely appropriate - they have a vested interest; they have the means, resources and expertise and a direct relationship with consumers, so can influence behaviour. Future customers were less likely to suggest water companies should focus their strongest efforts on their core business or central remit. They were, conversely, almost universally likely to suggest that companies' strongest focus should be on the combined issues of global warming / climate change; and the decline or extinction of plant and animal life.

SSC – WRMP Themes 1 and 3 Quantitative Insights (2022) (Accent) showed that whilst customers were still engaged with and concerned about the environment/climate change, there was evidence that the cost-of-living crisis is pushing environmental issues down customers' concerns list (water bills and poverty/inequality moved to 2nd and 3rd place respectively since the MCDA Quant survey in February 2022 (SSC – WRMP MCDA Quantitative Insights, 2022, Accent) , see 5.1). In addition to this, a general drop can be seen in relation to attitudes towards the environment in SSC – Customer Promises Tracking Research Report (2022) (Turquoise), with 89% of participants stating that they consider water to be a precious resource (a follow up question confirmed this was due to not changing water behaviour, rather than not believing water was a precious resource), and 90% stating that they are conscious of the world around them and that it needs to be looked after for future generations, falling by 2pp compared with the previous year.

Figure 5.1: Changes in concerns between early 2022 and late March 2022 from SSC – WRMP Themes 1 and 3 Quantitative Insights (2022) (Accent)



Research conducted in *Severn Trent – Environmental Destination and Compulsory Metering (2022)* (Accent) showed that an overwhelming majority of customers agreed that it was important for Severn Trent Water (STW) to consider affordability, climate uncertainty and working with abstractors (the latter not mentioned as a priority in SSC's research to date). When asked spontaneously, more customers supported STW investing to the legal minimum with regards to the environment, compared with 38% who support STW investing extensively now to protect the water environment. Once informed, more customers supported STW investing extensively now to protect the water environment compared to those who support investing to the legal minimum (45% compared to 42%), reflecting the importance of education for gaining customer buy-in to investing in the environment from the outset.

Stakeholders have relatively varied areas of prioritisation and concerns regarding the topic of environmental destination. These range from reducing pollution, improving water quality, avoiding habitat loss, population growth and its effects on the environment, and the current threat of climate change (WRW - Updated Regional Plan (2023); SSC – Your Water Your Say). There is a specific level of urgency brought about by many stakeholder groups (South Staffs Water – Stakeholder Roundtable Feedback Summary, 2021; Cambridge Water Stakeholder Roundtable, 2021, Community Research), recognising that climate change is a current threat rather than a future threat. Other stakeholders bring up concerns about the effect of environmental changes on those who are currently financially struggling, suggesting that low-income and marginalised communities will suffer more if there is no balance between the speed of environmental improvements and what customers can afford.

Attitudes and views regarding the natural environment and SSC's approach to planning

During the research from 2020-21 summarised in the SSC – Customer Priorities Infographic (2022) (included in the Appendix), customers stated that essential service levels should include addressing the impact of climate change, including planning long term to meet future demands, to make sure water always comes out of customers' taps. An enhanced level of service would include running a sustainable business e.g. carbon neutral ambitions, removing single-use plastics from business operations and investing in projects that help to protect the environment.

Many participants in the *CCW – Public Views on the Water Environment (2021) (Community Research)* were comfortable in principle with the public paying for improvements to the water environment. They saw benefits in terms of the environment, society and future generations. They also acknowledged that it is acceptable and fair because the public would benefit and have also contributed to the problems. However, a substantial minority disagreed, arguing that polluters should pay, beneficiaries should pay, or water companies should pay from profits. There was some debate on the best way to pay for environmental improvements and the suggestion that a combination of approaches (e.g., tax, water bills, charitable donations) would work best – mainly because each approach had different strengths and weaknesses. Overall, there was widespread support for paying for environmental improvements through water bills. However, there were several caveats, limits and assurances that would make them feel more comfortable about this approach relating to the amount charged (ensuring affordability and keeping increases reasonable) and how the money is spent (money being ring-fenced, activity being monitored and there being evidence of a positive outcome).

Generally, participants accepted paying more for environmental improvements (however, it should be noted, that whilst hypothetical bill increase amounts were deliberately not given, some participants assumed that any increases would be fairly small). They also believed that such increases need to be fair. In particular, the need for the polluter to pay was mentioned repeatedly. Views differed about whether water bill-payers should pay for improvements related to all environmental issues or only some of them. Almost all future customers (who are not yet paying bills themselves) were in favour of paying for action on all environmental issues.

There was no clear separation between participants' thinking as citizens versus their thinking as bill-payers. There was a spectrum of views between 'strongly citizen' and 'strongly customer'. Whilst some were more firmly concerned about the customer and bill-payer perspective throughout; many saw both perspectives at different stages in the process and some took a more firmly citizen approach throughout. Many participants showed signs of thinking in both ways. From early in the forum, it was clear that the water environment spontaneously inspired 'citizen thinking'. It was seen as a valuable resource shared and enjoyed by many now and to be preserved for future generations.

Participants said that the process of deliberative engagement had moved them from the potential to focus on personal financial impact (customer viewpoint) towards support for collective and societal responsibilities (citizen viewpoint).

Knowledge gleaned over the course of the project changed people's perspectives and supported the citizen perspective. Knowing about the issues and water companies' actions had multiple impacts, it emphasised the citizen perspective – seeing the water environment as a collective responsibility, with some even vowing to volunteer and help with solutions; but it also made water bills more justifiable (giving bill-payers understanding of what is delivered, beyond the delivery of tap water and removal of sewage).

With regards to SSC's planning, one stakeholder from an environmental organisation, (engaged with at the *South Staffs Water – Stakeholder Roundtable Feedback Summary (2021)*), pointed out that there is no need to choose between water quality, biodiversity value, and recreational value. This is because improving one tends to improve the others e.g. as shown when improving rivers to meet designated 'bathing river' criteria.

The *SSC – Stakeholder Roundtable: Helping Businesses Save Water (2022)* highlighted more areas where non-household customers and stakeholders felt SSC could support businesses and expedite achieving Net Zero by 2050. Firstly, water should be included in Net Zero strategy. There was a recognition that the corporate strategy for zero carbon targets needs to better tie in water and embed sustainability decision making into the organisation, such as internal carbon pricing to drive investment decision making, costs and managing risks. There was also a suggestion to align new strategies to UN sustainability goals and have carbon ambition targets, as well as biodiversity actions plans in place with direct links to water quality and consumption. The importance of working together was emphasised

and one non-household customer quoted ‘sustainability is a puzzle’ and that it relies on a range of partnerships to really achieve Net Zero, so reliance on suppliers and the value chain to deliver true Net Zero will be required. Opportunities for innovation in the agricultural sector to reduce water dependence were discussed, by reducing water usage and power generation with the use of artificial intelligence in terms of energy management (targets, benchmarks). Machine learning can help identify patterns in use and recommend solutions. A holistic view is important but more systems thinking is needed about how water is managed to understand where water is coming from and how it is being used. Finally, it was discussed that we might see more regulation around water usage to change the way water is valued, to incentivise change in behaviour usage. Also increasing energy/fuel costs may push the distribution model to be more regionalised around storage and transportation.

The *SRO Schemes Research – Public Value (2022) (Accent)* showed that environmental project additions were mainly valued more highly than social and economic ones. Public Value in water infrastructure projects was well supported but not unconditional.

“I feel a lot of those environmental ones go in the top corner – there’s a lot of construction with projects so there will be a negative impact. You should offset and add back – not just plant some trees” Cambridge Water, Future

Public Value additions in water infrastructure were not universal; there were a number of project additions that transcend projects, but customers expect different project additions/benefits according to core project needs. Economic additions and Environmental additions were felt to transcend all infrastructure projects (reservoir, canal, water treatment works and underground pipelines). There was a high emotional resonance with these additions and the narrative of supporting wildlife/new wetlands/habitats chimes with customers across water companies. The top-three most highly valued environmental 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). Future customers had strong engagement with the environment; they took a longer-term view and were keen to see environmental additions. Social project additions generally tended to have lower importance than economic or environmental additions.

“It’s not about education in terms of learning but education in terms of experiencing and respecting and understanding” Cambridge Water, HH, ABC1

Key economic additions (such as apprenticeships and boosting local employment) were felt to have strong persuasive impact and positive impact on brand reputation. Non-household customers had personal experience of economic additions e.g. aware of difficulties with apprenticeship schemes.

Public value in the water space was expected to fulfil five specific criteria; local community centric; long term justifiable value; sustainable; water relevant and low maintenance. In the quantitative work, overall, project additions at water treatment works were valued most highly, followed by reservoirs, canals, and pipelines. This could be due to reservoirs/canals being naturally more positive/pleasant. Qualitatively, people felt that the social project additions at water treatment works would be less valuable as they would be unlikely to want to visit but environmental and economic benefits were supported.

Environmental stewardship and level of ambition

The *SSC – WRMP24 - WRAP Theme 1 Research Findings (2021)* showed that customers felt water companies have a central role in caring for water environment, but everyone else has a role to play too. Customers preferred an ambitious target with regards to the environment (level three, the highest level, which includes greater collaboration for planning; ecological surveys to support decision making; reviewing supply options to compensate for taking less water from rivers and streams). In spite of this being the most expensive option, it was considered worth it to ensure supplies are maintained and to protect environment. This was particularly the case in the Cambridge region where there was more detailed knowledge about water environment problems and more support for ambitious targets (level 3) compared to South Staffs.

At the Cambridge Water Stakeholder Roundtable (2021) (Community Research), stakeholders argued strongly that Cambridge Water should aim for the highest level of ambition and aim to achieve it as quickly as possible. There was less agreement on where to focus, with arguments for focusing on areas of unique significance and the wide water environment, people and nature. There was a need to overcome barriers such as affordability, customer acceptability and regulatory framework, but that these cannot be allowed to hamper progress. For these

stakeholders, environmental impact was by far the most important criterion for choosing between supply and demand options and cost was much less of a consideration. It was suggested that customers should simply absorb the cost, with measures put in place to protect customers in financial difficulty.

One stakeholder engaged via the *South Staffs Water – Stakeholder Roundtable Feedback Summary (2021)* said that their organisation would strongly support South Staffs Water working towards level three, i.e. the most ambitious level, to help cope with the challenges of climate change.

The *CCW – Public Views on the Water Environment (2021) (Community Research)* report revealed that participants expected those who negatively impact on the water environment (for example farmers, developers as well as individual consumers) should have a significant responsibility; in addition to individual consumers. Action by the latter was felt to be constrained by consumers not knowing what to do and perceptions that individual actions do not make much difference. Participants spontaneously discussed how action to tackle water environment issues might be stimulated. Most focussed on a ‘carrot and stick’ approach i.e., stringent fines when rules are broken and incentives to encourage positive behaviour change. The call for fines and incentives applied at individual, organisational and community levels, for example fines for individuals who litter as well as fines for companies or farmers who pollute waterways. Participants were provided with information about the actions that water companies can take on the environment in the form of an animation, which provided examples and described three possible levels of action that water companies might undertake in relation to different issues. For all of the stated issues, the desire expressed by the majority of participants was for water companies to go ‘beyond the basics’ of meeting the minimum legal requirements. This was particularly strongly expressed in relation to both the decline or extinction of plant and animal life and global warming / climate change, where half or (in the case of extinction of plant or animal life) over half, wanted water companies to go to the highest possible level.

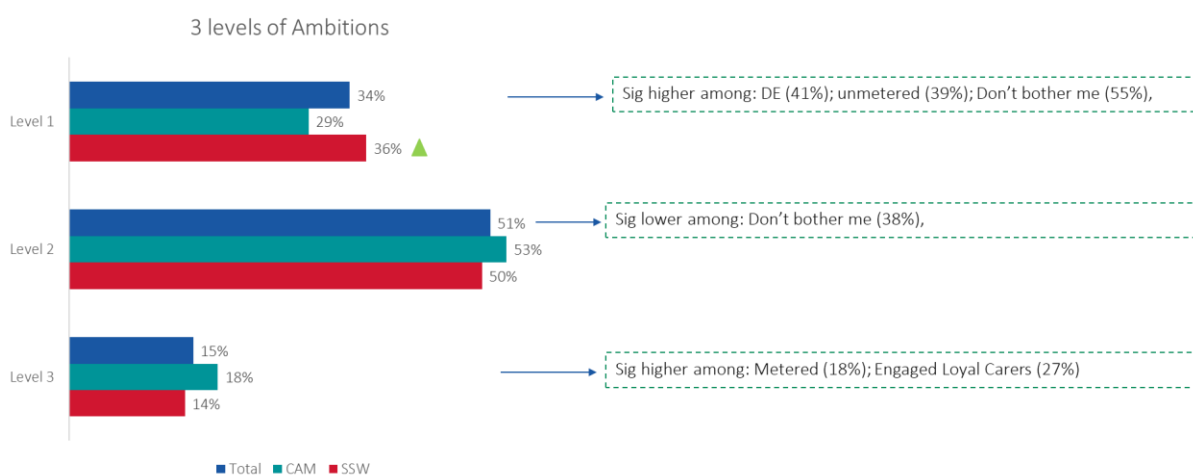
During the *SSC H2Online - Community Feedback WRMP (2019-2022) (Explain)* 67% of South Staffs Water and 75% of Cambridge Water members said that legally binding biodiversity targets were important. A further 25% of SSW and 15% of CAM members indicated that they felt that targets were important, but that they should not be legally binding. Only one respondent (out of 44) indicated that they did not think targets should be set by the Government in relation to biodiversity.

In 2022, the *SSC – WRMP Themes 1 and 3 Quantitative Insights (2022) (Accent)* provided information to customers (see Appendix, B.1.2) and found most support for level 2, rather than level 3 as seen in earlier research; the water environment stays as protected as it is now, but South Staffs/Cambridge Water also prioritises some of these to protect and improve them:

Figure 5.2: Allocations of Levels of Ambition from SSC – WRMP Themes 1 and 3 Quantitative Insights (2022) (Accent)

Levels of ambition:

Around half of customers opted for level 2, and about a third chose level 1. Significant more customers in SSW chose level 1 when compared to CAM. No sig differences between HH and NHH



Q52. There are broadly three levels of environmental ambition that could go into SSW/CAM plans. Which option would you prefer SSW/CAM to implement: (n= 1,180, CAM: 293, SSW: 887)

▲ Sig higher or lower than at least one attribute in the same category

By selecting level 2, customers prefer a balance between protecting the environment and the cost to them personally. This is showing the pressures created by the cost-of-living crisis are starting to change customer priorities and ambitions, with environmental concerns taking the brunt of the changes in the short-term. Those who supported Level 3 were significantly more likely to be environmentally engaged/concerned as found in previous work and for them the priorities are relatively unchanged. Those who support Level 1 are generally environmentally supportive but are concerned about the impact of the cost-of-living crisis and uncertainty around household bills which takes priority.

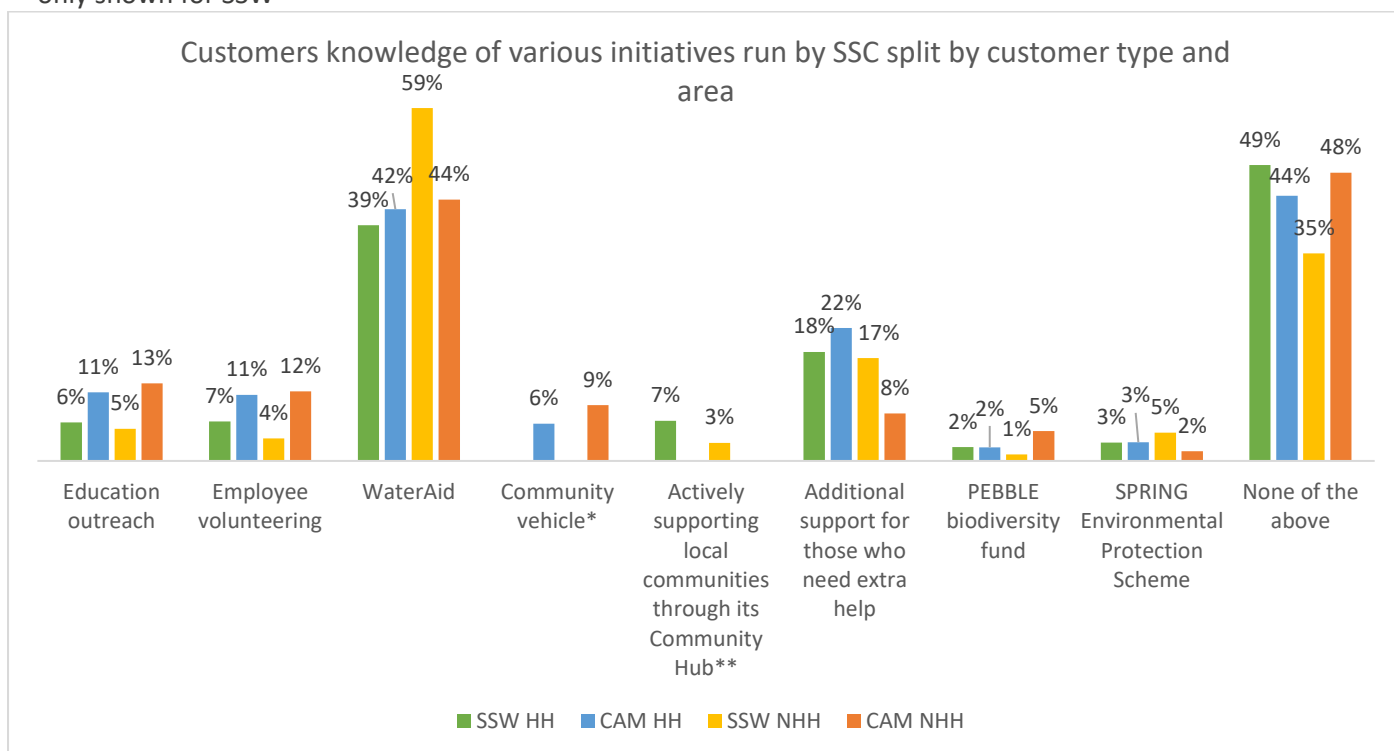
The *SSC – Customer Promises Tracking Research Report (2022) (Turquoise)* found that 44% of household customers agreed that SSC is environmentally focused and does a good job at helping to protect the environment in the areas they take water from. This was highest in NHHs (51%), compared with HHs in the South Staffs region (45%) than Cambridge (41%). A similar number of customers stated that they believe SSC runs an environmentally sustainable business (44%), with more South Staffs HHs agreeing with this (45%) compared with CAM HHs (41%) or with NHH (43%). This highlights the need for SSC to better engage its customer base around the environmental programs it runs.

General awareness for SSC’s environmental programmes alongside other initiatives remains notably low, with qualitative groups during *SSC – PR24 CSA Research (2023) (Impact Research)* stating that despite being impressed by what SSC does during these initiatives, most were completely unaware that these programmes existed, with some participants specifically asking if more can be done to raise awareness of them. The CSA’s quantitative element displayed similar findings, with 47% of the sample not being aware of any of the initiatives. Environmental initiatives scored especially low in terms for awareness, with only 3% of HHs in both regions, 5% of SSW NHH and 2% of CAM NHH being aware of the SPRING Environmental Protection Scheme, and even less being aware of the PEBBLE biodiversity scheme. Please note these initiatives were displayed as a pre-coded list, rather than customers being asked to name them spontaneously.

Figure 5.2: Results from the quantitative phase of the CSA showing which SSC community initiatives customers had heard of, split via customer type and service area. (Base size: 936 SSW HH customers, 378 CAM HH customers, 107 SSW NHH customers, 42 CAM NHH customers).

*only shown for CAM

**only shown for SSW



Time period for improvements to be funded

When asked in the *SSC – WRMP24 - WRAP Theme 1 Research Findings (2021)*, there was no clear preference for a timetable to deliver the preferred level of environmental destination, but 20 years seemed a reasonable compromise for most, although Cambridge gave slightly more support for a faster timetable than the South Staffs region.

The *Cambridge Water Stakeholder Roundtable (2021) (Community Research)* were clear that changes need to be made as a matter of urgency. The consensus was that there is an urgent need to take action before it is too late. They mentioned, for instance, that some local streams had been dry for a couple of years and local councils already recognise both climate and biodiversity emergencies. One stakeholder pointed out that on climate change “we’ve got 10 years left” to avert the worst effects, and because the next WRMP covers 2025- 2030, it must include ambitious steps to address climate change. One stakeholder argued that Cambridge Water should make the most of current opportunities by producing an ambitious WRMP. They noted several current opportunities that mean that this WRMP “could be a huge step change”: the Government’s stated focus on the environment; the new national strategy for chalk streams; the current interest in integrated water management (i.e. the integration of water resource management and flood risk management); and the well-organised national and regional approach to water resource planning. Another stakeholder felt that Cambridge Water had “dragged their feet” compared to Affinity and Anglian Water so now “needed to up their game”.

In 2022, the *SSC – WRMP Themes 1 and 3 Quantitative Insights (2022) (Accent)* study concluded that 46% of SSW customers support the 2050 deadline for reaching their preferred environmental destination (level 2 for most). (Stimulus materials shown to respondents in this study is included in the Appendix). CAM customers who are known to be slightly more supportive on environmental priorities, were split between those supporting the proposed timeline (42%) and those who believe it is too late (38%), echoing the results seen in the earlier SSC WRMP24 - WRAP Theme 1 research findings.

SSC – LTDS Report (2023) (Turquoise) saw customers making preferential choices on long-term potential investments for SSC. During this study support for WINEP investment was relatively high, with 92% of participants stating that they support long-term investment target proposed in this area. WINEP is a program of actions to be taken by water companies for ensuring water environments have a healthy level of water flow by reducing human demand for water, for example by 50 million litres per day by 2050 in the CAM region. Although a high number of participants supported WINEP investments, it only ranked as 7th out of 10 investment ambition areas tested in SSC workshops, and 8th on a quantitative survey, suggesting it is highly important, but there are other more important areas to a lot of customers.

Future customers showed a higher level of concern for this priority, while vulnerable, low-income customers, as well as those who have difficulty paying for water bills showed lower support than other customers (although support was still relatively high, with 82% of those who struggle to pay water bills stating that they supported this area of investment). The main reasons for supporting this investment were to protect the environment, and future proofing, with 65% of participants (69% in future customer groups, and 74% in NHH groups) stating they would prefer to have this work completed before the 2050 deadline, and 28% stating they’d want it completed by 2035. It is worth however noting that some customers suggested that with the cost-of-living crisis in mind, they would consider longer term goals as an option. Customers appear to be much more supportive in terms of long-term environmental investment in comparison to previous evidence shown, with almost universal support for funding being mitigated only by stronger support for other investments. However, this could be due partially to the ambitions presented being a preferential for investment phasing, with no bill impacts being shown, and investments being relatively removed from participants’ current situations, with most of them happening so far in the future.

Impact of abstracting water on the water environment

Consumers in the WRE – Club Customer Engagement report (2021) (Blue Marble) had no awareness of previous levels of abstraction causing environmental damage but wanted to see rivers recover. The majority of customers said they were willing to pay for environmental improvements, however, there was clear message that it should not be at any price.

Abstraction was a much more prominent topic of discussion during stakeholder engagement. There are a wide range of groups including farmers (SSC - Your Water Your Say; SSC - NFU Consultation Response to CAM's draft WRMP (2023)), local authorities (SSC - Cambridge and South Cambridgeshire Green Party Consultation Response to CCW's draft WRMP (2023); SSC - Cambridge City Council and South Cambridgeshire District Council Joint Consultation Response to CAM's draft WRMP), environmental organisations (South Staffs Water – Stakeholder Roundtable Feedback Summary (2021), WRE (SSC - WRE Consultation Response to CAM draft WRMP (2023) calling for substantial reductions in abstractions, with a desire for targets to be met earlier than the proposed 2050 date, as well as improving the resilience of watercourses and chalk streams across the area.

Golden Threads: Environmental destination

Golden Threads	The need for customer information and engagement	Customer support for environmental programmes is reflective of their understanding, when informed, of what SCC is doing and the benefits that result. For example, the strong level of support for the new reservoir among Cambridge customers partly reflects the perceived benefits of relying less on environmentally impactful measures such as abstraction from underground aquifers that feed chalk streams.
	Call for collective responsibility and fairness	Customers are looking for more of a balance between the costs of protecting the environment and keeping their personal financial burden to acceptable levels.
	Concern for the environment	While environmental concerns remain high on the agenda for most customers, they are not willing to pay as much towards achieving environmental goals as other areas of the core service, where needs are felt

		to be more immediate. With the steady rise of concerns related to the cost-of-living, environmental concerns have inevitably slipped down the priority list for some, replaced by areas that serve personal interests more and protect them from the financial impacts. However, the environment remains an important area of focus for customers.
	Protection for vulnerable customers	There were no topics relating to vulnerable customers in the context of concern for the environment
Emerging thread	Cost of living	The lower short-term priority of environmental ambition among customers reflects the growing emergence of the cost-of-living crisis.

Demographic Splits: Environmental Destination

The table below provides a brief summary comparison of each of the key demographic groups, related to environmental destination. Please see the appendix for detailed tables of each split.

Demographic group(s)	Key findings/ comparisons
SSW vs CAM	Appendix A.4.1 summarises SSW and CAM preferences in relation to environmental destination. There was relatively little difference between the environmental views of SSW and CAM customers. CAM customers were slightly stricter in terms of legally binding targets surrounding biodiversity, while SSW customers were slightly more likely to believe that the company is already sustainable.
HH vs NHH	Appendix A.4.2 summarises HH and NHH preferences in relation to environmental destination. Although all customers value the environment, it appears that NHHs are more likely to believe that SSC is environmentally focused, and NHHs are more in favour of SSC investing in WINEP ahead of the set targets, than HH customers are.
FBP vs current bill payers	Appendix A.4.3 summarises future customer preferences in relation to environmental destination. Environmental and pollution concerns are both key spontaneous priorities of future billpayers. They place a higher emphasis on a company's environmental approaches, both as customers and potential employees. Future billpayers have a noticeably higher willingness to pay for protecting wildlife and habitats and are generally more inclined to invest in environmental improvements compared to current customers. However, while they discuss the environment often, they often lack specificity. Future billpayers exhibit significant support for water industry environmental investments, even more so than the average customer, and prefer these goals to be achieved before 2050.
Vulnerable vs other customers	Appendix A.4.4 summarises vulnerable customers' preferences in relation to environmental destination. Vulnerable, low-income customers prioritised tackling water poverty over reducing leakage, and are less keen on paying more to fund WINEP investment.
Stakeholders vs customers	Appendix A.4.5 summarises some of the key themes relevant to environmental destination from the stakeholder consultation undertaken during the WRMP24 planning process. Many stakeholders place high importance on the environment, and are interested in SSC's environmental destination approach. Some are on board with SSC's plans to protect the environment, whilst others want more

information on exactly how SSC plans to reach the most ambitious targets. Furthermore, some stakeholders still do not believe SSC is doing enough to combat climate change. This care for the environment comes across strongly for some stakeholders, especially among those with an environmental focus. This is similar to future customers (who also often prioritise the environment), although most customer group place high importance on the environment.

8. SERVICE LEVEL RESILIENCE TO DROUGHT

Bibliography

Report	Published Date	Participants	Sample Size	Project Objectives
Garden Water Behaviour Change (2022)	October 2022	HH customers	15 HH, with 3 each from South Staffs and Cambridge, South East Water, Northumbrian Water Group, Portsmouth Water, and Southern Water	Aimed to understand garden water usage in customers, specifically to what extent hot weather changes water usage, what drivers and barriers there are towards behavioural change in this area as well as developing a tool/messaging to enable customers to change behaviour.
Hafren Dyfrdwy – WRMP Customer Research (2022) (Blue Marble)	June 2022	HH, NHH and future customers	35 customers overall: 4 future, 20 HHs, 6 NHHs, 5 digitally excluded customers.	To understand HD customers' views of the initial WRMP proposals. Specifically, to gauge response to proposed use of: water restrictions, ways to reduce demand, use smart meters, meet the new leakage targets, water transfers, and response to plans to support private supply households.
Severn Trent – WRMP24 (2022) (DJS Research)	May 2022	HH and NHH customers	HH: 624 NHH: 149	Measure customers' preferences for water resources, levels of service and the options or plans that Severn Trent might create to address any changes to levels in service or to address a supply-demand deficit. To develop a Best Value Plan in line with Water Resource Planning guidelines.
SSC – Appendix E - Customer Research Findings Summary CAM WRMP (2018)	2018	HH, NHH and future customers	7,000+	n/a
SSC - Cambridge City Council and South Cambridgeshire District Council Joint Consultation Response to CAM's draft WRMP	n/a	Stakeholder	n/a	Consultation response to CAM's WRMP draft business plan.

Report	Published Date	Participants	Sample Size	Project Objectives
SSC – LTDS Report (2023) (Turquoise)	July 2023	HH, NHHs and future customers	Qualitative: 34 HHs, 12 NHHs, 6 FBPs Quantitative: 980 HHs (including 82 FBPs), and 100 NHHs	To understand customers' attitudes and perceptions towards SSC's long-term vision to 2050 and their spontaneous preferences in terms of long-term delivery. Also, exploring SSC's performance and future targets in 10 key ambition areas, and to understand the main reasons that drive customer preferences, and to explore the issue of intergenerational fairness.
SSC - National Trust Consultation Response to SSW draft WRMP	n/a	Stakeholder	n/a	Consultation response to SSW's WRMP draft business plan.
SSC – NERA Willingness to Pay for Water Services at PR24 (2022)	December 2022	HH, NHH customers and future billpayers	Total: 1250 CAM: 424 SSW: 833 Future billpayers: 54	Aimed at designing, implementing and analysing a stated preference survey in order to gain an estimate of customer WTP for service improvements from SSC with the overall aim of informing their PR24 business plan. HH, NHH and future customers were of specific focus.
SSC – ODI Research (2023) (Accent and PJM Economics)	March 2023	HH and NHH customers	Total: 807 HH: 609 NHH: 198 Medically vulnerable: 109 Communications vulnerable: 90 Life-stage vulnerable: 89 Financial vulnerable: 27	Aimed at analysing further segmentation of SSW and CAM Water customer values on top of previous Collaborative ODI research by Ofwat and CWW
SSC – ODI Research Pilot (2022) (Accent)	June 2022	HH and NHH customers	552 total interviews	A review of methodological options aimed at informing ODI rate for PR24.
SSC – PR19 Foundation Research June (2017) (Accent)	June 2017	HH and NHH customers	93 Total: 70 HH, 23 NHH	To understand customer priorities for service delivery both now and over the longer term (prompted and unprompted) and to check these against previously established priorities in PR14 work.

Report	Published Date	Participants	Sample Size	Project Objectives
SSC – WRMP and Long-Term Resilience Customer Engagement Insight Full Report (2017) (Community Research)	September 2017	HH and NHH customers	Workshops 62, business and stakeholder round tables 21, survey: 300 in SSW, 200 in CAM	To use the research findings from Phase One to support the development of SSC’s WRMP19 in both supply regions, specifically understanding customers’ views on; levels of service, leakage, water efficiency, metering, and (if possible) environment impact, and initial thoughts on options for the future and to use the findings from Phase Two to inform investment choices, by giving customers the opportunity to feed into SSC’s strategic challenges.
SSC – WRMP Themes 1 and 3 Quantitative Insights (2022) (Accent)	April 2022	HH and NHH customers	Total: 1,180 CAM:427 SSW: 753 HHs: 1,028 NHHs: 152	Core purpose of this study was to provide evidence of customer response and support for; managing droughts, universal metering, leakage, environmental ambition.
SSC – WRMP24 - WRAP Theme 1 Research Findings (2021)	August 2021	HH, NHH and future customers	Total: 47 HHs: 28 NHHs: 10 Future customers: 9	To explore household, future and SME businesses customer preferences in terms of; environmental ambition, levels of service/resilience ambition, water efficiency ambition, and best value planning criteria. To ensure a “golden thread” of customer preferences in these strategic areas, which sets the context for the remainder of the engagement programme.
WRE – Club Customer Engagement report (2021) (Blue Marble)	September 2021	HH and NHH customers, and stakeholders	HH: 20 (CAM 5, Essex & Suffolk 5: Anglian 10). NHH: 14 (Anglian 8, Essex & Suffolk 3, CAM 3) Stakeholders: 20 organisations across the 3 companies	To understand consumer context (general environmental priorities, current awareness of long-term challenges and implications for water suppliers, perception of water suppliers). To explore expectations and priorities re environmental planning. To explore response to the ‘best value’ plan objectives. To explore options preferences (ranking of preferences and what drives importance). To explore intergenerational economics (response to affordability options to understand generational expectations).
WRW - Updated Regional Plan (2023)	March 2023	n/a	Triangulation of 120	To ensure the customer input in the regional plan is up-to-date by including the latest knowledge (by conducting a

Report	Published Date	Participants	Sample Size	Project Objectives
			pieces of research	triangulation of the most recent customer and stakeholder research).
Garden Water Behaviour Change (2022)	October 2022	HH customers	15 HH, with 3 each from South Staffs and Cambridge, South East Water, Northumbrian Water Group, Portsmouth Water, and Southern Water	Aimed to understand garden water usage in customers, specifically to what extent hot weather changes water usage, what drivers and barriers there are towards behavioural change in this area as well as developing a tool/messaging to enable customers to change behaviour.

Overview

The majority of customers are in favour of current resilience plans, service levels, targets and timelines associated with these, and usage of TUBs and NEUBs; in fact, multiple studies show customers would be willing to accept more frequent drought interventions or lower service levels than they experience at present. Business customers seemed more mixed in their views than household customers, perhaps this is because they see their usage as “essential” where others might define it as non-essential.

Although also in favour of the drought targets and timelines, stakeholders remain sceptical about the targets and if they are achievable, as they want greater clarity on how the targets are going to be met.

Customers were unwilling to accept the most severe water use restrictions (drawing water from a standpipe/rota cuts) and therefore these scenarios should be avoided, except in the case of extreme emergencies.

Speed at which customers want to move from 1:200 to a target of 1:500 resilience with regards to emergency drought restrictions

The *SSC – WRMP24 - WRAP Theme 1 Research Findings (2021)* discussed the resilience targets and found that the Environment Agency 1:500 year emergency drought target was widely supported, but there were mixed views on speed of delivering this. This was a complex area for customers to understand and comment on, perhaps leading to the conflicting views; some suggested the ambition is unrealistic given climate change that is already happening; a couple thought that the longer time frame is important to spread out the cost; a small number thought that 2040 is too long to wait for change; some believed it will be difficult to bring companies together so think the timeline is slow but realistic; and lastly some believed that the companies will fail to achieve the target unless they also invest in educating customers.

Similarly, *SSC – LTDS Report (2023) (Turquoise)* study also found most customers felt the ambition to reduce the need to bring in an ‘emergency drought order’ restriction from 1 in 200 in any given year to 1 in 500 by 2040 was acceptable. Many felt this could be done by addressing leakage issues and re-utilising ‘grey water’, such as harvesting rainwater to water gardens and flush toilets.

In Severn Trent’s region, the *Severn Trent – WRMP24 (2022) (DJS Research)* report found that at present, the risk of an extreme drought that might involve such things as mobile water tanks having to be deployed is at 1 in 200 years and Severn Trent will be following the Environment Agency’s regulatory requirement for all water companies to get

to 1 in 500 by 2039. Three quarters of both households and non-households (both 75%) stated they would find this timescale acceptable.

Majority of Stakeholders were also found to support bringing forward standards to 1 in 500 years by 2025 from 2050 in the *WRW - Updated Regional Plan (2023)*. However, some stakeholders are not convinced the plans are being realistic with prevention of droughts as there are a multitude of natural factors that are going to bring greater droughts and so feeling as the numbers such as “1 in 500 years” to be hollow. Similarly, Ofwat also felt when feeding back on draft plans that the targets set are lacking sufficient testing or explanation and so expect regional water resources planning groups to explore full the trade-offs around different pathways to 1 in 500 year drought resilience and to identify and present costs and benefits of varying the timings of the final plans.

Drivers of customer support for the level of resilience in the plan

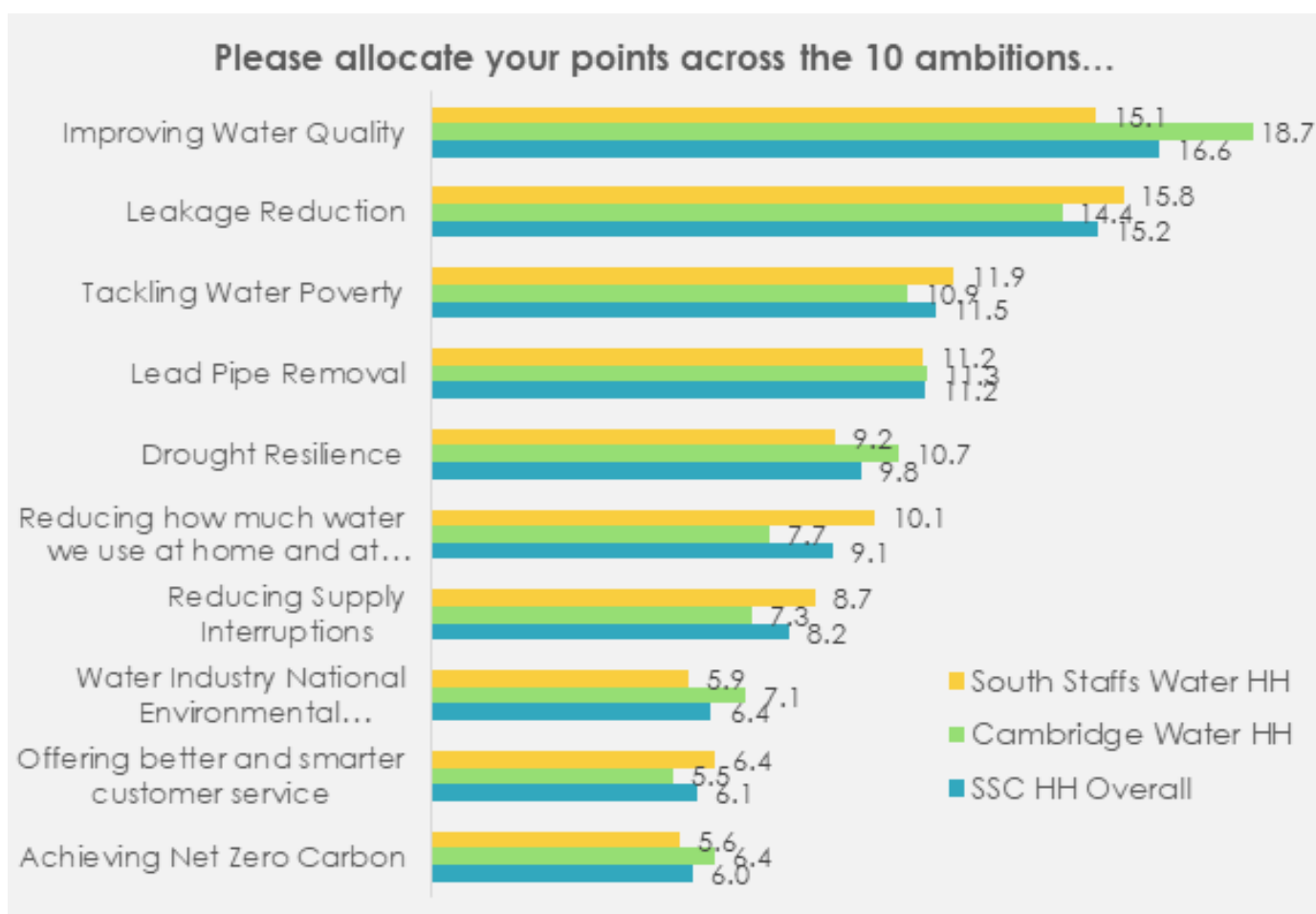
Although most of the literature reviewed seems to support current resilience plans (or even tougher restrictions), not much has been explored in terms of the reasons why this might be. The *WRE – Club Customer Engagement report (2021) (Blue Marble)* found that drought resilience should focus first on making the most of what water there is, before increasing supply through new options. Demand-side options were favoured above new supply options, with leakage the number one issue that water companies should address (unaware that customers have a part to play here too). Other options involving customer behaviour change and universal metering were secondary. Businesses, always with an eye on cost, were interested in recycling their water and want water companies to prioritise this.

Another study, the *SSC – WRMP Themes 1 and 3 Quantitative Insights (2022) (Accent)*, found that around three quarters of customers support the use of more frequent TUBs/NEUBs, particularly during long periods of dry weather when around 50% support their use every time, which is driven by customers having environmental concerns and wanting to ensure long term resilience. There was also hope that it might discourage those who use a lot of water for non-essential purposes from doing so.

In *SSC – LTDS Report (2023) (Turquoise)*, drought resilience was ranked 5th out of 10 ambitions as a priority for investment for HH overall (Figure 6.1). The key reasons for this were due to climate change and the changing environment, coupled with the need to maintain supply and prevent droughts.

‘We are more likely to have to ration our water due to climate change so need to deal with it rather than make excuses.’ CAM HH Customer

Figure 6.1: The average points (out of 100) allocated by region across the 10 ambitions, from SSC – LTDS Report (2023) (Turquoise)



Planning balances for resilience and trade-offs customers would accept

The *SSC – PR19 Foundation Research June (2017) (Accent)* showed that customers expect innovation from SSC to help reduce wastage, monitor usage and ensure resilience of the network in the face of population growth, climate change and energy challenges. This was reinforced in the *SSC WRMP Full Report* later the same year, which showed avoiding restrictions is not a priority and that levels of service could potentially be reduced, and few would worry if this were the case. Although *SSC – Appendix E - Customer Research Findings Summary CAM WRMP (2018)*, stated that a reduction in service could be considered, this report was more cautious, highlighting that as many customers cannot recall experiencing the most recent temporary ban, there was no sure way to know how this would impact on their overall satisfaction levels if they were to experience one. Maintaining the current service levels was therefore recommended. There was no evidence from the group of business customers from the same study, that the 1 in 50-year service level commitment should be changed. The WTP study also backed this up with business customers giving temporary bans a relatively low valuation. However, there was a clear call for businesses to receive more detailed information about what water usage is restricted during a NEUB, if the need ever arises.

The *WRE – Club Customer Engagement report (2021) (Blue Marble)* asked customers to trade off two resilience scenarios. The first being using drought permits more versus investing in new infrastructure such as desalination plants, new reservoirs and water recycling treatment. Overall, customers found this a difficult decision, but investment in new infrastructure is the more popular option. Most felt new initiatives provided a long-term strategy for water resilience, whereas at present drought permits are being used but there is still a risk of water shortage and therefore it did not feel like a long-term solution. Bill increases were a concern, however many felt that the need to invest is inevitable and it would be better to do so now, than continue damaging rivers until they run dry. For some the risk to the water supply did not feel so bad as to warrant building new infrastructure, particularly given the high associated financial and environmental costs of some of the associated options – desalination in particular. They would prefer to carry on using drought permits to avoid even greater damage to the environment from the new

measures. However, the possibility of using renewable energy largely dispels negativity over the environmental impacts of the new infrastructure.

The second trade off captured was investing sooner or later, to avoid supply restrictions before 2039, and on this point opinion was divided across the sample, with no clear consensus on the best option. Many felt that if new infrastructure will be needed at some point, it would make sense just to 'get it done', although this thought process is divorced from the actual benefits of a shorter timescale. However, for many the amount of time saved did not feel significant, and preference is based on the associated supply options rather than the pros and cons of the different timescale. For example, some chose 'Sooner' because it doesn't involve the drought permits they had rejected in the previous trade-off. Some younger customers believed that better technology may exist in the future which would increase supply with fewer impacts on the environment. Customer sentiment around this issue is less about avoiding supply restrictions and more about feeling that the long-term water supply is being safeguarded, as that is their bigger concern.

Some stakeholders like the National Trust expect the development of strategic regional level drought resilience measures to be in parallel with the new infrastructure programme (*SSC - National Trust Consultation Response to SSW draft WRMP*).

Acceptable levels of resilience expected from SSC willingness to pay for any improvements

Temporary use bans (TUBSs) – household

The *SSC – WRMP24 - WRAP Theme 1 Research Findings (2021)* showed that Level 1 (information) & 2 Temporary Use Bans (TUBs) restrictions were acceptable and justified for most, although there were a slightly higher number of objections to more frequent restrictions in SSW even though the majority were still in favour. Those on the PSR were less willing to accept lower service and were more likely to voice issues and concerns with restrictions because of the impact on them personally. There was a slight preference for TUB restrictions to be done via a rota in SSW, whilst in CAM customers were more likely to be in favour in principle but identified issues including about how they would be policed, potential confusion about the rules and whether it is too drastic a solution.

The *SSC – WRMP Themes 1 and 3 Quantitative Insights (2022) (Accent)* found that without any prior education on the topic, around three quarters of customers support the use of more frequent TUBs/NEUBs, with around 50% supporting their use every time there is a long period of dry weather. This is driven by customers having environmental concerns and wanting to ensure long term resilience. Three propositions were tested for reducing customer demand for water and the highest level of support was for the use of TUBs/NEUBs every summer where the amount of rainfall is well below average (62% supported). Although it received the lowest level of support, 43% of customers support the use of TUBs/NEUBs every summer, mainly to discourage heavy users of water.

Similarly, the *Garden Water Behaviour Change (2022)* paper also found broad support for TUBs, especially during prolonged periods of hot and dry weathers, across the 15 households who took part in the study (representing 5 different water companies including SSC). Most customers also expected TUBs to be implemented more frequently with the expectation that hot and dry summers are becoming more likely with global warming. The participants were also quite familiar with what the rules were and felt it was easy to comply with the ban on a practical level, but nonetheless they expressed some frustration with not being allowed to use the water as they want.

This sentiment is echoed in Hafren Dyfrdwy's region, as *Hafren Dyfrdwy – WRMP Customer Research (2022) (Blue Marble)* found that customers and future customers support their proposed level of risk of drought restrictions: many would accept more frequent restrictions. The majority supported the proposal for managing risk of drought restrictions based on a 1 in 40-year likelihood and/or would not mind a more frequent likelihood of restrictions. All respondents were asked about non-essential usage bans, the risk was clearly acceptable; most believed a 100-year frequency is a reasonable risk and many were relaxed about the frequency increasing.

In Severn Trent's region, the *Severn Trent – WRMP24 (2022) (DJS Research)* report, found that overall, household customers were most likely to recall restrictions on water usage (such as hose pipe bans) with 59% experiencing this

issue at some point (compared to 41% who have never experienced this issue). A half of household customers have also experienced interruptions to their supply, with 30% recalling that this happened within the last three years.

Most recently, the *WRW - Updated Regional Plan (2023)* report showed that in 2022 customers supported the need for TUBs and NEUBs as it was the most popular way to reduce demand during the summer months (e.g. versus higher charges for the highest consumers). However, in 2023, it is less clear whether customers find more frequent restrictions acceptable or not since they had more direct experience of restrictions compared to previous years as TUBs were given in parts of the UK during the summer 2022. Although there was support for more frequent restrictions, if necessary, with three quarters of SSC customers support the use of more frequent TUBs/ NEUBs particularly during long periods of dry weather, others expressed they would like them less frequently.

Non-essential use bans (NEUBs) – non household

The *SSC – WRMP24 - WRAP Theme 1 Research Findings (2021)* found that SMEs were more likely to raise concerns about restrictions than other groups, given their experiences over lockdown.

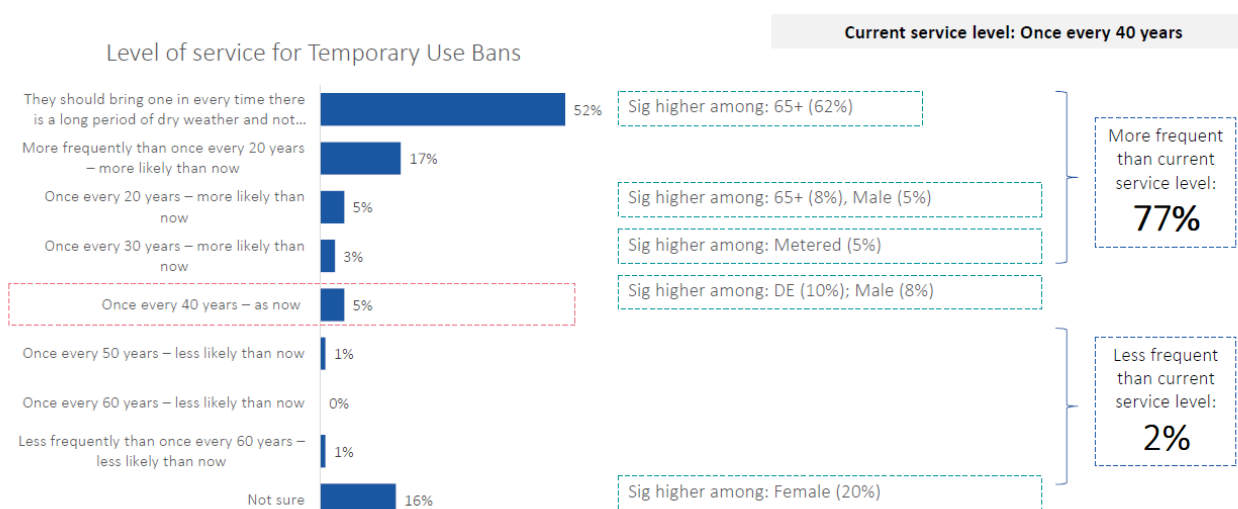
In the *Hafren Dyfrdwy – WRMP Customer Research (2022) (Blue Marble)* report, businesses (who would be affected by non-essential usage bans) had mixed views on non-essential usage bans and the frequency of any restrictions.

Drought restrictions such as standpipes, rota-cuts

Specifically, the *SSC – WRMP Themes 1 and 3 Quantitative Insights (2022) (Accent)* showed that 52% of customers find the current level of risk of drought restrictions to be acceptable (49% in the SSW region compared with 57% in CAM – See Figures 6.2 and 6.3

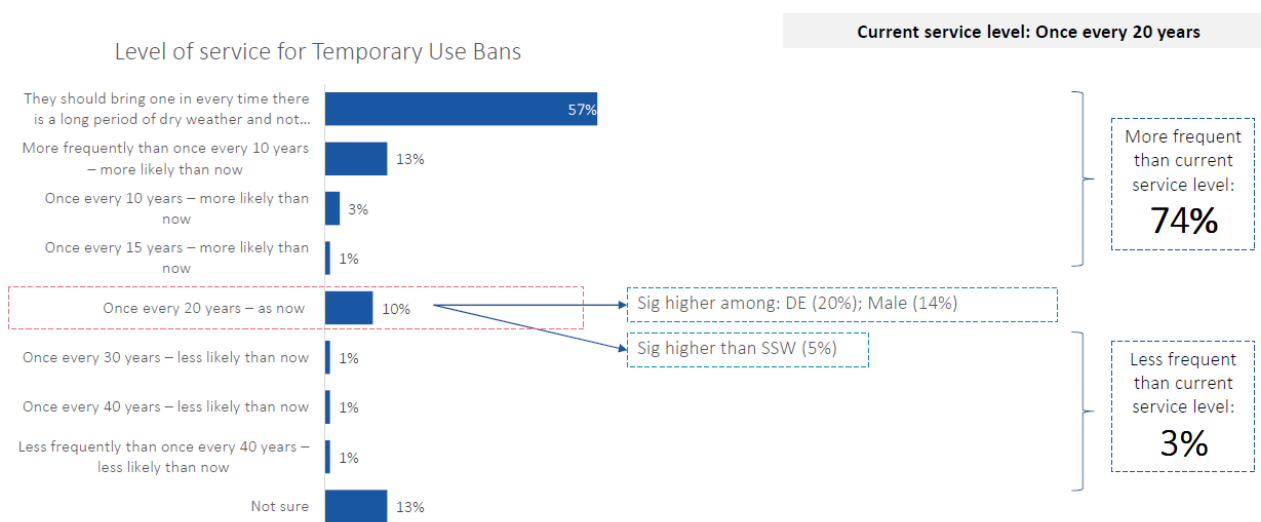
Figure 6.2: Managing Droughts South Staffs Water Household Customers). Respondents over 65, those on a meter and males in the SSW region were more likely to look for more frequent TUBs than at present. In CAM there were fewer demographic differences, except that the lowest social grades and males were more likely to suggest TUBs should remain as frequently as now, and this was higher than in the SSW region overall.

Figure 6.2: Managing Droughts South Staffs Water Household Customers, from *SSC – WRMP Themes 1 and 3 Quantitative Insights (2022) (Accent)*



Q32. What level of service for Temporary Use Bans would you want SSW to plan for in the future? SSW: 887

Figure 6.3: Managing Droughts Cambridgeshire Water Household Customers, from SSC – WRMP Themes 1 and 3 Quantitative Insights (2022) (Accent)



Q32. What level of service for Temporary Use Bans would you want CAM to plan for in the future? CAM: 293

Accent

Once informed on the topic, broadly the same proportion (54%) supported reducing the risk to once every 500 years by 2040, from once in every 200 years. One in three would like to this target achieved earlier than 2040. Around half (54%) supported the target reducing the need for rota cuts and standpipes to be used to no more than once in every 500 years on average by 2040. This was significantly higher among those on the Priority Services Register (69%).

The *WRW - Updated Regional Plan (2023)* research found customers wanted drought resilience targets brought forward and may be willingness to pay for this. Specifically for SSW, the current restriction service level targets were seen as acceptable. Additionally, when informed of the issues around droughts, around half of HH and half of NHH customers supported reducing the risk to 1 in 500 years by 2040.

It also found that current restrictions and EA targets are seen as acceptable and when informed of issues, around half of all customers supported reducing risk to 1 in 500 years by 2040, three in ten would like this even sooner than 2040. However, this view is not informed by customer experience, and it is possible that if restrictions such as these were brought in customer experience may not be as positive therefore any changes to increasing frequency of TUBs or NEUBs should be undertaken with caution and public perceptions carefully monitored.

In terms of severe restrictions, *SSC – Appendix E - Customer Research Findings Summary CAM WRMP (2018)* showed that having to draw water from standpipes in the street (or any other severe restrictions of the supply) is not a scenario that customers are willing to accept.

In terms of WTP, the *SSC – NERA Willingness to Pay for Water Services at PR24 (2022)* paper found both HH and NHH customers in both regions were not willing to pay to reduce the percentage chance of temporary use ban in a given year as the model used to calculate returned negative values (Figure 6.4). One suggestion for this value may be because customers in SSC’s supply regions did not have TUBs imposed during 2022 and may therefore be willing to accept TUBs with greater frequency. Additionally, based on some of the free text responses, many customers seem to view TUBs positively with some suggesting it should be used as a tool to manage water resources and to convey to customers the need for behaviour adaptation in drought situations.

Figure 6.4: Main Model WTP per Unit Change for Status Quo, from SSC – NERA Willingness to Pay for Water Services at PR24 (2022)

Attribute	Unit	HH WTP (£)		NHH WTP (% of bill)	
		SST	CAM	SST	CAM
A Customer service	reduction in the percentage of costumers that wait more than 10 minutes	-0.07	0.00	N/A	N/A
B Risk of temporary "do not drink" notice	reduction in number of properties that received "do not drink" notice	0.74	0.97	0.013	0.015
C Installing "smart" water meters	increase in the percentage of properties having an operational "smart" meter by 2030	-0.21	-0.30	-0.004	-0.008
D Hard water supply	increase in the number of properties that benefit from investment (thousands)	0.00	0.03	-0.0002	-0.001
E Lead pipes	reduction in the percentage of properties that have a lead supply pipe by 2030	-0.86	-0.13	-0.017	-0.017
F Water lost to leakage from pipes	reduction in the percentage of water that is lost to leakage	0.61	1.40	0.001	0.010
G Issues with tap water colour, taste, or smell	reduction in the percentage of properties experiencing issues with tap water per year (tenth of a percentage)	-0.17	0.11	-0.001	-0.014
H Chance of property flooding from a burst pipe	reduction in the flooding incidents per year	0.16	1.03	0.002	0.005
I Low water pressure	reduction in the percentage of properties experiencing low pressure per year (tenth of a percentage)	-0.27	-0.12	-0.003	-0.001
J Supporting nature and wildlife	increase in the number of acres protected and enhanced (tens)	0.03	0.28	0.0002	0.003
K Unplanned short interruptions to water supply	reduction in the percentage of properties experiencing a short interruption per year (hundredth of a percentage)	-0.19	-0.01	-0.002	-0.002
L Risk of temporary use ban, including hosepipes	reduction in the percentage chance of temporary use ban in a given year	-5.99	-0.30	-0.089	-0.024

Note: NHH customers were not asked about attribute A (customer service).
Source: NERA analysis of SSCW WTP survey

Instead, customers showed WTA when it comes to drought restrictions. The scenario shown to customers was “for 2 months SSC cut the tap water supply from 2pm to 7am everyday” in the SSC – ODI Research (2023) (Accent and PJM Economics) report. On average, SSW HH expected £291.10 in compensation for the emergency drought restrictions for 2 months (Table 6.5). This was slightly lower for HH CAM customers at £287.60.

For NHHs, there was a big difference between SSW and CAM with CAM NHH customers expecting a compensation of £34,213 whilst NHH SSW customers expected £7,460 compensation. However, these large difference may partly be due to the small CAM NHH sample size resulting in wide confidence ranges around the estimates (NHH SSW 155 versus NHH CAM 43 customers).

Table 6.5: WTA values for Emergency drought restrictions among HH and NHH customers between SSC and CAM.

Scenario	HHS		NHHs	
	SSW	CAM	SSW	CAM
Emergency drought restrictions (2 months)	£291.10	£287.60	£7,460	£34,213

For vulnerable customers in the SSC – ODI Research (2023) (Accent and PJM Economics), on average, the compensation expected was higher for emergency drought restriction for 2 months than the average HH customer except for those who are financially vulnerable (Table 6.6). Those who were medically vulnerable expected £410 compensation whilst those with communication vulnerabilities expected £493.40 and £379.60 for those with life stage vulnerabilities.

Those who were financially vulnerable expected £68.90 compensation which is considerably lower. This highlights the importance of communicating clearly what an emergency drought order is to vulnerable PSR customers and having the right support in place based on their need.

Table 6.6: WTA values for Emergency drought restrictions among vulnerable customers.

Scenario	All HH	Vulnerability			
		Medical	Communication	Life stage	Financial
Emergency drought restrictions (2 months)	£291.90	£410.00	£493.40	£379.60	£68.90

Changes to customers’ views on service levels since 2017

In 2017, all the evidence pointed towards customers being happy to accept lower service levels and by 2021 the picture was very similar in that the *SSC – WRMP24 - WRAP Theme 1 Research Findings (2021)* showed that most expected more frequent restrictions than current service levels. Even in the most recent research, in spite of the cost-of-living crisis, acceptability of current service levels is very high and evidence suggests customers would be willing to accept an increased frequency of NEUBs. There was broad support for TUB rotas, especially in SSW. This would allow for planning and better than an outright ban, but there was some concern about how these would be policed, potential confusion about the rules and whether it is too drastic a solution. Annual TUBs were rejected by most, and mixed views on TUBs in hot summers as these are likely to become more frequent in future.

Support for harmonisation of the service levels across companies in the same regional area (WRE/WRW)

Little has been explored on this specific question, however the *WRE – Club Customer Engagement report (2021) (Blue Marble)* found that local service is more relevant for comms on locally-based restrictions, however national communications were likely to have more ‘clout’. Some recalled the confusion (and divisiveness) of local tiers during lockdown and worry about very localised restrictions. The general view is that restrictions should be region (not company) wide as this is likely to most effective. The *SSC – WRMP24 - WRAP Theme 1 Research Findings (2021)* showed that most believe restrictions should be regional / national rather than more localised.

Customer support during drought periods and communications and support required

Current evidence on this topic is limited as most customers cannot accurately remember a drought period within recent years and therefore claim to be willing to accept lower service levels or stricter restrictions. For example, the *Garden Water Behaviour Change (2022)* paper found that some HH customers lacked awareness of UK scarcity issues and felt droughts are only faced by hotter and drier countries than the UK. Those who were relatively aware, this was due to experience when abroad in drought prone countries, and not specifically from recall of droughts in the UK.

Consequently, it is not possible to accurately predict how customers would react if restrictions were to become stricter and happen more frequently at present as there is an overall lack of experience in such restrictions as the customers themselves may not be aware of what it may entail.

There is very little research information found during this review on the communications and support customers would like during drought periods. Some evidence comes from the *Garden Water Behaviour Change (2022)* report which found much of the communication around drought announcements did not explain enough about what a drought is, why a drought restriction is taking place in terms of how it affects water resources, or why droughts do not disappear as soon as the weather changes. This contributed not only to customers’ motivation and maintenance of water saving behaviours, but also how the lack of both experience and knowledge of droughts in the UK would most likely mean customers are not quite sure what support they would require.

Nonetheless, the Red Cross currently have an information page available for areas suffering from drought: <https://www.redcross.org.uk/get-help/prepare-for-emergencies/heatwaves-uk/drought>.

In Cambridge City Council and South Cambridgeshire District Council’s joint response to Cambridge Water’s draft WRMP, the councils outlined the need for greater clarity about what the plan means about drought measures in practice, and how frequent the TUBs and NEUBs would be, along with details on how long these restrictions would

last and whether they would no longer be needed once other sources of supply became operational. (SSC - Cambridge City Council and South Cambridgeshire District Council Joint Consultation Response to CAM's draft WRMP)

Golden Threads: Service level resilience to drought

Golden Threads	The need for customer information and engagement	There is a need to better educate customers when and why droughts happen to give a holistic understanding of why resilience plans and targets are put in place. Additionally, when informed, many customers are in favour of current resilience plans and targets, timelines associated with these, and usage of NEUBs and TUBs.
	Call for collective responsibility and fairness	Customers are unwilling to accept the most severe restrictions (drawing water from a standpipe), except in the case of very extreme emergencies.
	Concern for the environment	There was a notable level of support for use of TUBs and NEUBs (potentially more so than now) in order to protect the water environment over the long term.
	Protection for vulnerable customers	Those customers on the PSR were less willing to accept lower service and were more likely to voice issues and concerns with restrictions because of the impact on them personally.

Demographic Splits: Service level resilience to drought

The table below provides a brief summary comparison of each of the key demographic groups, related to service level resilience to drought. Please see the appendix for detailed tables of each split.

Demographic group(s)	Key findings/ comparisons
SSW vs CAM	Appendix A.5.1 summarises SSW and CAM preferences in relation to service level resilience to droughts. There are limited differences between SSW and CAM views on this topic, but it does appear that CAM customers are more likely to raise concerns about water restrictions than SSW.
HH vs NHH	Appendix A.5.2 summarises HH vs NHH preferences in relation to service level resilience to droughts. There are limited differences between HH and NHH view on this topic, but it does appear that NHHs are more likely to raise concerns about water restrictions than HHs.
Vulnerable vs other customers	Appendix A.5.3 summarises future customer preferences in relation to Service Level Resilience to Droughts. Future billpayers have high expectations for service levels. Despite increasing awareness of climate change and its association with rising temperatures, respondents, including future billpayers, rarely mention drought risks or the potential for running out of water. There is some variation in how respondents, including FBPs, perceive the risk of a 1 in 200 chance of drought restrictions. However, they generally consider emergency measures to have a low impact and occur with a low frequency. They believe they would rise to the challenge if such restrictions were imposed. When future customers are presented with the challenges faced by SSC in the future, they express particular concern about droughts. They anticipate the need to

	reduce their water consumption and be more mindful of usage, along with fears of higher water bills due to prolonged droughts and water scarcity in the future.
Vulnerable vs other customers	Appendix A.5.4 summarises vulnerable customers' preferences in relation to Service level Resilience to Droughts. Vulnerable customers are less willing to accept lower service and expected to be compensated more than non-vulnerable customers for any disruptions.
Stakeholders vs customers	Appendix A.5.5 summarises some of the key themes relevant to service level resilience to droughts from the stakeholder consultation undertaken during the WRMP24 planning process. Whilst a few stakeholders support SSC's drought resilience targets, most want more information about how these drought measures and the timings have been calculated. Multiple stakeholders mentioned the need to reevaluate the likelihood of droughts, based on the hot recent summers experienced in England. Stakeholders are more engaged on this topic than SSC customers, and are in pursuit of more information.

9. BALANCING SUPPLY AND DEMAND SIDE OPTIONS

Bibliography

Report	Published Date	Participants	Sample Size	Project Objectives
Cambridge Water Stakeholder Roundtable (2021) (Community Research)	October 2021	Stakeholders: Attendees from a wide range of organisations, including local and national environmental organisations, a social housing provider, a local authority planning department, a university and an MP	18 stakeholders	To consider stakeholder views at a formative stage of the plan development process.
South Staffs Water – Stakeholder Roundtable Feedback Summary (2021)	October 2021	Stakeholders: Attendees from councils, Citizens Advice, Natural England, Waterwise and consumer industry representatives	8 stakeholders	To consider stakeholder views at a formative stage of the plan development process.
SSC – Appendix E - Customer Research Findings Summary CAM WRMP (2018)	2018	HH, NHH and future customers	7,000+	n/a
SSC - Cambridge City Council and South Cambridgeshire District Council Joint Consultation Response to CAM's draft WRMP	n/a	Stakeholder	n/a	Consultation response to CAM's WRMP draft business plan.
SSC - Natural England Consultation Response to CW draft WRMP	n/a	Stakeholder	n/a	Consultation response to SSW's WRMP draft business plan.
SSC – PR19 Data Triangulation Study SSW WRMP (2018)	2019	HH, NHH and future customers	9000+	Appendixes for SSWs PR19 triangulation research. A review of all SSW customer engagement activity relating to their

Report	Published Date	Participants	Sample Size	Project Objectives
				WRMP focusing largely on customer priority.
SSC – WRMP and Long-Term Resilience Customer Engagement Insight Full Report (2017) (Community Research)	September 2017	HH and NHH customers	Workshops 62, business and stakeholder round tables 21, survey: 300 in SSW, 200 in CAM	To use the research findings from Phase One to support the development of SSC’s WRMP19 in both supply regions, specifically understanding customers’ views on; levels of service, leakage, water efficiency, metering, and (if possible) environment impact, and initial thoughts on options for the future and to use the findings from Phase Two to inform investment choices, by giving customers the opportunity to feed into SSC’s strategic challenges.
SSC – WRMP MCDA Quantitative Insights (2022) (Accent)	July 2022	HH and NHH customers	Total: 1,015 CAM: 445 SSW: 570 HH: 887 NHH: 128	Explore customers’ attitudes and views regarding the natural environment and SSC’s approach to planning.
SSC – WRMP24 - WRAP Theme 1 Research Findings (2021)	August 2021	HH, NHH and future customers	Total: 47 HHs: 28 NHHs: 10 Future customers: 9	To explore household, future and SME businesses customer preferences in terms of; environmental ambition, levels of service/resilience ambition, water efficiency ambition, and best value planning criteria. To ensure a “golden thread” of customer preferences in these strategic areas, which sets the context for the remainder of the engagement programme.
WRE – Club Customer Engagement report (2021) (Blue Marble)	September 2021	HH and NHH customers, and stakeholders	HH: 20 (CAM 5, Essex & Suffolk 5; Anglian 10). NHH: 14 (Anglian 8, Essex & Suffolk 3, CAM 3) Stakeholders: 20 organisations across the 3 companies	To understand consumer context (general environmental priorities, current awareness of long-term challenges and implications for water suppliers, perception of water suppliers). To explore expectations and priorities re environmental planning. To explore response to the ‘best value’ plan objectives. To explore options preferences (ranking of preferences and what drives importance). To explore intergenerational economics (response to affordability options to understand generational expectations).

Report	Published Date	Participants	Sample Size	Project Objectives
WRW - Updated Regional Plan (2023)	March 2023	n/a	Triangulation of 120 pieces of research	To ensure the customer input in the regional plan is up-to-date by including the latest knowledge (by conducting a triangulation of the most recent customer and stakeholder research).

Overview

Customers have consistently preferred demand side options rather than increasing supply side options, particularly focussed on reducing leakage. Although some of the research showed restrictions on usage were not popular as an option to meet the demand for water long-term, other evidence shows that when explored in more detail customers are comfortable with the current levels and frequency of restrictions and would likely tolerate an increase to restrictions if necessary. However, this context is critical, that customers expect leakage to be dealt with alongside the introduction of or increased frequency of any restrictions, in order that SSC are seen to be playing their part as well as customers reducing their usage.

Of supply side options, increased water abstraction from rivers was the least popular, and at times unacceptable to customers, whilst there are other options such as water recycling at home and new reservoirs that were preferable.

Customers' preferences to meet the long-term demand/supply balance challenge to 2050

Initially, there was not a lot of evidence to understand customer views on how to balance supply and demand challenges. The *SSC – WRMP and Long-Term Resilience Customer Engagement Insight Full Report (2017) (Community Research)* stated that demand management options, especially reduced leakage and increased metering, were most appealing to customers in both regions. Customers felt they should be included by the company as part of the strategy. In terms of asset management, two medium treatment works were preferred over one mega works as this was seen as a safer option in terms of ensuring reliability of supply.

By the time the *SSC – WRMP24 - WRAP Theme 1 Research Findings (2021)* was available, this showed that many wanted a balance between demand management and increasing supply. Demand management options came first for many and supply solutions should be considered a last resort for some. In general, negative environmental impacts are to be avoided. The report also highlighted that there was stronger support for universal metering in Cambridge than in South Staffs. Future customers were more likely to feel that reduced household water consumption targets were achievable compared with bill payers and some PSR customers were less likely to feel that reduced consumption targets were realistic (potentially because of having health conditions which rely on greater water use).

The *WRE – Club Customer Engagement report (2021) (Blue Marble)* summarised that supply options should meet three criteria: financially viable; low carbon; and effective in the long term. Options that appeared short term stop gaps and/or poor environmentally were largely rejected (including the use of drought permits). Recycling water and (low carbon) desalination were the most acceptable of the 'new' supply options. Tankering from other countries had the least appeal.

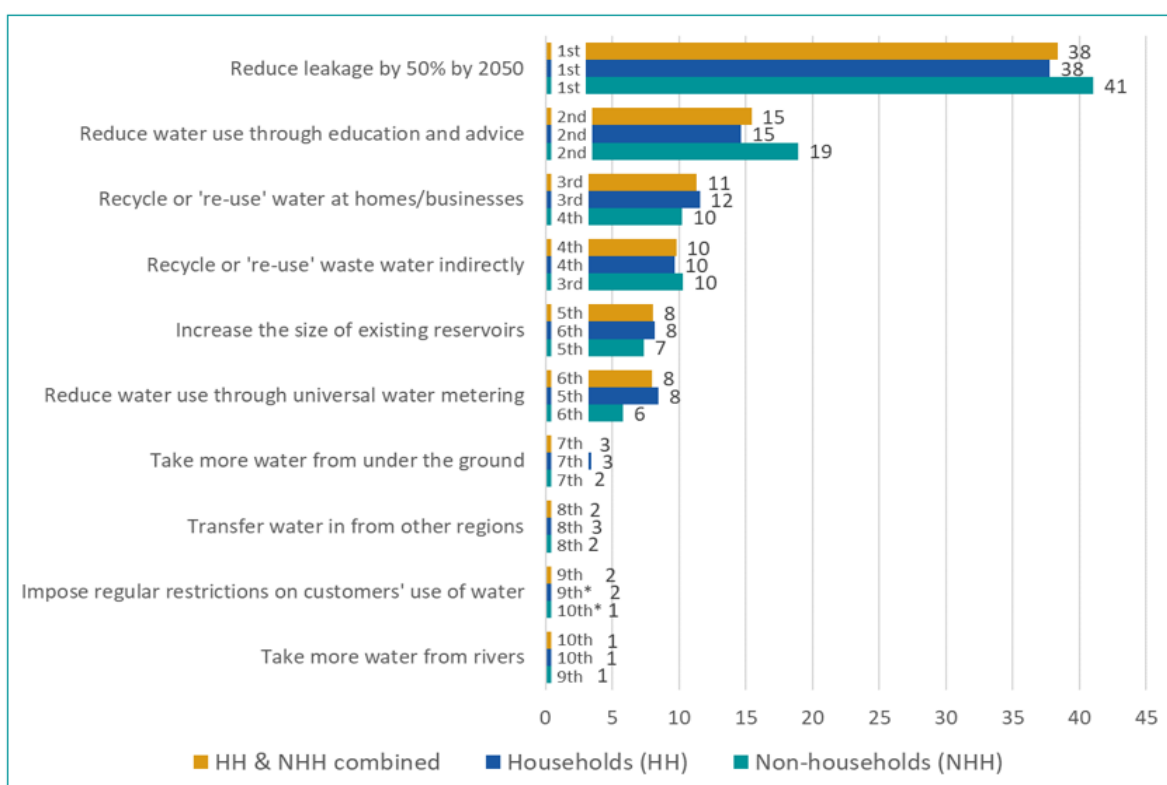
The prioritisation of demand solutions was reinforced during the *South Staffs Water – Stakeholder Roundtable Feedback Summary (2021)*, when stakeholders from environmental organisations prioritised demand over supply, in line with UKWIR guidance, in order to minimise the negative environmental impacts associated with supply-side measures. Other stakeholders did not have strong views on the balance between supply versus demand investment and felt that South Staffs Water should use whichever options come out as best from cost-benefit analysis.

Similarly, during the *Cambridge Water Stakeholder Roundtable (2021) (Community Research)*, there was strong support for Cambridge Water to do more on demand management and quickly e.g. increase ambition on per capita consumption; introduce universal metering; and use restrictions as part of business as usual rather than only in the

most extreme situations. Generally, stakeholders did not have a preference on how to balance demand and supply investment though some preferred demand management, mainly because of the smaller environmental impacts.

Most recently, the *SSC – WRMP MCDA Quantitative Insights (2022) (Accent)* showed customers 9 (in SSW) or 10 (in CAM) supply and demand options with their relative costs, and environmental impacts, and asked them to give a measure of preference intensity on a 0-100 scale. The study found that both regions prioritised reducing leakage, then reducing usage through education, then recycling at homes/businesses third, again underlining demand as a priority rather than supply (See Figure 7.1).

Figure 7.1: Supply-demand option preferences, from SSC – WRMP MCDA Quantitative Insights (2022) (Accent)
SSW REGION: HOUSEHOLDS AND NON-HOUSEHOLDS



30 Base: Households=661; Non-households=76 (weighted)

Similarly, the *WRW - Updated Regional Plan (2023)* customer research found that amongst demand side options reducing leakage was most favoured, whilst water use restrictions were least popular.





This has also been the case in other water areas, as shown in *SSC – Appendix E - Customer Research Findings Summary CAM WRMP (2018)*, except for 'building a new water reservoir', preferred demand side options to supply side ones. The engagement carried out by Anglian Water also showed that their customers generally prioritised demand options over new water resource options, preferring interventions that avoid perceived wastage (leakage reduction and recycle/reuse sewage), promote efficiency (provide water saving devices) and make use of existing resources and infrastructure (store water underground/aquifer storage and recovery and extend existing reservoirs). There was also evidence to suggest that customers were against the concept of drilling new boreholes on environmental impact grounds as a supply-side option, but were in favour of bringing existing underground water sources back on-line. However, this finding must be treated with caution as the stimulus material shown to customers did not inform customers that these options would only proceed where abstraction levels would be within an agreed sustainable threshold.

Furthermore, the *WRW - Updated Regional Plan (2023)* found customers and stakeholders across 5 different water companies (SSC, Dŵr Cymru, United Utilities, Severn Trent and Hafren Dyfrdwy) preferred demand management such

as reducing leaks, which has been consistently the most favoured demand/ supply solution in 2021 and 2022 (with broad support for 50% reduction by 2050). Smart and mandatory metering was seen as another popular demand management solution which customers are growing to accept and to view as the fairest way to pay for water and reduce demand.

Figure 7.2 shows specifically for SSC, that both HH and NHH SSC customers favoured demand options to reduce leakage, in line with most of the other water companies in 2022 with nothing to suggest this has changed in 2023.

Figure 7.2: Comparison table summarising the hierarchy for demand and supply side options expressed by each company's customers in 2022 (SSC is the top line in the table), from the WRW - Updated Regional Plan (2023)

	← Most favoured										→ Least favoured									
	Reduce leakage	Reduce water use (education and advice)	Recycle water at home / business	Recycle waste water indirectly	Increase size of existing reservoirs	Universal metering	Ground water abstraction	Water transfers	Restrictions	River abstraction	Supply									
	Reduce leakage	Improve WE	Recycle water indirectly	Manage land to improve water quality	Install water meters	Increase capacity at treatment works	Increase size of existing reservoirs	Ground water abstraction	Water transfers	River / lake abstraction	Demand									
	Recycle water indirectly	Increase size of reservoirs	Maximise output of treatment works	Increase capacity at treatment works	Increase connectivity of supply system	New water treatment works for river water	Water transfers	Additional surface storage	Ground water abstraction		NB: For SSW, UU and ST, the views of HH and NHH match**									
	Reduce leakage	Make homes more water efficient	Raise awareness of how to reduce use	Water transfers	Expanding existing reservoirs	De-salination	Increase metering	Re-using wastewater	Restrictions	Ground water abstraction										

Some stakeholders feel uncertain about the discussions and decisions around supply and demand being heavily reliant on reduction of demand. For example, the Environment Agency believe unrealistic assumptions are being made about the capacity of water supply assets for SSW. Specifically, they argue that capacity is greatly over estimated and there is a risk that supplies are not reliable in times of high demand as the plan suggests. Consequently, greater certainty is needed in that public water supply demand reductions will be achieved.

Customers' preferences for WRMP demand and supply side options to obtain weights for water resource regional planning (WRW and WRE) MCDA decision metrics and at a local level in WRMP24 plans

The SSC – WRMP MCDA Quantitative Insights (2022) (Accent) found that the top supply and demand preferences for both regions were the same, with reducing leakage at number one. In SSW reducing use through education second and recycling at homes/businesses was third. In CAM, reducing use through metering was second and building a regional reservoir was third. Other differences emerged between regions:

- CAM customers had higher valuations compared to SSW customers, carbon emissions weights were substantially higher for both SSW and CAM customers than the original SEA and NCA values.
- The ecosystem resilience/habitats weights were lower for both SSW and CAM customers than the original SEA and NCA values (substantially so for SSW).
- For SSW customers, weights for flood risk and human and social wellbeing in line with NCA, weight for multi-abstractor benefits in line with SEA.
- For CAM customers, weights for flood risk higher than SEA and NCA, weights for human & social wellbeing and multi-abstractor benefits in between SEA and NCA values.

Customer preferences for supply side options

Abstracting more groundwater had the least appeal of various supply side options presented in the SSC – WRMP and Long-Term Resilience Customer Engagement Insight Full Report (2017) (Community Research). This was true of both regions, mainly driven by environmental impact concerns. However, customers attending the workshop viewed reusing existing boreholes as a good use of resources. In SSW, there was no clear-cut supply side 'winner.' Workshop participants were most positive about trading, but this was not reflected in the subsequent online survey conducted.

In CAM, the most popular supply side option was a new reservoir, with workshop participants torn as to whether or not this should be a shared resource.

By summer 2021, the *SSC – WRMP24 - WRAP Theme 1 Research Findings (2021)* showed abstracting more water was still an unpopular choice in both areas.

During the *Cambridge Water Stakeholder Roundtable (2021) (Community Research)*, levels of detailed knowledge about the supply side options varied among stakeholders. A new reservoir was generally seen as an essential component of the plan. Transfers elicited mixed feelings, ranging from an essential component of the plan in the medium term to unacceptable because of environmental impacts. Water recycling was popular.

Although customers in the *WRW - Updated Regional Plan (2023)* preferred managing demand side options to increasing supply in 2023, they ideally wanted any supply side option to minimise the amount of water taken out of the environment. This included reservoir expansion which was seen as the most obvious choice for increasing supply. However, some were concerned about new reservoirs impacting wildlife and habitats. Customers were also favourable towards transfers, especially as they expect a positive impact on local economics during installation. Wastewater recycling faced a particular challenge of removing the “yuck” factor.

Regardless of the supply side option chosen, in the *SSC - Cambridge City Council and South Cambridgeshire District Council Joint Consultation Response to CAM's draft WRMP*, ensuring there is no environmental deterioration and that past ecological damage has an opportunity for repair was important for stakeholders.

In the same light, Natural England emphasises the need to ensure that demand and supply options within the plan are deliverable, so that there is a reduction in abstraction (*SSC - Natural England Consultation Response to CW draft WRMP*).

Golden Threads: Balancing supply and demand side options

Golden Threads	The need for customer information and engagement	Reducing demand through metering and promoting water recycling both benefit from education, though both these areas are behind reducing leakage as a priority.
	Call for collective responsibility and fairness	Customers prefer demand-side options over increased supply-side options and are generally accepting of current level and frequency of restrictions. The implication is that greater participation of customers is part of the solution. However, their efforts need to be backed up by reductions in leakage levels.
	Concern for the environment	Increased water abstraction from rivers is the least popular, and at times an unacceptable supply-side option due to its perceived negative environmental impacts
	Protection for vulnerable customers	There were no specific mentions of vulnerable customers in the context of balancing supply- and demand-side options.

Demographic Splits: Balancing supply and demand side options

The table below provides a brief summary comparison of each of the key demographic groups, related to balancing supply and demand side options. Please see the appendix for detailed tables of each split.

Demographic group(s)	Key findings/ comparisons
SSW vs CAM	Appendix A.6.1 summarises SSW and CAM preferences in relation to balancing supply and demand side options. SSW and CAM customers preferred slightly different supply and demand preferences, both however had reducing leakage as their number one priority.
HH vs NHH	Appendix A.6.2 summarises HH vs NHH preferences in relation to balancing supply and demand side options. No

Demographic group(s)	Key findings/ comparisons
	differences are seen between the two customer types, as demand side options, especially reducing leakage, are universally favoured.
FBP vs current bill payers	Appendix A.6.3 summarises future customer preferences in relation to balancing supply and demand side options. Future billpayers preferences tend to focus more on demand side options in comparison to supply side. Metering holds relatively low interest. However, due to its use as a long-term solution to save money, it is favoured relatively highly in comparison to other supply and demand options. In addition to metering, leakage reduction is a highly sort after demand side option. In relation to supply side options, desalination is popular, however, future billpayers worry about the environmental impact of this. Future billpayers anticipate the need to reduce their water consumption and be more mindful of usage, along with the possibility of higher water bills due to prolonged droughts and water scarcity in the future.
Vulnerable vs other customers	Appendix A.6.4 summarises vulnerable customers' preferences in relation to balancing supply and demand side options. Vulnerable customers seem to lack confidence in reduced consumption targets being met.
Stakeholders vs customers	Appendix A.6.5 summarises some of the key themes relevant to balancing supply and demand side options from the stakeholder consultation undertaken during the WRMP24 planning process. Multiple stakeholders are concerned that SSC has not provided enough evidence to explain any significant changes to the supply demand balance. Also, multiple stakeholders are concerned that supply is dwindling and that SSC might not be able to deliver the demand measures they have proposed in their plans. Here, stakeholders have a much more niche view than SSC customers, as most customers did not pick up on the fact that SSC might fail to deliver in accordance with future supply and demand expectations.

10. DEMAND SIDE OPTIONS

Bibliography

Report	Published Date	Participants	Sample Size	Project Objectives
Artesia – MOSL Enhancing Metering Technology (2022)	April 2022	Stakeholders	30 stakeholders	<p>The aim of this project is to capture and understand the collective stakeholder view of current state of metering technology in the retail market and to develop a technology strategy and framework for assessing the business case for smart, AMI, AMR and data solutions which will benefit stakeholders in both the retail and wholesale market.</p> <p>Provide a consistent approach to support adoption of future standards and protocols and more efficient rollout across the industry.</p>
Cambridge Water Stakeholder Roundtable (2021) (Community Research)	October 2021	Stakeholders: Attendees from a wide range of organisations, including local and national environmental organisations, a social housing provider, a local authority planning department, a university and an MP	18 stakeholders	To consider stakeholder views at a formative stage of the plan development process.
CCW – Desktop Review of Behaviour Change Campaigns (2023)	April 2023	n/a	n/a	Review of campaigns aimed at households, both large and small, on reducing water usage, reducing flushing of unflushables, and disposal of fats oils and greases in the sink.
CCW – Lifting the Lid (2023)	January 2023	HH customers	2,126 HHs (from England and Wales)	To understand people's water habits, specifically abnormal habits such as running taps to cover toilet noises, and skipping shower days and how these habits differ by region.
CCW – Smart Thinking Metering	March 2023	NHH customers	524 NHHs, including 313	To assess NHH awareness of smart water meters.

Report	Published Date	Participants	Sample Size	Project Objectives
for Business Customers (2023)			smart water meter owners and 148 who did not own one.	To identify the most appealing benefits of these meters. To investigate benefits experienced already. To assess how much NHHs would be WTP for smart meter installation and access to consumption data.
Dŵr Cymru Welsh Water – Metering and Efficiency Research Report (2021) (Relish)	October 2021	DCWW customers	30 online community, 700 online interviews and 100 CATI interviews	To collect feedback from customers to understand their views, preferences and priorities on the subjects of water efficiency, metering and tariffs.
CCW and Ofwat– Water Consumer Views (2022)	April 2022	HH, NHH and future customers	Online focus group: 12 Depths: 16	Research aimed at understanding water consumers' views on water and sewerage services, what is important, views on Ofwat's proposed common PC areas for PR24, any new areas for exploration and to test descriptions and measurements of PCs.
CCW – Environmental Awareness Index (2023)	February 2023	HH customers	1,466 HHs	The second phase of the Environmental Awareness index, tracking results in 2022. Aimed at understanding attitudes around environmentally damaging water behaviours including supply and demand, things flushed down toilets and fats, oils and greases poured down sinks.
CCW – Evidence Review of Retail Business Water Market (2023)	January 2023	NHH customers	n/a	Desk research and synthesis of existing research to focus on 4 themes from business customers' experiences: experience of the market, perceptions of the market, causes of adverse impacts and examples of best practices.
Garden Water Behaviour Change (2022)	October 2022	HH customers	15 HH, with 3 each from South Staffs and Cambridge, South East Water, Northumbrian Water Group, Portsmouth Water, and	Aimed to understand garden water usage in customers, specifically to what extent hot weather changes water usage, what drivers and barriers there are towards behavioural change in this area as well as developing a tool/messaging to enable customers to change behaviour.

Report	Published Date	Participants	Sample Size	Project Objectives
			Southern Water	
Hafren Dyfrdwy – WRMP Customer Research (2022) (Blue Marble)	June 2022	HH, NHH and future customers	35 customers overall: 4 future, 20 HHs, 6 NHHs, 5 digitally excluded customers.	To understand HD customers' views of the initial WRMP proposals. Specifically, to gauge response to proposed use of: water restrictions, ways to reduce demand, use smart meters, meet the new leakage targets, water transfers, and response to plans to support private supply households.
Net Zero Citizen Jury (2023) (Explain)	June 2023	HH and NHH customers	20 SSW and 20 CAM each including online jury members including 5 NHH and 15 HH, as well as 8 F2F DD customers.	Citizens' Jury to understand customer preferences relating to their plans to reduce carbon emissions. This paper specifically aimed to look at what SSCs Net Zero ambitions should be, when should these be achieved, and how customers should be involved in helping this
Severn Trent – Environmental Destination and Compulsory Metering (2022) (Accent)	May 2022	HH and NHH customers	1,000 customers overall: 817 HHs and 183 NHHs. (490 metered, 434 unmetered customers)	To understand customer views and support on universal metering and environmental ambition.
Severn Trent – Proactive Metering Research Report (2021) (DJS Research)	June 2021	HH and NHH customers	34 HH and NHHs (28 in groups, 6 depths)	Severn Trent wanted to conduct deliberative research to understand five key themes, relating to metering; views on metering, installation of the meters, drivers and barriers to metered water billing, Severn Trent communications, and mandatory metered billing.
Severn Trent – WRMP24 (2022) (DJS Research)	May 2022	HH and NHH customers	624 HH, 149 NHH	Measure customers' preferences for water resources, levels of service and the options or plans that Severn Trent might create to address any changes to levels in service or to address a supply-demand deficit. To develop a Best Value Plan in line with Water Resource Planning guidelines.

Report	Published Date	Participants	Sample Size	Project Objectives
South Staffs Water – Stakeholder Roundtable Feedback Summary (2021)	October 2021	Stakeholders: Attendees from councils, Citizens Advice, Natural England, Waterwise and consumer industry representatives	8 stakeholders	To consider stakeholder views at a formative stage of the plan development process.
SSC – Appendix E - Customer Research Findings Summary CAM WRMP (2018)	2018	HH, NHH and future customers	7,000+	n/a
SSC - Cambridge and South Cambridgeshire Green Party Consultation Response to CCW's draft WRMP (2023)	May 2023	Stakeholder	n/a	Consultation response to CAM's WRMP draft business plan.
SSC - CCW Consultation Response to CAM draft WRMP (2023)	May 2023	Stakeholder	n/a	Consultation response to SSW's WRMP draft business plan.
SSC – Customer Priorities Infographic (2022)	May 2023	HH and NHH customers	44 HH customers and 5 vulnerable customers	To provide insight presenting customers' priorities for now and the future.
SSC – Customer Priorities Research Tracker Quantitative Insights Year 3 (2023) (Accent)	May 2023	HH customers	2021: 511 HH 2022: 1,054 HH 2023: 1,072 HH - 745 SSW and 372 CAM	Provide a benchmark against which customers' priorities will be tracked for both wholesale and retail services. Explore any differences between uninformed/informed priorities and qualitative/quantitative insights. Understand the customer impact of the cost-of-living crisis (2023).
SSC – Customer Priorities Research Qual and Quant Year 3 (2022) (Accent)	May 2022	HH and NHH customers	1,154 HH - 801 SSW - 353 CAM NHH – 5 depth interviews	To identify and explore the priorities with SSW and CAM households and non-household customers and understand what matters to them now and for the future.
SSC – Customer Promises Tracking Research Report (2022) (Turquoise)	April 2022	HH and NHH customers	1,106 customers overall: 814 HHs and 292 NHHs	To monitor ongoing customer satisfaction against the key metrics that engagement has shown to be important to customers; these include hard and soft measures.

Report	Published Date	Participants	Sample Size	Project Objectives
				<p>To deliver on-going customer sentiment tracking against key brand statements.</p> <p>To probe awareness and usage of key services and track changes in the way customers wish to interact with SSC.</p> <p>To monitor and track the impact of Covid-19 pandemic on customers – new objective added in 2020/21.</p>
SSC – Customer Tracking Annual Report (2023) (Turquoise)	March 2023	HH and NHH customers	Total 1,134 customers: 837 HHs (268 CAM, 569 SSW), 297 NHHs (93 CAM, 204 SSW)	To monitor ongoing customer satisfaction, deliver on-going customer sentiment tracking, probe awareness and usage of key services and track changes in the way customers wish to interact with SSC.
SSC H2Online - Community Feedback WRMP (2019-2022) (Explain)	2022	HH customers	Panel responses vary over time CAM 360+ SSW 315+	
SSC H2Online – Monthly Report (August 2022) (Explain)	August 2022	HH customers	For the poll reported on (about schemes they support), there were 38 SSW voters and 23 CAM.	<p>To build a truly engaged community of customers, and raise the profile of the SSC brand among the customer base.</p> <p>To gain insights more quickly to allow the customer voice to be built into more day-to-day decision-making within the business.</p>
SSC – LTDS Report (2023) (Turquoise)	July 2023	HH, NHHs and future customers	<p>Qualitative: 34 HHs, 12 NHHs, 6 FBPs</p> <p>Quantitative: 980 HHs (including 82 FBPs), and 100 NHHs</p>	To understand customers' attitudes and perceptions towards SSC's long-term vision to 2050 and their spontaneous preferences in terms of long-term delivery. Also, exploring SSC's performance and future targets in 10 key ambition areas, and to understand the main reasons that drive customer preferences, and to explore the issue of intergenerational fairness.
SSC – Metering Presentation (2017) (QA Research)	July 2017	HH customers	101 CAM, 101 SSW	To understand the key barriers to customers switching to a meter. To understand what messages and communication channels would be

Report	Published Date	Participants	Sample Size	Project Objectives
				most effective in switching customers to take up a meter.
SSC – NERA Willingness to Pay for Water Services at PR24 (2022)	December 2022	HH and NHH customers	1250 HH respondents, including 833 SSW and 424 CAM. 91 future bill payers, 54 of which were from SSW and 37 from CAM. 247 NHH.	Aimed at designing, implementing and analysing a stated preference survey in order to gain an estimate of customer WTP for service improvements from SSC with the overall aim of informing their PR24 business plan. HH, NHH and future customers were of specific focus.
SSC – ODI Research (2023) (Accent and PJM Economics)	March 2023	HH and NHH customers	807 customers overall: 609 SSC HH customers (404 SSW and 205 CAM), and 198 NHH customers (155 SSW and 43 CAM)	Aimed at analysing further segmentation of SSW and CAM Water customer values on top of previous Collaborative ODI research by Ofwat and CWW
SSC – PR19 Data Triangulation Study SSW WRMP (2018)	2019	HH, NHH and future customers	9000+	Appendixes for SSWs PR19 triangulation research. A review of all SSW customer engagement activity relating to their WRMP focusing largely on customer priority.
SSC – PR19 Foundation Research June (2017) (Accent)	June 2017	HH and NHH customers	93 Total: 70 HH, 23 NHH	To understand customer priorities for service delivery both now and over the longer term (prompted and unprompted) and to check these against previously established priorities in PR14 work.
SSC – Social Tariffs Research (2023)	September 2023	HH and Stakeholders	Qual: SHs 6 HHs 52 Quant: Total: 1238 HHs Panel: 130 Vulnerable HHs: 99 On PSR: 23 H2Online: 21	To engage with consumers about the future development of the Assure tariff, and establish customer views towards a possible new affordability tariff aimed at those struggling to pay their water bills, but who don't qualify for Assure due to their HH income being too high.

Report	Published Date	Participants	Sample Size	Project Objectives
SSC – Stakeholder Roundtable: Helping Businesses Save Water (2022)	March 2022	Stakeholders: Universities and local industry	6	To work with businesses in the Cambridge area to find out what can be done with retailers to further support, promote and implement water efficiency in NHH in the next 5 years and beyond (challenges, visions, opportunities).
SSC - Waterwise Consultation Response to CAM draft WRMP - April (2023)	April 2023	Stakeholder	n/a	Consultation response to SSW's WRMP draft business plan.
SSC - Waterwise Consultation Response to SSW draft WRMP - Feb (2023)	February 2023	Stakeholder	n/a	Consultation response to SSW's WRMP draft business plan.
SSC – WRAP Deep Dives (2021) (Community Research)	November 2021	HH, NHH and future customers	87 customers overall: Forum 1: 47 Total CAM: 25 SSW: 22 Billpayers: 28 Future: 9 Small business: 10 Forum 2: 40 total CAM: 20 SSW: 20 Bill payers: 26 Future: 6 Small business: 8	To explore household customer, future customer and SME business customer views in depth on; universal metering and water transfers.
SSC – WRAP Focus Groups Report (2022) (Community Research)	February 2022	HH, NHH and future customers	11 customers overall: 5 HHs, 1 future, 1 NHH (6 SSW and 5 CAM)	To explore the following topics with online groups; metering options (covered in both regions), new types of tariffs/incentives (SSW only), water transfer options (CAM only).

Report	Published Date	Participants	Sample Size	Project Objectives
SSC – WRMP and Long-Term Resilience Customer Engagement Insight Full Report (2017) (Community Research)	September 2017	HH and NHH customers	Workshops 62, business and stakeholder round tables 21, survey: 300 in SSW, 200 in CAM	To use the research findings from Phase One to support the development of SSC’s WRMP19 in both supply regions, specifically understanding customers’ views on; levels of service, leakage, water efficiency, metering, and (if possible) environment impact, and initial thoughts on options for the future and to use the findings from Phase Two to inform investment choices, by giving customers the opportunity to feed into SSC’s strategic challenges.
SSC – WRMP Themes 1 and 3 Quantitative Insights (2022) (Accent)	April 2022	HH and NHH customers	Total: 1180 CAM:427 SSW: 753 HHs: 1028 NHHs: 152	Core purpose of this study was to provide evidence of customer response and support for; managing droughts, universal metering, leakage, environmental ambition.
SSC – WRMP24 - WRAP Theme 1 Research Findings (2021)	August 2021	HH, NHH and future customers	Total: 47 HHs: 28 NHHs: 10 Future customers: 9	To explore household, future and SME businesses customer preferences in terms of; environmental ambition, levels of service/resilience ambition, water efficiency ambition, and best value planning criteria. To ensure a “golden thread” of customer preferences in these strategic areas, which sets the context for the remainder of the engagement programme.
Strategic Metering – Roles and Responsibilities in the NHH Market Report (2022) (PA Consulting)	June 2022	Stakeholders	n/a	Identifying a set of potential options to reform or enhance current roles and responsibilities in relation to metering and related activities in the NHH market.
UEA – Behaviour Change Interventions in the Water Sector (2022) (UEA and CBESS)	January 2022	n/a	n/a	To identify existing good practices, as well as opportunities for improving how evidence bases can support the design of interventions, and how the effectiveness of interventions can be monitored and evaluated over various timescales.
SSC - Waterscan Consultation	February 2023	Stakeholder	n/a	Consultation response to SSW’s WRMP draft business plan.

Report	Published Date	Participants	Sample Size	Project Objectives
Response to SSW draft WRMP (2023)				
Water Usage in the Garden (2021) (Blue Marble)	November 2021	HH customers	15 HH (3 per water company area)	<p>Observe, through ethnographic filming, garden water usage behaviour.</p> <p>Assess dissonance between recalled and actual (filmed) behaviour.</p> <p>Provide insight to support communications and behaviour change activities about “good” or “bad” garden water usage.</p> <p>Explore whether garden water usage is thought to have changed as a result of the Covid-19 pandemic.</p>
WRE – Club Customer Engagement report (2021) (Blue Marble)	September 2021	HH and NHH customers, and stakeholders	<p>HH: 20 (CAM 5, Essex & Suffolk 5; Anglian 10).</p> <p>NHH: 14 (Anglian 8, Essex & Suffolk 3, CAM 3)</p> <p>Stakeholders: 20 organisations across the 3 companies</p>	<p>To understand consumer context (general environmental priorities, current awareness of long-term challenges and implications for water suppliers, perception of water suppliers).</p> <p>To explore expectations and priorities re environmental planning.</p> <p>To explore response to the ‘best value’ plan objectives.</p> <p>To explore options preferences (ranking of preferences and what drives importance).</p> <p>To explore intergenerational economics (response to affordability options to understand generational expectations).</p>
WRE – NHH Demand Club Project – Stage 1 (2022) (Blue Marble)	January 2022	NHH customers	9 NHHs	To find out water retailers views and opinions on water efficiency, and on strategies to encourage NHH water efficiency.
WRE – NHH Demand Club Project – Stage 2 (2022) (Blue Marble)	April 2022	NHH customers	4 NHHs	To develop and refine solutions with retailers and wholesalers.
WRE – Promoting Water Efficiency among Non-Household Customers (2022) (Blue Marble)	August 2022	NHH customers	26 NHHs	To find out current role of water efficiency –How, it at all, have businesses adopted water efficiency? Barriers to water efficiency – What is, and could be, preventing adoption of water

Report	Published Date	Participants	Sample Size	Project Objectives
				efficiency? WRE proposition response – How do business' feel about WRE's water efficiency propositions?
WRW - Updated Regional Plan (2023)	March 2023	n/a	Triangulation of 120 pieces of research	To ensure the customer input in the regional plan is up-to-date by including the latest knowledge (by conducting a triangulation of the most recent customer and stakeholder research).

Overview

As concluded in section 7, customers have strong preferences for demand side responses over supply side and this preference has remained consistent since 2017. This section looks in more detail at 5 options:

- **Leakage** is an emotive issue for customers, with the majority believing that ethically, levels must be reduced as much as possible. Furthermore, some feel that leakage must be reduced if customers are to be motivated to play their part with water conservation. Despite this strong sentiment from customers, they were reluctant to pay for this on bills and expect this to be funded by SSC in other ways. This situation has been exacerbated by financial hardship since Covid-19. In addition, leaks on customer properties are unlikely to be effectively addressed without an education programme to inform customers of the scale of this problem, how to detect leaks and how to reduce them. The national leakage target appears to be broadly in line with customer expectations (once educated) and there is some scope to bring forward the date by which targets are to be achieved. Similar to customers, most stakeholders tend to think that progress on leaks is a prerequisite to talking about water efficiency.
- The national targets for **reducing customer demand for water** were largely acceptable to customers, although the stretch targets seemed too difficult to achieve at this point. There is appetite from stakeholders in the building sector and wider sectors (e.g. environmental) and customers for building in water recycling into new builds. Other stakeholders seem to be particularly concerned with reducing NHH consumption. Customers are still keen to have education on water efficiency strategies, whether via schools, directly to their homes or information on water saving strategies for large businesses.
- **Water recycling** is popular with both household and non-household customers, however the reality of installing a system provides some challenges which would require education up front on the benefits and likely costs, potential subsidies to help customers accommodate the costs of retrofitting a system and information on how to maintain it. These would all need to be in place before large scale adoption is likely to take place.
- **Metering** – On balance, customers support metering as the fairest approach to charging, although this is backed more strongly by customers who already have meters installed, future customers and those in the Cambridge region. Customers and stakeholders have some concerns about how to move all customers to universal metering, including concerns for vulnerable customers. More recent studies suggest targeting areas of higher consumption for metering, first, might be a good approach for rolling out universal metering. Most recently, speed of roll out has depended on a mixture of speeding up the roll out to deliver a reduction in demand as quickly as possible, and potential increased cost for customers, the latter being more prominent since Covid-19 and the more recent rise in the cost of living. Work in other regions echoed the findings in SSC, although the need for education on how installation works, and the potential benefits was more evident in Severn Trent's region. With regards to preferences for smart meters, once educated,

customers had a preference for AMI over AMR metering technology and some willingness to pay for the programme, due to a perceived small price difference between the two technologies.

- **Behaviour change** is an area that overlaps with other demand and supply side options, but in general customers need to have a full understanding of any particular issue before any change is likely e.g. the amount of leakage that takes place on customer properties, or the benefits of smart metering versus the costs of installation. For the most part, customers agree they could save more water than they do at present (but need motivation to do so and barriers removed). There is valuable literature advising on tactics to elicit behaviour change, such as using multimedia education materials rather than static printed media, collaborating with local businesses and the community to spread positive messages, and informing and behaviour change campaign with sound desk and primary research before commencing.

Leakage

Customer aspirations for leakage reduction over the next 25 years to 2050

SSC – *WRMP and Long-Term Resilience Customer Engagement Insight Full Report (2017) (Community Research)* showed very clearly that all audiences want SSC to do more, going beyond current targets at the time. The moral imperative outweighed the economics for many. Leakage levels can act as a barrier to reducing consumption for some.

SSC – *Appendix E - Customer Research Findings Summary CAM WRMP (2018)* and *SSC – PR19 Data Triangulation Study SSW WRMP (2018)* reinforced this, saying that the evidence all pointed to the need to reduce leakage levels well beyond current levels. Customers thought this was morally the right thing to do, although the more informed customers were about the costs and operational challenges associated with reducing leakage by significant levels, the more balanced their judgement became. The triangulated WTP value among household and business customers to reduce leakage by 1ml/d was £216,977 (per year).

The *SSC – WRMP24 - WRAP Theme 1 Research Findings (2021)* highlighted the fact that leakage was still a customer priority. Clean water was seen to be a precious resource and loss through leakage felt ‘wrong’. Customers assumed that the issue would only worsen with population growth, but on the flip side, there was an expectation that technological advances would help achieve targets.

“I would have thought with all the advances in technology it would be possible to identify and locate leakages quickly and so reduce wastage quite a lot over the next 25 years.” (SME – hotel)

There was little concern expressed about the disruption associated with leakage. Educating customers was seen to be key to reducing leakage from their pipes, coupled with incentives to tackle the problem.

The *SSC – Customer Priorities Research Tracker Quantitative Insights Year 3 (2023) (Accent)* also found that leakage remained a priority for HH and NHH SSC customers. In a Max Diff exercise with a list of attributes, leakage reduction came third out of all factors. Interestingly, customers in CAM ranked leakage as a higher priority than SSW customers, placing it second and third respectively in the ranking exercise.

The *SSC H2Online - Community Feedback WRMP (2019-2022) (Explain)* found that when members were told about SSC’s leakage reduction targets for 2020-2025 (15% reduction), 64% wanted South Staffs Water to go further and deliver a 20% reduction or greater, and 47% wanted Cambridge Water to go further and deliver a 20% reduction or greater.

“Should definitely go for 20% target but customers should not be charged extra. Losing water costs money so by repairing more leaks saves the company money. Invest in engineers to repair more to save more! I know it’s not quite that simple, but this is how you should focus and prioritise funding to support it”

“Cambridge Water should seek not be satisfied with being better than the average water company, they should aim to be leading the pack.”

SSC – LTDS Report (2023) (Turquoise) work also found leakage reduction to be a top-tier priority amongst almost all customer segments, and it came out as the 2nd highest priority in both the qualitative and quantitative phases of work. It is clear, throughout the SSC regions, that leakage is a very important area to customers.

SSC – Customer Promises Tracking Research Report (2022) (Turquoise) showed levels of satisfaction were 45% positive agreement, on average, for how quickly SSC repair leaks on public highway/footpath although for non-household customers, satisfaction was lower at 35%. Perceptions had improved during the first year following the COVID pandemic (2020/21) but had slipped back again in 2021/22 to previous levels.

Net Zero Citizen Jury (2023) (Explain) highlights how high of a priority leakage reduction is in comparison to other factors, as jurors were shown it only contributes 11% towards 2030 carbon targets, compared with 69% for renewable energy generation. Despite this, leakage reduction received high priority scores across all participant groups across SSW and CAM samples, while renewable energy generation received medium/high priority in online samples for SSW and CAM, and lower priority for the F2F Juries. Despite the relative low impact it has on reducing carbon emissions, pipe leakage maintains a very high priority in customers' minds.

Detailed research in other regions shows similar results, *Hafren Dyfrdwy – WRMP Customer Research (2022) (Blue Marble)*, showed that customers prioritise leakage reduction. They saw leakage as a bigger problem than they realised and that this is about 'getting your own house in order'. The majority wanted to see leaks reduced irrespective of the cost and see long term cost and environmental benefits in doing so. A much smaller number supported leak reduction only where it is economically beneficial.

Among stakeholders, *WRW - Updated Regional Plan (2023)* shows that they believe, like most customers, that progress on tackling leaks is a prerequisite for having a more meaningful conversation about water efficiency. Also, *SC - CCW Consultation Response to SSW and CAM draft WRMP (2023)* reflects a clear message from customer research/engagement, that the plan's strong focus on demand management solutions means the plan must make the best possible use of the current water resources before investing in any large-scale supply side options. Much depends on leakage and PCC, supported by universal metering (the latter two options are explored later in this chapter).

Some stakeholders want more detail around how leakage targets are set. For example, the Cambridge Valley Forum, in its consultation response, note that it is disappointing to be unable to tie down the issue of actual volumes of water leaked per unit time.

Acceptability of the national target of a 50% reduction by 2050

In the summer of 2021, *SSC – WRMP24 - WRAP Theme 1 Research Findings (2021)* showed that leakage was a key priority, but there were mixed views on the national target. Around half of participants (slightly more in SSW) were happy with the target given the challenges and the associated cost/disruption of addressing them, as long as they were convinced about effective planning. There needs to be communication with customers about their role. There was a strong call from both regions for interim targets to ensure SSC stay on track. Half of participants (slightly more in the Cambridge region) called for more ambition because of the urgency of the issue and the need for action. There were some mentions of technology to facilitate achieving the target.

WRE – NHH Demand Club Project – Stage 1 (2022) (Blue Marble) found customers agreed that a 50% reduction in leakage was acceptable, but the timeframe of 2050 is too long and would prefer to see a target of 2030. However, many customers do not understand why addressing leaks should take 30 years to achieve, they just see it as an extremely important target.

The *SSC – WRMP Themes 1 and 3 Quantitative Insights (2022) (Accent)* asked customers without any prior information, to provide their views on leakage reduction and 46% of all customers wanted to see leakage reduced to as close as zero as possible. Once informed on the challenges around reducing leakage, 80% supported the national target for reducing leakage and just 2% opposed the target. Key reasons for supporting the national target for reducing leakage were that wasting water does not make sense and that 'we'll leave more water for future (if leaks

are fixed) and that it's the 'right' thing to do. Customers felt there should be more education to raise awareness of water usage and shortages. It was acknowledged however that it is impossible to reduce leakages to 0%. As would be expected, customers who were more engaged with protecting the environment were significantly more likely to have a higher level of support for the national target for reducing leakage.

The *WRW - Updated Regional Plan (2023)* looked at going beyond leakage targets and found there was an appetite to go further i.e. 15% reduction by 2025 and 50% by 2050 is seen as not fast enough. The updated *synthesis report from WRW* in 2023 also found there are still widespread calls to increase leak reduction targets, and this continues to be an emotive topic and top priority for both HH and NHH customers. Across WRW, there is clear appetite for targets to go further. Looking at SSC specifically, customers supported the leakage reduction target of 50% by 2050, but some questioned whether this could be achieved sooner.

Similarly, the *SSC – LTDS Report (2023) (Turquoise)* also found leakage reduction to be a top-tier priority for customers. As seen in the other research, the vast majority of customers (96%) in the LTDS research supported the ambition of reducing leakage levels by 50% by 2050 (from the 2017/18 figure). In the qualitative workshops, leakage reduction was viewed as a priority due to participants being concerned by the current level of leakage and they felt as if it was a strong contributor to water shortages and perceived high prices. They felt that SSC should prioritise fixing leaks before asking customers to reduce their water consumption. Participants in both the qualitative and quantitative phases were asked when they wanted this ambition to be achieved by. Over three quarters of the sample wanted this ambition to be achieved in advance of the national 2050 target which SSC is targeting to deliver (84% in workshops and 76% in survey). Both NHH (78%) and Future Customers (77%) are equally likely to want this ambition achieved before 2050, however, a lower proportion of future customers wanted it achieved by 2035.

Looking at specific stakeholder voices, we can see that the *NFU*, in response to the Cambridge Water WRMP consultation, are in support of CAM's target to reduce total leakage by 50% compared to 2017/18 levels by 2050. However, the *NFU* said there needs to be a toolbox of options to meet future supply deficits, through demand management, such as reducing leakage and exploring supply options.

Ofwat agree that some areas of CAM Water's plans, for example the leakage ambition, are in line with their expectations for this stage of the draft WRMP. *CCW* also seem to be in support of CAM and *SSW*'s leakage reduction targets.

Furthermore, *WRW - Updated Regional Plan (2023)*, said they expect companies, working as part of regional groups, to reduce demand for water to relieve pressures on water supply, and they expect companies to adhere to demand targets; including halving leakage across the industry by 2050 compared to 2017/18 levels. *WRE* think there is a lack of a robust path to meet this target, and hence are concerned around the derivability of some demand management strategies. *WRE* would like to see companies work together to robustly testing and tailor demand management strategies, in order to be confident with these proposals.

Other stakeholders, such as *Waterscan (SSC - Waterscan Consultation Response to SSW draft WRMP, 2023)*, are concerned that *SSW* are just defaulting to targets and not going far enough to show suitable and ambitious targets, especially for leakage reduction. Also, *Cambridgeshire County Council* also thinks the 50% reduction in leakages figure is not ambitious enough, and needs a more urgent delivery date (*Cambridge County Council Email to CW*).

Willingness to pay more to achieve the target quicker

Whenever the subject of who pays for reducing leakage was put to customers, in most cases, they feel this is a key area for investment and should be prioritised, but customers were not keen for this to be on their bills. Customers in other regions such as *Hafren Dyfrdwy – WRMP Customer Research (2022) (Blue Marble)*, supported ambitions targets beyond the immediate cost benefit, although there were indications that customers will not want to fund this on their bills. Customers were shocked by how much water leaks and consequently wanted *Hafren Dyfrdwy* to halve its 2017/18 leakage level ahead of the statutory timeframe (2050).

Alternatively, *SSC – NERA Willingness to Pay for Water Services at PR24 (2022) research* found that leakage was a priority for customers, and that customers were willing to pay *SSC* to combat this. Out of multiple attributes tested,

water lost to leakage from pipes was one of a handful of attributes that customers were WTP for, and the amount was higher amongst CAM customers compared to SSW customers.

Table 8.1: HH WTP, from SSC – NERA Willingness to Pay for Water Services at PR24 (2022)

Attribute		Unit	HH WTP (£ per unit per household)		
			SST	CAM	Total ³
B	Risk of temporary “do not drink” notice	reduction in number of properties that received "do not drink" notice	£0.74	£0.97	£0.79
D	Hard water supply	increase in the number of properties that benefit from investment (thousands)	£0.00	£0.03	£0.01
F	Water lost to leakage from pipes	reduction in the percentage of water that is lost to leakage	£0.61	£1.40	£0.77
G	Issues with tap water colour, taste, or smell	reduction in the percentage of properties experiencing issues with tap water per year (tenth of a percentage)	-	£0.11	£0.08
H	Chance of property flooding from a burst pipe	reduction in the flooding incidents per year	£0.16	£1.03	£0.34
J	Supporting nature and wildlife	increase in the number of acres protected and enhanced (tens)	£0.03	£0.28	£0.08

We should note that not all customers might be WTP for reducing leakage. WRW - Updated Regional Plan (2023) found that, while most customers were willing to pay for reducing leaks, there were exceptions in vulnerable and lower income customers.

In SSC – NERA Willingness to Pay for Water Services at PR24 (2022) , Cambridge customers were more ready to select leakage improvements than South Staffs customers, and price played a more influential role for the latter. In the qualitative workshops of the LTDS, there was reluctance to increase the target due to potential cost implications. Customers felt that tackling leaks would be an expensive task, and some believed it might be worth waiting for technology to innovation that could reduce the cost. Additionally, customers that were finding it difficult to afford their water bills recorded a lower level of support for the leakage reduction ambition. This shows that cost does have an impact on ambition levels.

Further research shows that this can be a somewhat contentious point in the SSC region. In the SSC – LTDS Report (2023) (Turquoise), most participants (84% in the workshops and around 70% in the survey) wanted SSC to invest in greater leakage reduction now rather than wait for new technology. This was seen amongst both HH and NHH customers. Interestingly, future customers displayed a slight preference for waiting for innovation. As seen before, when customers started to think about who would pay for leakage reduction, ambition levels can sometimes fluctuate.

The primary concern for customers in the WRE – Club Customer Engagement report (2021) (Blue Marble) was companies reducing leakage, with 62% rating this as one of their top 3 options (the next option was 24pp behind at 38%). Customers expected companies to ‘get their houses in order’ before any major new resources are considered or before demands are made of customers to reduce their own leakage. Customers believed leakage reduction is the responsibility of companies rather than the customers. Customers would be happy with a 50% reduction in leakage across company and household pipes. In order for customers to address household leaks, they need support from companies in the form of; leakage allowance, being alerted if there is a leak, smart metering and insurance policies.

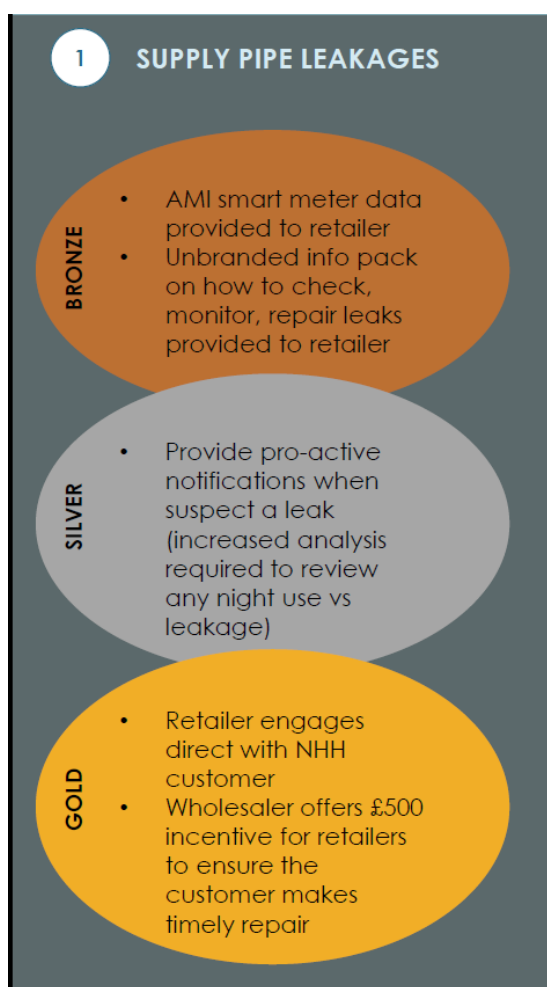
³ For consistency with pre-PR24 outcomes, we have taken the value from each region and calculated an average total value weighted by number of customers

The SSC – WRAP Focus Groups Report (2022) (Community Research) showed that most customers were unaware of the proportion of leaks which are on customers’ property, implying that significant education will be required before customers will make any changes to their behaviour or property to reduce leakage.

Engagement with businesses via SSC – Stakeholder Roundtable: Helping Businesses Save Water (2022) showed that provision of usage data and understanding of where water is being used was critical to enable implementation of water efficiency interventions and help identify and fix leaks. Leakage, Wastage (internal leaks e.g., loos, urinals) and Retrofits are already being considered for new sites but there needs to be more i.e. what is the next generation of solutions from the water sector and business case studies to support.

Depending on if leakage fixing covers company, and or, customer pipes, the priority of this service attribute could potentially change. CCW and Ofwat– Water Consumer Views (2022) found that water customers imagined that the description detailed network leaks versus property leaks, and the importance of this attribute is likely to increase slightly if it is clear that the leak fixing commitment encompasses people’s own homes.

Figure 8.2: Supply pipe leakage options from WRE NHH demand club project – Stage 2



The WRE – NHH Demand Club Project – Stage 1 (2022) (Blue Marble) and WRE – NHH Demand Club Project – Stage 2 (2022) (Blue Marble) found that most non-household customers were not engaged with water efficiency considerations. The expectation was that wholesalers should be responsible for water efficiency and post COVID they are just surviving. Retailers felt that commercial pressures are a priority. Then Net zero and carbon reduction dominate climate change priorities. Water efficiency may feature in CSR but lip service only. There was potential for ‘crisis fatigue’ and ‘doomsday top trumps’ to be a disincentive to engage. Unless customers have a specific need for water efficiency, better service with accurate billing was more enticing. During the Stage 2 engagement, three propositions for handling supply side leakage were put to the retailers for evaluation (see Figure 8.2).

Retailers responded enthusiastically to all three options for the supply pipe leakages though had some key suggestions to make them more appealing/ less risky for NHH customers. Alerts were particularly well received, as was data (though some not keen on being provided with lots of data, preferring alerts only). There was recognition that customers need information on looking out for leaks, and the benefits of leak repairs to customers. Customers would be more motivated to fix leak if they understood the cost to them. The incentive level may not be attractive enough to make it worthwhile for larger sites. The barrier for customers is investing on leak detection, hence this should be funded. Non-household customers were already motivated to repair leaks once detected.

Engagement in the proposed way still requires a lot of resources and effort from the retailer (in a low margin context).

The recent WRE NHH engagement conducted in June and July 2022 gauged responses from Anglian water business customers to a proposition to reduce leakage via water meter detection. In particular, for those who had experienced leaks in the past, this proposition felt valuable as it could help identify and help fix leaks more quickly which in turn saves money and potential damage.

Reducing customer demand for water

Level of ambition for the home of the future for household usage levels and the best way to deliver this

In *SSC – WRMP24 - WRAP Theme 1 Research Findings (2021)*, there was a call for greater ambition in terms of speed of consumption reduction, but not in terms of the stretch ambition of 80l/p/d. The *WRW - Updated Regional Plan (2023)* provided feedback from stakeholders (experienced in water related matters) and the majority of SSC customers suggested current target for 110L per capita consumption by 2040 should be brought forward, with the focus being on expediting targets rather than increasing them e.g. 80L.

The *CCW – Environmental Awareness Index (2023)* highlighted that understanding of the impact of decreasing personal water usage has increased since February 2022. This is especially apparent amongst women, those living in the east of England, and those without a water meter. These customer groups are increasingly more likely to understand how reducing their personal consumption can help the environment.

‘Reducing water consumption’ was one of the ambitions tested in the *SSC – LTDS Report (2023) (Turquoise)*. This ambition is aimed at meeting two national targets in the Environment Act: for HHs, reducing the average amount each person uses at home by 26% in SSW (22% in CAM), this is a reduction in SSW from 148 (CAM 141) litres per day in 2023/22 to 110 litres per day by 2050. The Environment Act also has set a target for NHHs, where water companies should aim to reduce NHH water use by 9% by 2037. It was found to be a mid-tier priority ranking, and overall, it was ranked 8th in the workshops, and 6th in the survey responses of the 10 ambitions tested. The ambition of reducing water consumption was not tested in depth in the survey, but the qualitative results found that 82% supported this ambition. In general, participants supported the efforts to encourage people to use less water, but they believed that reducing water usage from 148 to 110 litres would be difficult, and customer education would be required. Future bill payers agreed that customers should be persuaded to use less water and were concerned that SSC was behind the target. NHH customers felt that targeting businesses in the same way would be a challenge as each business has different usage requirements.

The results of the survey in the *SSC – LTDS Report (2023) (Turquoise)* found that the key reasons for wanting to reduce the amount of water used at home and work was wanting to ‘reduce unnecessary wastage/usage’ and to ‘reduce costs’. Only 34% of workshop participants and 52% of the survey sample wanted SSC to achieve this ambition before the target date of 2050. NHH customers and FBPs were more willing for SSC to achieve this ambition before 2050 – 69% of NHHs and 72% of FBPs agreed. In the qualitative workshops, there was some pushback from HH customers about contributing to funding investment plans to help businesses reduce their water usage, and some felt that NHHs should contribute since they were generating profit.

Moving further, the *South Staffs Water – Stakeholder Roundtable Feedback Summary (2021)* shows that different stakeholders have different levels of understanding, and different views regarding PCC targets. Some stakeholders feel the target of 2050 is too far away, and progress should be faster. Others feel it is a reasonable timeline. Others said that it depends; if abstraction can be reduced and environmental goals met with 2050 timeline, then it is acceptable, but if not, then PCC should be reduced sooner.

Some consultation responses show that certain stakeholders disagree with the PCC targets. For example, *SSC - Cambridge and South Cambridgeshire Green Party Consultation Response to CCW's draft WRMP (2023)* says the 110 litres per person per day by 2050 target needs to be more ambitious, and they think it should be 80 l/p/s as soon as possible. On the other hand, the consultation responses from Ofwat and Waterwise show that they think the plan delivers in its expectations of setting its ambition towards demand management targets, including per capita consumption. CCW think that SSW's plan ought to go further than the 110 l/p/d household consumption reduction by 2050 and think they should increase this to 122 litres per person per day, to align with DEFRA's Environmental Improvement Plan.

SSC - Cambridge City Council and South Cambridgeshire District Council Joint Consultation Response to CAM's draft WRMP consultation response shows support for reduction of HH consumption to 110 litres per person by 2050;

however, they believe this cannot be achieved through just smart metering and educational work, and it needs investment into more water efficiency homes and businesses, with the option of retrofitting where appropriate.

The Federation Cambridge Residents' Association mentioned that residents might not be aware of the urgency of the situation, and they wonder how SSC is communicating changing behaviour and saving water. This latter point is explored further in the chapter.

Should SSC support the development of low water use homes – partnerships and incentives with new developers?

WRE – Club Customer Engagement report (2021) (Blue Marble) found support for using grey or rain water, especially from developers and Local Authorities (LAs) who were interesting in collaborating to achieve this particularly in new builds. This also had strong support from environmental groups when thinking about new developments to address both floods and droughts. There is a need for better incentives to encourage more grey water schemes, including for businesses, the payback period for grey water is 10-12 years, this is too long and so requires incentives.

SSC H2Online – Monthly Report (August 2022) (Explain) asked about smart villages, a potential new housing innovation designed to deliver on the Government's 'Future Homes Standards' and found that both South Staffs and Cambridge regions felt similarly about it, with the largest proportion of members stating that they think the plan is a good idea, but they would not be willing to receive a small bill increase to fund the scheme (42% of South Staffs Water voters and 44% of Cambridge Water voters). This suggests that smart villages are not a main priority for SSC community members. More CAM voters (21%) stated they'd be happy to receive the bill increase compared to SSW voters (9%), illustrating that this innovation may be more effective in the Cambridge Water area. Some members stated that, unless they were to purchase a new build house themselves, they felt they shouldn't be responsible for paying for this. Collaboration between businesses was mentioned as a possibility for funding and one member felt that all new homes should be built with water efficiency in mind.

On a more general note, research from 2022 has found that customers respond well to clear advice aided with visuals in order to help them change their water behaviour. The *Garden Water Behaviour Change (2022)* study found that giving tangible examples of how much water can be saved, in either litres or GBP, can be really motivating when it comes to persuading people to save water.

Some stakeholders had some ideas about how SSC could support low water use homes. For example, the WRW customer research showed that stakeholders would like to see subsidised water saving products available for customers. Further, Cambridge City Council and South Cambridgeshire District Council said retrofitting existing buildings to reduce water use will be essential and is urgently required. The Councils would like CAM to explore this further, in conjunction with themselves and the Environment Agency.

Should SSC continue to run education programmes at schools to raise the value of water? Would customers support additional investment in this area?

The SSC H2Online - Community Feedback WRMP (2019-2022) (Explain) found that 48% of South Staffs Water members and 61% of Cambridge Water members indicated that water companies, including SSC, should play a supporting role for teaching children about issues such as water efficiency. 33% in SSW and 28% in CAM felt that it was SSC's full responsibility to lead on this, with support from teachers and parents.

Dŵr Cymru Welsh Water – Metering and Efficiency Research Report (2021) (Relish) found customers would like their water company to deliver higher profile campaigns on using water sensibly, conveying an 'in it together' message which is supported by education at schools on water efficiency, as well as those about to leave home so they adopt good habits.

How far should SSC go to encourage NHH businesses to reduce their water consumption?

The WRE – NHH Demand Club Project – Stage 1 (2022) (Blue Marble) found that for small business, according to NHH retailers, that water efficiency is less relevant and so messaging has to be targeted to larger businesses, where efficiency is more relevant. Some NHH retailers felt that there is a lack of water efficiency options available for

businesses, and information that is available is targeted towards households. Retailers think smart metering could be a solution; is it the simplest and easiest way to target and measure water efficiency but the cost of smart meters is excessive for smaller businesses and investment support is needed from wholesalers.

Furthermore, the *WRE – NHH Demand Club Project – Stage 2 (2022) (Blue Marble)* similarly found that messages need to be relevant and tailored to different businesses. These retailers suggested creating a ‘Which?’ style list of technologies so companies can vie for business based on water efficiency criteria. Wholesalers need to motivate businesses ‘to have skin in the game’, to drive awareness of water usage and waste.

The WRE NHH Demand Club Project - final debrief (from August 2022 tested 4 propositions with NHH customers).

Proposition 1 was ‘to reduce leakage from business premises. Customers who had experienced a leak in the past felt this proposition was valuable as it can help identify leaks to be fixed more quickly and thus saves money and prevent potential damage. Some improvements that were suggested:

- Ensure it’s clear where the customer is responsible for leaks
- Provide case studies or cost examples to help contextualise the financial support against the cost of leak repairs
- Outline clear guidelines for support eligibility and how funding will work

Proposition 2 was ‘to enable businesses to reduce water’. Customers would prefer an in-person audit by their water company, this was especially important for larger companies as the self-audit tool isn’t sufficient. Some improvements suggested are:

- Important to be clear whether an in-person assessment would come at a cost
- Offer or advertise specialist support and guidance for more complex or unique businesses
- Optimise self-audit tool to offer a hybrid and tailored approach – self-audit with support from online chat or video call

Proposition 3 was ‘to encourage businesses to adopt water recycling’. It was found that implementing water recycling measure resonated more with high volume users and those on an environmental platform. The improvements suggested are:

- Develop ‘green accreditation’ further to help businesses understand why it would be beneficial and who would recognise it
- Water company should provide expert advice; outside the scope of a water retailer who are considered more of a ‘middle man’
- Target new businesses as they set up

The final proposition, 4, was ‘to encourage businesses to consider water efficiency actions. For this proposition, incentives felt the most relevant for businesses that are able to make significant changes. Web based sources were most relevant for those businesses which are ‘standards’ in the way they are set up. Suggested improvements included:

- Give examples of small behaviours that would be eligible for incentives and rebates
- Show how this accreditation scheme differs from other and who would recognise it
- Offer a web-chat option as a resource to talk to a real person about your unique business.

CCW – Evidence Review of Retail Business Water Market (2023) found that most NHHs, apart from the highest consumers, are complacent about their water usage. This being said, NHH customers (not necessarily in SSC region specifically), find the idea of water usage audits/reviews very attractive.

Many stakeholders tended to be passionate about reducing consumption amongst NHHs. *WRE – Promoting Water Efficiency among Non-Household Customers (2022) (Blue Marble)* found that around half of the NHH customers studied were aware of short or long-term demands for water, but not to the level of detail they were shown. Results showed that the market is open to reducing water usage, but the main barrier is complacency. This research tested specific propositions with NHHs and found that NHHs are busy and need help to navigate the services available, and it seems most don’t have the time or inclination to self-serve. The short-term propositions thought to be the most

effective are leak alerts with incentives, and in-person audit and install. Further, longer term ambitions seem to have the potential to engage NHH once wider societal and environmental drivers exist, such as self-service tools, generic advice and accreditation schemes.

The Strategic Panel and committees open letter to wholesaler CEOs regarding WRMPs said that water efficiency needs to become core to everybody's business and meaningful wholesaler engagement in relation to the NHH market is critical, and water companies' WRMPs are key for this. The Strategic Panel do not believe that water companies are currently considering the needs and potential contributions of NHH customers, and they ought to go further with these commitments, and their inclusion in the plan. The NHH market must be fully integrated into these plans as business customers represent a significant opportunity to reduce demand and as the majority of NHH customers use water for the same purposes as HH customers (e.g. taps and toilets).

Water recycling

SSC – Appendix E - Customer Research Findings Summary CAM WRMP (2018) and SSC – PR19 Data Triangulation Study SSW WRMP (2018) stated that the feedback from the WRMP and other projects highlighted an appetite for water recycling, particularly when customers are informed about the challenges we face in terms of meeting future demand for water. However, whilst customers viewed it as a priority, there were affordability issues that came through in the engagement. This included the low level of likely take up of a retrofit scheme at an individual property level and the long-term concerns over whether customers would keep up the maintenance of a greywater system. Household customers also expressed an interest for more advice and support to help them to install simpler rainwater harvesting system, such as water butts.

Findings from the *SSC H2Online – Monthly Report (September 2021) (Explain)* found that customers generally thought water recycling should be something that is done in all homes (67% SSW, 64% CAM). All Cambridge customers were happy to use recycled water for flushing the toilet (91% SSW) or in their garden (73% SSW). Those who did have concerns was because of hygiene and potential spread of disease, they want SSC to be clear on the quality of the water that has been recycled. Black water was the type of water customers were least happy to use in their homes at all. The majority of customers (68% SSW, 82% CAM) indicated that they had no concerns about using recycled surface rainwater in their homes, but customers were generally more concerned about using recycled greywater in their homes. The *South Staffs Water – Stakeholder Roundtable Feedback Summary (2021)* felt that grey water recycling elicited more enthusiasm than any of the other supply-side options put to them. This was partly because it was thought to have low environmental impact and was minimally disruptive for customers. Also, the public were thought to be familiar with and positive about the concept of recycling. However, stakeholders would want questions answered. For instance, what could the water be used for; were the chemicals used in grey water recycling safe; and who would bear the costs of e.g. retrofitting an extra set of pipes in existing homes? Water recycling was also popular at the *Cambridge Water Stakeholder Roundtable (2021) (Community Research)*.

The *SSC – Stakeholder Roundtable: Helping Businesses Save Water (2022)* highlighted a lack of understanding of the benefits vs costs. There was a need to provide more support on the cost benefit analysis of water reuse interventions and wider non-monetary benefits to help businesses make informed decisions. New builds were also a key area flagged a few times as an opportunity area to explore options for water re-use/harvesting if the right support and expertise was provided. There was a discussion around what is the best route for water recycling on large developments. The return on investment would be key to understand for the business case to stand. There was mention of some negative case studies of water recycling not working, so more success stories need to be shared in what has worked to help shift perceptions.

A survey at the start of 2022 in neighbouring Severn Trent's region, the *Severn Trent – WRMP24 (2022) (DJS Research)* report gathered views on the eight or nine supply options that Severn Trent is considering to ensure there is sufficient water to meet demand both now and in the future. The top water supply option for households (based on nine options) was recycling or re-using water indirectly through a treatment works. For non-households water recycling did not feature in the top three options, instead they preferred to see increasing the size of existing reservoirs, increasing the capacity of water treatment works and maximising the outputs of our current water treatment assets.

In terms of stakeholder views, the Cam Valley Forum fully supports CAM Water's plans to incentivise water recycling. They believe the water industry should put its energy behind all such modifications to local building regulations, and Local Authorities should demand the facility to better influence local planning laws.

Metering – including smart tech

The fairest way to charge for water, long-term aspirations for metering and universal metering approaches

The *SSC – Metering Presentation (2017) (QA Research)* showed that likelihood to adopt a meter was driven by bill reduction potential, but only 27% of customers thought a meter would save them money. Small financial gains were not necessarily enough to drive take up and therefore there was also a need to focus on emotional motives.

SSC – WRMP and Long-Term Resilience Customer Engagement Insight Full Report (2017) (Community Research) said that most believed that metering is the fairest way to charge. Views on universal (compulsory) metering were more mixed, with suspicion about water company motives and concern about leakage being a disincentive for some. Smart metering (an indoor device giving a real time reading) was popular.

Echoing other studies at that time, the *SSC – Appendix E - Customer Research Findings Summary CAM WRMP (2018)* found that metering was seen as the 'fairest approach' by a majority of customers for charging for water, but that any policies should not disadvantage customers in vulnerable circumstances. Most unmeasured customers were against compulsory metering and 'having the choice' was seen to be important. Customers were willing to pay £10 per property (per year) to have a meter installed and only £2 for giving the customer a continuous meter reading to their home (i.e. an in-home device).

The *SSC – WRMP24 - WRAP Theme 1 Research Findings (2021)* found strong agreement for universal metering, especially strong in Cambridge. In South Staffs, universal metering was picked as one of the top three options by 3 of the 4 future customers. It was a much less popular option amongst current customers. Likewise in Cambridge, 4 of 5 future customers chose this option, although in this region it was a more popular choice for all. However, no SMEs in South Staffs chose universal metering within their top 3 options.

In *South Staffs Water – Stakeholder Roundtable Feedback Summary (2021)* found that household stakeholders felt strongly about universal metering and had a range of responses. For some it was welcomed, and universal metering was seen as an effective way of making people more aware of and more careful about their water use. It was also generally regarded as a fair and therefore acceptable way to charge. For others, they did not welcome it as it was felt it would increase bills for some customers and so risked "tipping people over the edge". It was perceived by some that now was not the right time to do this, with so many people already in debt because of increasing food and energy bills. Some stakeholders were cautious but positive; while there was concern about bill impact and affordability, this was balanced against a sense that universal metering made sense. It should therefore be introduced with care. Even a stakeholder whose "focus is people not environment" could see the value of universal metering for demand management, so long as customers were protected from unmanageable bill increases.

At the *Cambridge Water Stakeholder Roundtable (2021) (Community Research)* stakeholders were also strongly in favour of universal metering for household customers as soon as possible, for several reasons:

- Because of the urgency of the situation, compulsion is now needed to reduce demand.
- Universal metering sends a clear message to customers about how serious the situation is and reinforces the value of water.
- It enables the use of tariffs that encourage more careful use of water, such as rising block tariffs. Tariffs were raised repeatedly during the group, and stakeholders strongly encouraged Cambridge Water to use them as an incentive mechanism.
- Finally, there seemed to be no good reason not to introduce universal metering. While affordability was a concern, this could be addressed through targeted support measures.

However, it was thought that metering might have only limited impact while water bills are low so would not be a panacea; other demand management measures would be needed too. Other stakeholder WRMP24 consultation

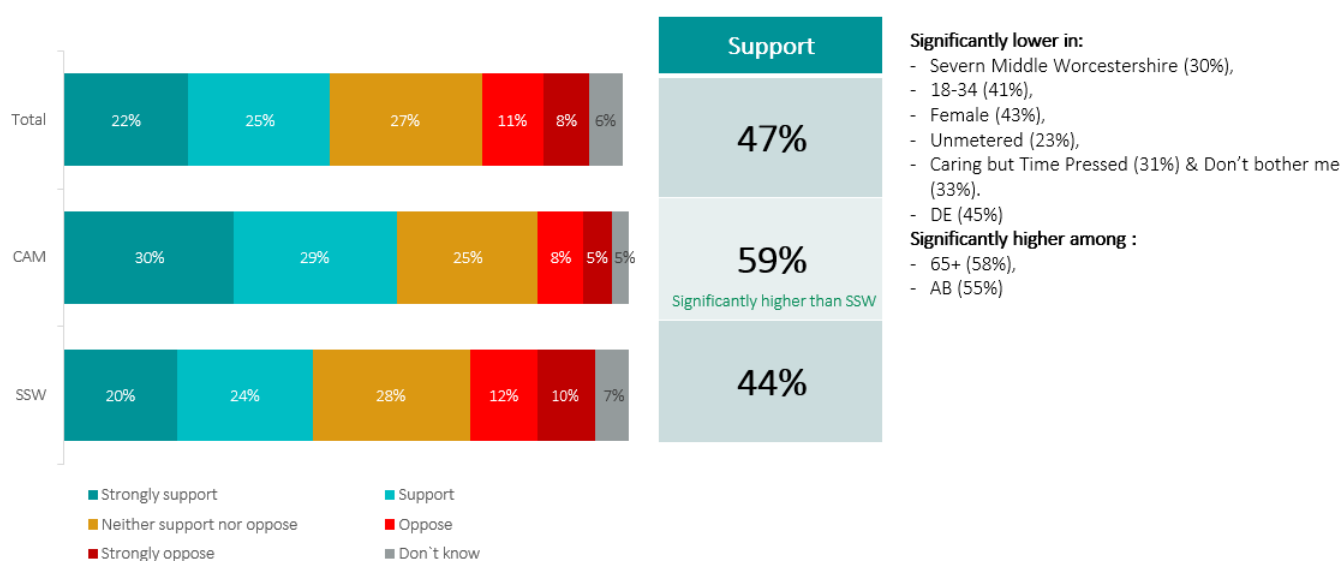
responses show some general support for universal metering and smart meters, but many stakeholders think the SSW and CAM plans are not clear enough yet on the detail around metering.

The SSC – WRAP Deep Dives (2021) (Community Research) customers called for a universal metering programme to prioritise reducing the demand for water as quickly as possible. The majority wanted to see universal metering fully implemented in the next 10-15 years. There was agreement with the need to support customers through the transition, however, water companies need to consider how much customers are being asked to contribute. Recent energy prices rises have brought household bills to the forefront of peoples’ minds and there is recognition that household budgets are being squeezed.). The focus should be on installing new meters (or retrofit and install new at the same speed) to support achieving this.

The *SSC – Customer Priorities Infographic (2022)* showed that a full smart meter roll-out programme, so customers can receive regular information and comparisons about their water usage to help control how much water they use was expected only as part of an enhanced service to customers. Future 2050 essential/expected service should include use of innovative technology to predict problems and/or quickly fix pipes, treatment works and pumping stations, to reduce wastage of water – e.g. use of artificial intelligence.

SSC – WRMP Themes 1 and 3 Quantitative Insights (2022) (Accent) found that amongst uninformed customers, just under half (47%) supported the introduction of universal metering, which was significantly higher in CAM compared with SSW and amongst metered customers (see Figure 8.3 for more information).

Figure 8.3: Uninformed perception of Universal Metering, from SSC – WRMP Themes 1 and 3 Quantitative Insights (2022) (Accent)



Q44. Which of the following best represents how you feel about the introduction of universal metering? (n= 1,180, CAM: 293, SSW: 887)

▲ ▼ Sig higher or lower than at least one attribute in the same category **Accent**

Once informed, the support for universal metering increased (significantly) by 6%. Customer support was driven by 5 key reasons;

1. Greater equitability;
2. control and awareness;
3. the incentive to reduce consumption;
4. protecting the environment;
5. the potential to save money.

When considering options for a universal metering roll out programme having been provided with some education, 38% of customers supported the approach that minimises costs – a shift from previous Community Research

qualitative work, where the highest level of support was to minimise the demand for water as quickly as possible (27% supported this approach in this study). Even when informed 37% were not prepared to pay any more to deliver universal metering. Of those who are prepared to pay more to deliver universal metering, customers in the Cambridge region (27%) were significantly more likely to pay an additional £4 per year to see universal metering delivered by 2035. SSW customers were most likely to support an extra £2.50 by 2050 (24%) Customers who supported universal metering were significantly more likely to pay for an additional amount (71%), while those who opposed this approached are more likely to opt for not paying any more (21%).

When looking at stakeholder views, we can see that the Environment Agency would like CAM Water complete the full smart meter roll out by 2030 or earlier. Fast and effective rollout of smart metering is key to reduce demand, and they note that CAMs suggested timeline of implementation is slower than other programmes in England. The pressure on CAM water resources means they should be delivering smart metering at a faster pace.

The *SSC H2Online - Community Feedback WRMP (2019-2022) (Explain)* highlighted that saving money is a key selling point of 'smart' water meters in the South Staffs Water region, whilst in the Cambridge Water region it is the wider benefits of saving water through leakage detection and supporting the environment, as well as the convenience of automatic readings. In June 2021, 52% of Cambridge Water community members (base 44) indicated that they felt metering should be universal for all customers, whereas only 32% of South Staffs Water members (base 47) shared this view. 43% of South Staffs Water members indicated that customers should have a choice when it comes to a metered supply and should have the option to switch back if they are unhappy; 18% of Cambridge Water members shared that view. In Feb 2021, when asked what SSW/CAM's metering policy should be, 30% of South Staffs Water members thought (base 27) water meters should be universal but starting with those with high water usage, compared to only 13% of Cambridge members (base 23). However, 57% of Cambridge members thought a water meter should be universal for all customer homes, compared to 26% of south Staffs members. In June 2021, members were asked what they thought the benefits of being on a water meter were, the most common positives included monetary savings and being more conscious of water usage. However, those who were not on a meter already had concerns over the uncertainty of charges.

"I'm not currently on a meter, but have considered it before. I'm still unsure whether it is right for me as I keep hearing of these 'standard charges' that are included in your bill whether you have used the water or not, so I'm thinking, would it benefit me? Would I be paying more for water I haven't used? Still on the fence with this one" SSW Member

The *SSC – NERA Willingness to Pay for Water Services at PR24 (2022)* research did not observe a positive WTP for installing smart meters, which seems to imply that many customers do not prioritise having a smart meter in their home, and/or that they do not want to pay extra to have one. Conversely, the *WRW - Updated Regional Plan (2023)* found most customers do support smart metering, including the universal roll-out. This was especially apparent when customers understood the future challenges around water supply. However, this review noted that there is a lack of WTP data for smart metering, which is in line with the NERA results. These showed that customers in both regions were more mindful of price in relation to this attribute compared to most other attributes. Specifically, customers preferred the idea of fully smart meters, as opposed to semi-smart or non-smart meters, because of the data visibility and consumption data they would offer. SSW customers tended to support universal metering as long as vulnerable customers would continue to be supported. There were also some wider concerns around the prospect of smart metering, for example, the worry of increased bills, especially for larger households, or those who are currently unmetered.

There has also been some discussion about smart meters for business customers. *The South Staffs Water – Stakeholder Roundtable Feedback Summary (2021)* found that whilst they were thought to be helpful for businesses proactively looking to cut costs, there was less interest from farmers who use several water sources (mains, abstraction, private water supply).

The water retailers consulted as part of the *WRE – NHH Demand Club Project – Stage 1 (2022) (Blue Marble)* stated that inaccurate data was a major barrier to encouraging water efficiency in the sector. Retailers felt it is difficult to promote water efficiency with the current data which was seen as poor quality, with meter readings repeatedly missed. Smart metering was seen as the solution and would be the simplest and easiest way to target and measure

water efficiency. However, the cost of smart meters was prohibitive for smaller businesses and therefore investment support would be needed from wholesalers.

“Wholesalers don't know enough about meters - where they are, if they're broken etc. If they could deal with that we'd be well on the way to better water efficiency.” (Unassociated)

CCW – Smart Thinking Metering for Business Customers (2023) noted that, among NHHs, smart meters are viewed positively as they are understood to help to reduce water usage and allow businesses to become more efficient. Most businesses were already aware of this concept, and the associated benefits, due to the growing popularity of other utility smart meters in both homes and businesses. 82% of NHHs supported the broader rollout of new water meter technologies, and expected them to become commonplace as they offer time and financial savings. However, businesses need educating on how smart water meters actually work, and how the installation process works. There seems to be a lack of knowledge amongst NHHs about how AMI meters differ from AMR and basic water meters, meaning some benefits regarding time savings may be unknown or underappreciated at the moment.

Severn Trent – Proactive Metering Research Report (2021) (DJS Research), summarised the perceived advantages of metering to be that it could work out cheaper (depending on household make up), meters were seen as way of ensuring that everyone will pay for what they use, they make people more careful about what they are using, they enable people to cut down wastage and to 'do their bit', provides accurate billing, could help to inform water companies and help detect leaks and it is a fairer way to charge. Perceived disadvantages were that it could work out more expensive (depending on household make up and life circumstances), customers might modify behaviour to the point where people are worrying too much about usage or feeling guilty, it could cause arguments in the home, there is hassle associated with having to read them, customers were unsure whether the customer pays to install plus added installation hassle, it could impact on where you can live or house sales, people would need to enter the home to service it (post COVID-19 concern) and that bills would fluctuate. When revealed that most water meters are not in fact smart, participants were clear that not being able to access the information in real time, for some, defeats the purpose of having a meter in the first place.

A more recent report from *Severn Trent – Environmental Destination and Compulsory Metering (2022) (Accent)* found similar conclusions to *SSC – WRMP Themes 1 and 3 Quantitative Insights (2022) (Accent)*, in that amongst uninformed customers, half supported the introduction of universal metering, significantly higher amongst metered customers compared with unmetered. Once customers were informed with education on the topic, support for universal metering increased (significantly) by 8%. When considering options for a universal metering roll out programme, 49% wanted rollout to be undertaken as soon as possible and this was significantly higher amongst metered customers, middle social grades (C1C2) and those who do not report issues with paying their household bills. Significantly more customers supported the roll out of smart meters with the associated increase in costs compared to cheaper, non-smart meters (42% compared to 29%). 44% supported the rollout of smart meters by 2035. Monthly meter reads were the most preferred frequency for receiving meter reads (37%). There was no clear preference for replacement method (38% replace at end of life/40% before end of life).

The *Dŵr Cymru Welsh Water – Metering and Efficiency Research Report (2021) (Relish)* supported findings in SSC's region, in that unmetered customers were often open to more info and to their barriers being challenged. Most also expressed support for the fairness of paying for what you use, thus progressive metering offers a stepped approach to adoption without making meters compulsory. Customers recognised that better understanding their usage will help them reduce consumption, and they saw a potential role for smart water meters in helping achieve this. They did, however, harbour cost concerns and have high expectations based on energy smart meters, with (for example) IHDs, apps and real time info. Applying a tiered pricing tariff structure to control demand did not gain traction with customers, primarily because it was felt to penalise families and vulnerable customers. Although not ideal, reducing pressure across the network was often felt to be a preferable and fairer solution.

The GB wide study by *Artesia – MOSL Enhancing Metering Technology (2022)* found that adoption of smart metering across all retail market regions – would have the following benefits:

- For retail customers - accurate bills, based on consumption. Fewer complaints. NHH customers can make more informed choices about their retailer based on value-add services and should be able to switch more

easily due to accurate bills speeding up the process. More opportunity for water efficiency, leakage will reduce, and bill shocks minimised.

- For wholesalers - Each transaction will be settled based on accurate consumption data. Improved visibility of consumption from each NHH meter, allowing sites with potential wastage or leakage to be identified, and this information will be shared with retailers. Opportunities to improve water efficiency and reduce leakage. Improved consumption data to improve demand forecasting and water resource planning. Improved consumption data for use in water balances and performance commitment reporting. Accurate consumption will also improve settlement calculations.
- For retailers - More accurate settlement and reliable cashflow, due to improved billing and settlement accuracy. Reduced costs for meter reading, and the opportunity to deliver a more efficient service. It will allow retailers to innovate and provide customers with the services they want. It should provide more confidence in taking on new customers.
- For the market operator - Improve market performance, allowing the market to be more outcome focussed. Provide a data rich environment to deliver value added insight and drive evidenced based improvements. It should allow the market to become more efficient.

The Artesia report also stated that enhanced meter technology exists now that can deliver the benefits via remote communications, daily metered consumption values from every meter, sub-daily consumption data to identify continuous demand which can reduce leakage or deliver water efficiency. Delivering enhanced meter technology in AMP8 is cost beneficial and will deliver benefits into the future. Enhanced meter technology could be delivered by wholesalers as a “low regrets” investment in PR24 to deliver long term benefits under a range of scenarios.

A recent report *Hafren Dyfrdwy – WRMP Customer Research (2022) (Blue Marble)* showed that a majority of the sample felt positive about smart meters. They would be motivated to monitor use and (hopefully) save money. Many were unsure or had concerns, however, suggesting clear communication of potential benefits is needed.

Approach to fitting and retrofitting meters

Information gathered in SSC – PR19 Data Triangulation Study SSW WRMP (2018) found that the opportunity to revert to an unmeasured charge within the first two years of opting for a meter remains a vital policy to offer. Also, offering a guarantee that the customer will not pay more than their rateable value during this period would also give customers reassurance. This should be supported by targeted communication of any savings made during this period as a way to help overcome the main barrier that customers highlighted, the prospect of higher bills. This is particularly important to ensure vulnerable customers to not experience unwanted distress, particularly when moving home; and the evidence shows that a noticeable number of customers view smart metering as a potentially useful service to help them manage their water consumption more effectively. A pilot trial, including gaining customer feedback, of how best to approach a water smart metering roll out is required to ensure it delivers a solution that gives customers more control of their water usage – something they have called for throughout SSC engagement.

The *SSC – WRAP Deep Dives (2021) (Community Research)* which favoured bringing in universal metering within the next 10-15 years felt the focus should be on installing new meters (or retrofit and install new meters at the same speed) to support achieving this. Customers felt that this time frame is sufficient for South Staff and Cambridge to make the transition.

“We are running out of water the problem needs to be managed asap.” Cambridge Customers.

Those who thought universal metering should be implemented should be implemented in the next 25 years did so because they were more concerned about the cost of implementation if completed sooner.

Smart metering preferences

SSC – WRAP Deep Dives (2021) (Community Research) stated that most participants were willing to pay more to have universal metering implemented ahead of 2050 but may not have considered this in the context of all other proposed bill increases (relating to water transfers, more frequent information on usage etc). Cambridge customers were more likely to prioritise full Advanced Metering Infrastructure (AMI) as a roll out option than SSW. Cambridge September 2023

customers also appeared slightly more determined to hold out against any bill increases than SSW customers (including support for vulnerable customers). Future customers were slightly more likely to prioritise AMI metering than current customers. Higher socio-economic grades were more reluctant to pay towards supporting vulnerable customers through the impact of increased water bills.

The *SSC – WRAP Focus Groups Report (2022) (Community Research)* found that customers were surprised that there was only a small price differential between roll out of Automatic Meter Reading (AMR) (£3.50 per year) and roll out of AMI metering (£4.20 per year) by 2040. Cost was a prevalent consideration but once they were aware of the small additional costs of AMI as opposed to AMR, there was a strong preference for AMI. The need to educate and inform consumers about the change to smart meters was highlighted. There was concern about the potential impact of changes on vulnerable consumers and frequent mentions of the positive impact on the environment. One Cambridge participant was very sceptical about the reasons for change (which has been noted as emerging in wider metering studies) and therefore such an emotional response needs to be factored into any communications about the introduction of AMI.

Cambridge region stakeholders reported in the *SSC – Stakeholder Roundtable: Helping Businesses Save Water (2022)* that there was strong and consistent support shown for smart water meters and more frequent data. Smart metering, Technology, Data insight – smart metering roll out was deemed to be a key enabler so all working with the same data. There was a need for more support and advice on business cases in how to make best use of resources.

In the *SSC – WRMP Themes 1 and 3 Quantitative Insights (2022) (Accent)* monthly meter reads were the most preferred frequency (39%). In this study, customers were not shown the potential bill impacts of investments made, rather willingness to pay for particular service features (independent of one another) and found 26% of customers were prepared to pay an additional £2.50 per year for monthly or twice monthly meter read.

The *WRE NHH Demand Club Project Final Debrief (2022)* reported that the idea of smart meters captures the attention of NHH customers as they like the idea of more accurate billing and not having to read a meter. However, there is some concern about the feasibility of installing smart meters in certain locations, such as rural farms. Other concerns raised in WRE NHH demand club project stage 1 included: SMEs finding a smart meter investment is not worthwhile and would need an incentive to install one. There was discussion about wholesalers supporting business customers with the investment as they also benefit from businesses installing smart meters.

Supporting low-income families who might struggle to pay their bills

South Staffs Water – Stakeholder Roundtable Feedback Summary (2021) stated that universal metering should be introduced gradually, with care, to protect those who might be tipped over the edge by a rise in water bill. Stakeholders suggested some approaches to help reduce the financial shock, including, not catching people off guard, SSW should educate customers on universal metering and introduce the concept slowly. Stakeholders also suggested offering financial help to avoid unmanageable high bills.

The *SSC – WRAP Deep Dives (2021) (Community Research)* concluded it is right to support the most vulnerable customers. Water companies need to consider how much customers are being asked to contribute towards supporting others struggling with paying their water bills. Recent energy price rises have brought household bills to the forefront of peoples' minds and there is recognition that household budgets are being squeezed.

Further, CCWs response to the consultation plan shows that stakeholders have recognised the cost of living and affordability concerns when discussing smart metering rollouts, and CCW would like to see the plan provide clearer reassurance that support will be provided to the vulnerable, those struggling with affordability and larger households during the transition to and after meter rollout.

Usage of “ghost” meters to encourage unmeasured properties to switch to a meter

The *WRMP Strategic Planning (2022) report* found that the shadow “ghost” metering concept, once introduced and clearly explained, was seen as a positive and efficient way to increasing number of metered properties by customers.

The SSC – PR19 Data Triangulation Study SSW WRMP (2018) underlined that the opportunity to revert to an unmeasured charge within the first two years of opting for a meter remains a vital policy to offer. Also, offering a guarantee that the customer will not pay more than their rateable value during this period would also give customers reassurance. This should be supported by targeted communication of any savings made during this period as a way to help overcome the main barrier that customers highlighted, the prospect of higher bills. This is particularly important to ensure vulnerable customers to not experience unwanted distress, particularly when moving home; and the evidence shows that a noticeable number of customers view smart metering as a potentially useful service to help them manage their water consumption more effectively. A pilot trail, including gaining customer feedback, of how best to approach a water smart metering roll out is required to ensure it delivers a solution that gives customers more control of their water usage – something they have called for throughout all our engagement.

The more recent SSC – WRAP Deep Dives (2021) (Community Research) found the majority of customers across both regions (30 out of 40) believed that properties should be switched to a metered charge within 6-12 months of a meter being installed. Waiting until a change in occupancy was not favoured by customers, the reasoning was because they believed customers might not attempt to change their behaviour if they are not planning to move and this option does not communicate the seriousness of the situations.

“I think 1 year would give people plenty of time to start and be more mindful of their water usage and monitor how they may use it differently due to different times of the year.” SSW Customer

However, in the SSC H2Online - Community Feedback WRMP (2019-2022) (Explain), when asked ‘what do you think of a potential new approach to increase water meter uptake?’, ghost water meters were the least popular option (15% CAM, 21% SSW) compared with the 25% price cap guarantee. However, 40% of SSW customers said they would like a combination of both options offered.

“I selected a combination of both. A ghost meter fitted then a guarantee for two years on the price cap. I support the help for low income or people who have a medical need for more water” - SSW member

Offering a price cap and/or staggered bill for a period of a year to smooth the bill shock

In South Staffs Water – Stakeholder Roundtable Feedback Summary (2021) showed that stakeholders suggested a range of approaches to help reduce the financial shock. People should not be caught off guard by meters. Education (particularly in advance of starting a universal metering programme) and a slow steady approach (“drip drip”) would help. Some customers would need financial help to avoid unmanageably high bills. A stakeholder with an environmental focus suggested that customers should be encouraged to cut their water use first, before being offered financial help.

New ways of charging for water and tariffs

SSC – WRMP24 - WRAP Theme 1 Research Findings (2021) , showed there was support for higher tariffs for higher users, but only if the system considers household size and composition. SSW customers, however, query how this would work for customer without a meter and how this could impact large households on low incomes and those with health conditions. SMEs didn’t agree with this method for businesses.

“That would be understandable as it makes sense to me that customers who use more water should pay for more water. I would only think this would be unfair if this was also applied to low-income households who may not be able to afford the extra cost.” Cambridge Water, Future Bill Payer.

Some customers suggested offering lower prices for less use would be a better method, using this as an incentive for behaviour change.

The SSC – WRAP Focus Groups Report (2022) (Community Research) found that on the whole, individual tariffs were more appealing than a community tariff but a Community Tariff should be considered if that is the only option available. Time-based tariffs were least popular of the individual tariffs as they were perceived to be least likely to result in behaviour change as so many water-based activities are anchored to morning routines. Respondents found

it difficult to choose between tariffs based on usage without knowing more about costs involved. With either option challenges were identified with educating customers about the ‘acceptable’ water usage limit.

Dŵr Cymru Welsh Water – Metering and Efficiency Research Report (2021) (Relish) concluded that applying a tiered pricing tariff structure to control demand would struggle to gain traction with customers, primarily because it was felt to penalise families and vulnerable customers. It could however benefit non-working households and home workers who can load shift. Although not ideal, reducing pressure across the network was often felt to be a preferable and fairer solution.

The *SSC – Social Tariffs Research (2023)* asked customers about a proposed new affordability tariff, known in the research as the ‘Essential Use’ tariff. In the quantitative survey, almost half (48%) of all SSC respondents would support the introduction of ‘Essential Use’, and nearly a third (32%) neither supported nor did not support this, whilst only 20% did not support it. The qualitative survey shows that the concept and eligibility criteria raise multiple questions and concerns amongst some customers and stakeholders, which impact on how far customers can support it as this stage.

Customers generally had more questions and concerns than positive comments; it is important to clarify and amend the tariff in response to these to give the trial the best chance of success.

- In the household groups, participants were unsure if now was the right time to focus on a higher income bracket, but recognised many households with income over £19,050 are also struggling at this time. However, some questioned why pilot a new scheme when there is a shortfall in those currently being helped on Assure vs who needs it – why not help those who are most in need first?
- Stakeholders were split – around half felt it was a good idea, while the other half had concerns. It was seen as something for a slightly higher income bracket who are certainly struggling but a concern was it might lead to unhealthy behaviours over-restriction and obsession with monitoring usage (as with energy smart meters), possibly detract from the support offered to those most in need
- In the co-development customers initially reacted negatively, mainly due to metering requirement. The tariff concept was mainly viewed as a good money saver for those already on a meter and those living alone, good for higher income bracket who miss out on lots of support. However, there was very strong resistance to switching to a meter as it would be unfair on families and those with disabilities, and households might restrict their water use to an unhealthy level and obsess over usage. There were concerns it would be too much for people to think about.

The quantitative survey results show that support for the tariff increases to 52% when respondents feel they completely understood the concept, suggesting that it is crucial to explain the tariff successfully, and answer customers questions about it to gain buy-in. The co-development workshops among target customers highlighted that the need to install a meter is a barrier to many unmetered customers relating to concerns about being metered per se, and a discount through ‘Essential Use’ is perceived to not be sufficient to off-set what a metered bill would be to drive uptake of the tariff. That being said, there is majority support (56%) amongst target customers (those with an income between £19,050-£25,000), and customer support does increase amongst metered customers to 64% (although this is not significantly higher than for unmetered customers).

Other smart technology

The *SSC – PR19 Foundation Research June (2017) (Accent)* stated that longer term, there was an expectation for increased investment in technology, improved education, and measures to address future demand. Younger customers in particular wanted SSC to help them manage their own usage (and costs) via smart technology, devices and real-time information.

The *SSC – Customer Priorities Research Qual Year 3 (2022) (Accent)* explored expectations of future technology and found that long term priorities include as an enhancing factor, that customers expect SSC will be much more imaginative in their use of technological solutions for example, no flush toilets, predictable usage apps, water

efficiency devices, real time/instant service support, water recycling technology, innovation that addresses carbon emissions and water leakage detection and prevention.

Behaviour Change

SSC – WRMP and Long-Term Resilience Customer Engagement Insight Full Report (2017) (Community Research) stated that over half of customers agree they could do more to reduce water usage. A lack of awareness that a water shortage is likely in future, meant that many saw no reason to reduce their usage. Both passive and proactive education and support were welcomed. Although most customers said they thought water is a precious resource, many did not seem to reflect this in their behaviour. It was concluded that more work was needed to raise water consciousness.

Later that same year, the *SSC – PR19 Data Triangulation Study SSW WRMP (2018)* summarised a positive start to the WaterSmart trial when providing customers with water saving recommendations in their homes and gardens. The effectiveness of these water savings recommendations was monitored over time to help guide SSC's approach to how best to support customers to use water more wisely.

Water Usage in the Garden (2021) (Blue Marble) focussed on water usage in the garden in various water company regions (not including SSC customers). This report showed that respondents found it tricky to remember exactly how many times they used water in the garden over the 6-week period. This was especially true for watering the garden, where most over-estimated the frequency that they did so. Many claimed to have a more strict and regular watering routine than what they carried out. Few really followed a strict routine and watering the garden was a sporadic behaviour during the observed fieldwork. It was often done when: the customer found themselves at home with time on their hands; the weather was particularly hot, and crucially, sunny, or when they happened to notice the plants looking dry or unhealthy. Among the participants who gardened, all said that they gardened a similar amount at that time to pre-pandemic, suggesting that garden water usage patterns at that time ought to be similar to pre-pandemic behaviours.

Most customers felt that they were *capable* of reducing the amount of water that they use in the garden. Barriers were low awareness of water scarcity and more water efficient ways to conduct regular behaviours and reducing water usage may make certain tasks more time consuming e.g. cleaning car/patio. There was often seen to be a key gatekeeper to garden water usage i.e. the main gardener. The downsides of water saving were perceived to be less fun and that it made tidiness more difficult. There were few perceived advantages i.e. there was low awareness of cost benefit or environmental benefits to using less water.

CCW – Lifting the Lid (2023) found that 63% of people in England and Wales felt they could be more water efficient, with most claiming they could 'possibly' be more efficient (49%), compared to 14% who said 'definitely'. There were some groups of people who were more likely to claim they could be water efficient, such as; younger people aged 18-34 (compared to older age groups), and those who are not working (compared to those who are working). Perhaps life stage impacts on one's ability to feel like they can take steps to use less water, but there must be things that could motivate people to become more efficient.

Another report from *WRE – Club Customer Engagement report (2021) (Blue Marble)* highlighted too that customers need to be empowered to help, by reducing their water use: consumers and stakeholders agree that communication is vital. Much of the public do not know there is a problem. There is little to motivate them to reduce demand. Potential for restrictions in a drought does not appear to trouble people (who approach the prospect with new post-pandemic resilience). The water sector's perceived silence on the risk of supply shortages suggests that the problem is not real/immediate.

The *SSC – WRAP Deep Dives (2021) (Community Research)* highlighted that metering is strongly believed to encourage behaviour change and is considered the fairest way of paying for water by customers. Similarly, the SSC WRAP online groups report from Feb 2022 found that customers believed that having real time information would change behaviours (as it has for some of those with smart energy meters).

SSC – WRAP Focus Groups Report (2022) (Community Research) noted there may be a difference between claimed and actual behaviour change as a result of smart metering. People find it notoriously difficult to predict how they will behave in the future.

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UEA – Behaviour Change Interventions in the Water Sector (2022) (UEA and CBESS) contained several considerations relating to behaviour change that could be adopted by SSC. Long-term change and increased adoption of new behaviours can be inspired by exploring new forms of interventions like environmental restructuring and modelling. Interventions can be designed and targeted more precisely with the support of more preliminary research and the use of best practice derived from primary or academic research. The benefits of interventions can be improved by including reinforcement of the newly introduced behaviours, supporting long-term behaviour changes. There is a good foundation available for identifying and adopting new methods of data collection and impact analysis to formalise and streamline the process of impact assessment. A sizeable majority of interventions surveyed were delivered via standard communications channels and would have benefited from some underpinning research or evidence base. Trial runs, and measurement of outcomes in terms of changes in behaviour could also have helped optimise the interventions, increasing the likelihood that investment made in the larger roll out would be successful. Research shows that these one-off ‘fire and forget’ interventions are unlikely to result in significant success. Further, they miss an important opportunity to build a knowledgebase and community of practice in the sector, in which successful interventions can propagate more widely, while unsuccessful ones can be examined to understand behaviour better and improve the design of future ones.

The *SSC – Stakeholder Roundtable: Helping Businesses Save Water (2022)* felt that best practice sessions to share case studies of success stories would be helpful. It was viewed water was a key part of the conversation around strategic planning, quality of life and attracting business investment in Cambridge. There was a call to explore opportunities to link water and energy savings. Multi-utility link up could work but that depends on the building usage and how much water is used (link to occupancy) and potentially new build incentives to harvest water. If there was a price rise in the cost of water, then more effort is put in place to reduce usage.

The *CCW – Desktop Review of Behaviour Change Campaigns (2023)* reviewed certain water saving campaigns aimed at HH customers, amongst other campaigns. This research provided some interesting findings. For example, campaigns tend not to promote behaviours or offer products and services that people are likely to feel positive about. Ideally behaviours, products or services that are attractive and/or easy should be promoted as this makes the task of behaviour change much easier. Of course, it is sometimes necessary to promote less attractive or difficult behaviours, and campaigns can usually go some way towards making them more attractive or easier. This topic should be investigated more.

Garden Water Behaviour Change (2022) found that customers responded well to clear advice which is aided by visuals to help them to change their behaviour. This study also found it important to educate customers as how to water resource works, and why bans and droughts do not suddenly disappear as the weather changes. This has been seen to help motivate and maintain water saving behaviour. Also, providing tangible examples on how much water can be saved in litres or pounds can be motivating for customers.

The *WRW - Updated Regional Plan (2023)* found that, over the last few years, water efficiency views have not changed much. Amongst HH customers, there is little that compels people to save water, especially amongst unmetered customers. However, in general, most customers used some form of water efficiency device, and customers want to hear more from their water companies about how to save water. That being said, in 2023, seven out of 10 customers know or think that their water company is encouraging people to reduce their water usage.

Turning our attention to stakeholders, we can see that they often also focus on behaviour change. For example, *SSC - CCW Consultation Response to CAM draft WRMP (2023)* mentioned that they would like to see more detail in the plan on how CAM will use a behavioural science approach (or other similar innovations) to persuade customers that universal metering is the right thing to do. Also, Waterwise mentioned water efficiency in their response to both the SSW and CAM draft plans (*SSC - Waterwise Consultation Response to CAM draft WRMP - April (2023)*); *SSC - Waterwise Consultation Response to SSW draft WRMP - Feb (2023)*. Waterwise criticised the water efficiency costs which show minimal costs incurred after AMP8. They expect some money to be invested in this area, for example through an app or digital portal which customers will use to proactively engage with their consumption during the smart meter rollout, and there could also be more HH water saving visits for new homes and people who are moving house. Some other ideas that Waterwise had were a leaky loos campaign, and a dual flush campaign which could be integrated into home visits.

Golden Threads: Demand side options

Golden Threads	The need for customer information and engagement	<p><i>Leaks:</i> those on customer properties are unlikely to be effectively addressed without an education programme to gain customer cooperation.</p> <p><i>Water recycling:</i> customers are positive about this but again, education is important to encourage their involvement.</p> <p>Education and good information are clearly strong potential drivers of behaviour change.</p>
	Call for collective responsibility and fairness	<p><i>Leaks:</i> customers feel strongly that this should be addressed, but they were reluctant to pay for this on bills.</p> <p><i>Water recycling:</i> subsidies for retrofitting systems will be a key requirement to encourage adoption</p> <p><i>Metering:</i> generally regarded as a fair basis for charging, particularly among those who already have them and among future customers. Cambridge household customers were slightly more in favour than those in South Staffs region, though both regions generally positive towards universal metering. Targeting areas of higher consumption should be the priority.</p> <p>Accurate billing is also important among NHH customers to encourage a sense of fairness.</p>
	Concern for the environment	There was generally low awareness of the environmental benefits to using less water.
	Protection for vulnerable customers	<i>Metering:</i> there are concerns about how to move all customers to universal metering, including the costs for vulnerable customers. As long as these are mitigated and introduction is gradual to prevent unaffordable bill increases, there is majority support for universal metering.
Emerging thread	Cost of living	<p><i>Leaks:</i> opposition towards paying for this has been exacerbated by financial hardship since Covid-19, which is likely to continue with the cost-of-living crisis.</p> <p><i>Metering:</i> acceptance is dependent on the balance between reducing demand and the potential extra costs to some customers. SME customers were slightly less positive towards universal metering as there were concerns over bill increases.</p>

Demographic Splits: Demand side options

The table below provides a brief summary comparison of each of the key demographic groups, related to demand side options. Please see the appendix for detailed tables of each split.

Demographic group(s)	Key findings/ comparisons
SSW vs CAM	Appendix A.8.1 summarises SSW and CAM preferences in relation to demand-side options. All customers were concerned for leakage, and this was a top priority consistently throughout the literature. CAM customers tended to prioritise this higher than SSW customers, and were willing to pay much more for it. Differences in recycled water preference changed depending on the source of water by region.
HH vs NHH	Appendix A.8.2 summarises HH vs NHH preferences in relation to demand-side options. In regards to leakage, there are no differences between the customer types,

Demographic group(s)	Key findings/ comparisons
	as both HHs and NHHs view reducing leakage as a top priority. In terms of reducing water consumption, it appears that NHHs, overall, are perhaps more engaged in this conversation than HHs are.
FBP vs current bill payers	Appendix A.8.3 summarises future customer preferences in relation to demand-side options. Future billpayers are characterized as tech-savvy and demanding, expressing a strong desire for a real-time usage app. Motivations for reducing water wastage mainly surround avoiding unnecessary costs. Despite this, many of these customers tend to be somewhat oblivious to water wastage. Some state that they would change their water behaviour as a result of awareness, others stated that they would be unlikely to restrict their water usage for any reason. Reducing water wastage, smart metering and compulsory metering are highly ranked by future billpayers. This group also expresses a desire for quicker solutions in reducing leaks and are generally comfortable with the technology associated with smart meters. Future billpayers express a strong desire for ambitious goals in leakage reduction, with 77% wanting the ambition of reducing leakage (from 2017/18 levels) by 50% to be achieved before 2050. Similarly, 72% of Future billpayers desire a reduction in the average amount of water each person uses each day before the 2050 target. They suggest using smart meters and water audits to increase customer awareness of water usage and how to reduce it, but emphasise that such efforts should not notably impact their quality of life.
Vulnerable vs other customers	Appendix A.8.4 summarises vulnerable customers' preferences in relation to demand side options. There seems to be a lack of WTP for reducing leaks among vulnerable customers. On the other hand, there seems to be support for universal metering. Vulnerable customers were more likely to reduce their water usage compared to non-vulnerable customers, with one of the main drivers being wanting to save money, especially as those who are financially constrained are at risk of hardship from even small increases in their bills.
Stakeholders vs customers	Appendix A.8.5 summarises some of the key themes relevant to demand side options from the stakeholder consultation undertaken during the WRMP24 planning process. Stakeholders generally support measures to reduce water consumption. They emphasise the importance of addressing leakage, water efficiency measures and smart metering. Stakeholders and SSC customers are aligned in thinking that leakage reduction is of high importance. Also, among stakeholders there is a desire for government intervention on water efficiency, with some urging for more ambitious targets and subsidisation of water

Demographic group(s)	Key findings/ comparisons
	<p>saving products. Some NHH customers have also suggested similar interventions.</p> <p>Whilst stakeholders welcome smart metering, concerns about affordability and bill predictability, especially for vulnerable customer, are noted. This is similar to HH customer views, and especially, that of vulnerable HH customers. Some stakeholders favour universal metering, but with careful timing and affordability protection, which is again, similar to findings of other customer groups.</p> <p>On demand management, stakeholders sometimes also focus on communication and education, especially in deprived areas. This point has also come up in research projects with other customer groups. Stakeholders stress the need for clear plans, ambitious targets, and the integration of NHH customers into water reduction efforts, with ongoing monitoring and adaptation. These overarching views on managing demand are more developed for stakeholders, and in some instances, NHHs, compared to other SSC customers.</p>

11. SOURCE PREFERENCES, RESERVOIRS AND WATER TRANSFERS

Bibliography

Report	Published Date	Participants	Sample Size	Project Objectives
Hafren Dyfrdwy – WRMP Customer Research (2022) (Blue Marble)	June 2022	HH, NHH and future customers	35 customers overall: 4 future, 20 HHs, 6 NHHs, 5 digitally excluded customers.	To understand HD customers’ views of the initial WRMP proposals. Specifically, to gauge response to proposed use of: water restrictions, ways to reduce demand, use smart meters, meet the new leakage targets, water transfers, and response to plans to support private supply households.
Severn Trent – WRMP24 (2022) (DJS Research)	May 2022	HH and NHH customers	624 HH, 149 NHH	Measure customers’ preferences for water resources, levels of service and the options or plans that Severn Trent might create to address any changes to levels in service or to address a supply-demand deficit. To develop a Best Value Plan in line with Water Resource Planning guidelines.
SSC - Cambridge City Council and South Cambridgeshire District Council Joint Consultation Response to CAM's draft WRMP	n/a	Stakeholder	n/a	Consultation response to CAM's WRMP draft business plan.
SSC – WRAP Deep Dives (2021) (Community Research)	November 2021	HH, NHH and future customers	87 customers overall: Forum 1: 47 Total CAM: 25 SSW: 22 Billpayers: 28 Future: 9 Small business: 10 Forum 2: 40 total CAM: 20 SSW: 20 Bill payers: 26	To explore household customer, future customer and SME business customer views in depth on; universal metering and water transfers.

Report	Published Date	Participants	Sample Size	Project Objectives
			Future: 6 Small business: 8	
SSC – WRAP Focus Groups Report (2022) (Community Research)	February 2022	HH, NHH and future customers	11 customers overall: 5 HHs, 1 future, 1 NHH (6 SSW and 5 CAM)	To explore the following topics with online groups; metering options (covered in both regions), new types of tariffs/incentives (SSW only), water transfer options (CAM only).
SSC – WRMP MCDA Quantitative Insights (2022) (Accent)	July 2022	HH and NHH customers	Total: 1,015 CAM: 445 SSW: 570 HH: 887 NHH: 128	Explore customers’ attitudes and views regarding the natural environment and SSC’s approach to planning.
SSC – WRMP24 - WRAP Theme 1 Research Findings (2021)	August 2021	HH, NHH and future customers	Total: 47 HHs: 28 NHHs: 10 Future customers: 9	To explore household, future and SME businesses customer preferences in terms of; environmental ambition, levels of service/resilience ambition, water efficiency ambition, and best value planning criteria. To ensure a “golden thread” of customer preferences in these strategic areas, which sets the context for the remainder of the engagement programme.
Water Club: Changes of Source Full Report (Britainthinks) – June 2022	HH and NHH customers	Qualitative Phase: 98 HHs. Quantitative Phase: 1,762 HHs, 198 NHHs	To review existing evidence. To identify and fill knowledge gaps about attitudes towards water source change. Provide a clear and actionable framework for water companies to use when communicating water source	Water Club: Changes of Source Full Report (Britainthinks) – June 2022

Report	Published Date	Participants	Sample Size	Project Objectives
			changes in future.	
WRE – Club Customer Engagement report (2021) (Blue Marble)	September 2021	HH and NHH customers, and stakeholders	HH: 20 (CAM 5, Essex & Suffolk 5: Anglian 10). NHH: 14 (Anglian 8, Essex & Suffolk 3, CAM 3) Stakeholders: 20 organisations across the 3 companies	To understand consumer context (general environmental priorities, current awareness of long-term challenges and implications for water suppliers, perception of water suppliers). To explore expectations and priorities re environmental planning. To explore response to the ‘best value’ plan objectives. To explore options preferences (ranking of preferences and what drives importance). To explore intergenerational economics (response to affordability options to understand generational expectations).
WRW - Updated Regional Plan (2023)	March 2023	n/a	Triangulation of 120 pieces of research	To ensure the customer input in the regional plan is up-to-date by including the latest knowledge (by conducting a triangulation of the most recent customer and stakeholder research).

Overview

Expanding provision via reservoirs is one area where there was a regional difference; customers in the Cambridge region put a new reservoir as a top three priority when asked to rank a range of demand and supply side options, whereas in the South Staffs region expanding existing reservoirs was only ranked 5th and therefore seen to be less of a priority to meet demand in this way.

Customers are often concerned about how reliant SSC could become on other suppliers and some think water transfers should be a last resort, as this could affect other suppliers’ resilience. They want to be informed about when transfers may happen and if there will be any effect on the quality of the water they receive. Customers were spontaneously concerned about the effects this might have on the environment, and the CO2 emissions especially provoked a strong reaction.

Some stakeholders are more supportive of transfers (on which, the Canal & River Trust has offered two canal transfer options to SSW). To this point, Cambridge City Council and South Cambridgeshire District Council are supportive of the proposed transfer from Anglian Water to Cam Water from the Grafham water reservoir. However, there is acknowledgment among some stakeholders that transfers can be ‘politically divisive’ (*SSC - Cambridge City Council and South Cambridgeshire District Council Joint Consultation Response to CAM’s draft WRMP*).

While *the WRW - Updated Regional Plan (2023)* states that demand management should take priority, the Environment Agency lacks confidence in the company’s ability to deliver on its demand management reductions from 2025-2050 – they feel that there is an over-reliance on demand management in the short-term ahead of water transfers from Anglian Water and ahead of the Fen reservoir being ready, and they also note that there is uncertainty about the deliverability of these two projects which poses a further risk to the security of supply and to the environment. CCW are also of the opinion that it may be difficult for SSW to deliver on its demand solutions without additional supply-side input.

One solution may be grey water recycling, which was greeted with enthusiasm in the WRW - Updated Regional Plan (2023) (as a low impact solution with minimal disruption to customers). This view is shared by the Green Party who called for an acceleration in installing water recycling and rainwater harvesting in both old and new builds.

The value placed on new reservoirs

Customers from *SSC – WRMP24 - WRAP Theme 1 Research Findings (2021)* engagement stated that building new reservoirs felt like good long-term planning despite the expense.

“I thought that the reservoir would be a good long-term investment which will benefit the area for many years and provide a large water source although I do understand it is a very expensive project.” Cambridge customer

The *WRE – Club Customer Engagement report (2021) (Blue Marble)* found that 37% of customers selected seeing more reservoirs to store water as part of their top three supply or demand side options they would most like to see included in the business plan. Views in support of reservoirs were often quite vague and generic: customers simply felt they are a ‘good idea that works’, rather than being able to cite a more specific reason. Equally, many did not feel any strong arguments against this option. Many felt that using water from reservoirs would be less damaging to the environment than creating water through other initiatives, and that the structures themselves would provide a habitat for local wildlife. Reservoirs were appealing as they also create attractive community assets that can be used for leisure. For the 15% who placed creating more reservoirs in their least favoured options for the business plan, they were concerned that construction would harm wildlife and destroy habitats. Others were put off by the disruption of their construction, the high cost which would have to be paid for by local people and the large amounts of land required. The latter was a particular concern for the Cambridge and Essex & Suffolk regions, which have high population density. Whilst some found the low running costs attractive, others felt the expensive construction meant reservoirs were not a viable option. Finally, many questioned whether this option which relies on rainfall is sensible in the context of climate change.

In *SSC – WRMP MCDA Quantitative Insights (2022) (Accent)*, the Cambridge region placed building a new regional storage reservoir as third top priority for household and non-household customers alike, with 11% overall selecting it as a priority. Increasing the size of an existing reservoir was ranked 5th in the SSW region, with a slightly lower proportion (8%) selecting this as a priority.

Engagement in the *Severn Trent – WRMP24 (2022) (DJS Research)* showed customers placed value on reservoirs, with seven in ten households having visited a river, lake, or reservoir at some point and a third (34%) having done so in the past year. Those who have an annual income of over £60,000 were more likely to visit these sites, suggesting that visiting these sites may be unaffordable to those on lower incomes, especially if travelling long distances is involved.

In the Severn Trent region, when household customers were asked about supply options; ‘increasing the size of reservoirs’ was the second most important supply option to them. ‘Recycling or re-using water indirectly’ was ranked first for these customers and ‘Maximising the outputs of current treatment assets’ was third. For non-household customers ‘increase the size of existing reservoirs’ was the most important supply options. ‘Increase capacity of water treatment works was ranked second and ‘Maximise the outputs of our current water treatment assets’ was also ranked third.

Cambridge City Council and South Cambridgeshire District Council expressed support for the Fens Reservoir in their joint response to Cam Water’s Draft WRMP (*SSC - Cambridge City Council and South Cambridgeshire District Council Joint Consultation Response to CAM's draft WRMP*).

Customer concerns about bringing in new water sources to meet the long-term supply/demand side balance

Customers who took part in *SSC – WRAP Deep Dives (2021) (Community Research)* understood from the materials shown that water is in short supply and even though most would advocate for reduced demand, they are accepting of supply side options. Water transfers are sent as a binding agreement between two parties which should not be

entered lightly, customers do not want their region to become over dependent on water transfers and so expect all eventualities to be considered before agreement is made. SSC need to consider the fairness of the approach and how to communicate potential benefits of water transfers to customers living in donor areas. Cambridge Customers who took part in the SSC WRAP online group research (*SSC – WRAP Focus Groups Report (2022) (Community Research)*) had similar thoughts; they showed concern about resilience on another water company, would other companies have resources available for them if they needed it? They also wanted to know if SSC has done everything else in its power to avoid needing these options, i.e., have they considered water recycling options?

Hafren Dyfrdwy – WRMP Customer Research (2022) (Blue Marble) found a majority of customers support water sharing, if there is sufficient water in the region. Customers need reassurances that this would not put customers in detriment during a drought. However, a minority of customers think this sounds like an extreme measure.

There are differing views about water transfers among stakeholders. While many support it in principle, there is also an acknowledgment that it could be politically divisive. WRW has expressed support towards SSW's exploration of transfers and are willing to work with SSW on this, and the Canal & River Trust has also offered two canal transfer options. Meanwhile, Cambridge City Council and South Cambridgeshire District Council are supportive of the proposed transfer of water from Anglian Water to Cam Water from the Grafham reservoir – this is seen to be a way of helping to protect chalk streams (*SSC - Cambridge City Council and South Cambridgeshire District Council Joint Consultation Response to CAM's draft WRMP*). However, the Environment Agency notes that there are uncertainties about this transfer going ahead (and also uncertainty about the Fens reservoir) and that a lack of alternative supply solutions may pose a risk to supply security and the environment.

Would customers be concerned if their water quality changed from underground source only to one that mixes in surface water or changes to only surface water?

Cambridge customers in the *SSC – WRAP Focus Groups Report (2022) (Community Research)* showed concern over the quality of the water changing from using new sources asking; 'Will the water quality and taste be affected?' and 'Will customers be told that water transfers will be happening?'

Water Club: Changes of Source Full Report (Britainthinks) (June 2022) looked into the attitudes concerns of customers regarding water source changes; sources included:

- Water recycling
- Desalination
- Water transfers and
- Reservoirs

Key concerns for customers about water recycling included safety, quality and the environment. Many customers focused on the 'yuck' factor of this and found it hard to overcome. When educated more, customers expressed concerns about the energy intensity of the process and the high carbon emissions.

Desalination is a less-well know water source compared to others and felt that it was only suitable for emergency situations due to the intense construction and running processes.

Customers had concerns about water transfers in terms of comprehension issues and worries about quality and the environment. Yet, this was favoured more as an option as it was a logical solution to water scarcity.

Finally, reservoirs are more well known as a water source in the UK which is reflected in more positive attitudes towards them. The main concern for customers is in terms of cost.

The study also found customers had low engagement with topics related to water stress, customers were more likely to engage with source change information when it relates to the impact it has on them as a customer. This included quality, taste, characteristics and properties of water coming out of the tap. Customers were most concerned about the effect water source change will have on hardness, taste and the impact on their bills. Customers want clear information about what will and will not change in terms of these areas.

Preference for particular types of water transfer

SSC – WRAP Focus Groups Report (2022) (Community Research) were shown four water transfer options:

- **Option A:** Cambridge water takes a treated supply from a neighbouring company and pay the company the relevant commercial bulk supply costs for the water.
- **Option B:** Raw (untreated) water from regional resource (reservoir) is treated as a shared treatment works, between one or more water company. Treated water is transferred from the shared water treatment works into CAM area of supply and distributed through existing pipes and networks.
- **Option C:** Like option B, the difference being CAM fully owns the treatment works rather than sharing.
- **Option D:** Cambridge Water develops a supply outside of its supply area on its own (not a shared resource) and transfers this to its customers

Option B ‘development of shared assets’ was preferred by most; this was because this option was viewed as providing sufficient security and control whilst being lower cost than the other options. However, there was concern that it may not be sufficient to provide future needs. And although option C was similar to B, customers felt that the lower costs of sharing (B) outweighed the control advantage of C.

Customers also liked option D, with one customer feeling strongly that this option would future proof the strategy. This option also resonated with other customers; however, they flagged concerns about costs in the current climate and time it would take to get up and running. Timelines were explained to customers, yet they still assumed this option would take the longest time to implement.

Customers had concerns about the reliability of supply in Option A, they felt that this was a temporary, stop-gap measure and there were concerns about environmental control. However, customers did spontaneously identify and accepted that this type of transfer may need to happen whilst longer terms options were put in place.

Customer spontaneous views of water transfers and how these change when informed

During SSC – WRAP Deep Dives (2021) (Community Research), Cambridge participants seemed surprised to find out how reliant their area might become on water transfers in the future. As the forum progressed and after further education on the challenges faced to meet future demand and protect the water environment, these participants understood that they will become reliant on transfers which saw some increased levels of acceptance. However, Cambridge customers had markedly lower levels of agreement with various conditions associated with transfers than SSW participants. Concerns included environmental impacts, companies not being self-sufficient and becoming over reliant on other companies.

“I am even more convinced that water transfers are an unacceptable way of dealing with water shortages. Particularly the CO2 emissions and ecological impact of water transfers are something that is to be avoided at all costs.” Cambridge customer

Cambridge participants in the SSC – WRAP Focus Groups Report (2022) (Community Research) immediately associated water transfers with the transfer of treated water from another water company on a commercial bulk supply basis (Option A), and therefore, transfers were felt to be a stop gap or short-term fix rather than associated with planned supply options.

Furthermore, the SSC – WRAP Deep Dives (2021) (Community Research) both had spontaneous concerns about the environment, both in terms of the constructions of pipelines and transfer of non-native species. The CO2 emissions linked to water transfers provoked a strong reaction. Customers want SSC to give reassurances about the environmental impact of water transfers.

Who do customers think should pay for water transfers?

Cambridge water customers in the SSC – WRAP Focus Groups Report (2022) (Community Research) had some misapprehensions about how costs would be applied during water transfers and the frequency of use. There was some presumption that water transfers would just be used at times of high demand and paid for only at those times.

Similarly, the minority of Hafren Dyfrdwy customers thought the idea of water sharing sounded costly (Hafren Dyfrdwy – WRMP Customer Research (2022) (Blue Marble)).

The literature reviewed did not provide evidence to inform who should pay for the water transfers. This should be an area of focus for future research to inform WRMP24.

Golden Threads: Source preferences, reservoirs and water transfers

Golden Threads	The need for customer information and engagement	Customers want to be informed about when transfers may happen and if there will be any effect on the quality of the water they receive.
	Call for collective responsibility and fairness	Reservoirs are seen as offering amenity beyond their contribution to the resilience of supply, being a popular leisure destination open to all. However, the cost of travelling to these locations may be a barrier to lower income households. Water transfers were generally accepted as a short term, practical way to meet shortages, but an acceptable solution in the long term. The practice must be seen to be fair and potential benefits communicated to customers living in donor areas.
	Concern for the environment	While water transfers were tolerated, one concern was that it should not reduce the quality of service in other regions or threaten the quality of the environment in either the donor or recipient supply area.
	Protection for vulnerable customers	There were no specific points relating to vulnerable customers, but it is important to maintain good quality supply for all customers, evidenced primarily in terms of the taste and smell.

Demographic Splits: Source preferences, reservoirs and water transfers

The table below provides a brief summary comparison of each of the key demographic groups, related to source preferences, reservoirs, and water transfers. Please see the appendix for detailed tables of each split.

Demographic group(s)	Key findings/ comparisons
SSW vs CAM	Appendix A.8.1 summarises SSW and CAM preferences in relation to source preferences, reservoirs and water transfers. Regional differences in this area were relatively scarce, however CAM customers were found to prioritise the building of a regional storage reservoir much more than SSW customers.
HH vs NHH	Appendix A.8.2 summarises HH vs NHH preferences in relation to source preferences, reservoirs and water transfers. In CAM region, HHs and NHHs both agreed that building a new regional storage reservoir was an important priority. However, in Severn Trent’s region, HH and NHH top preferences for supply side options did differ slightly.
FBP vs current bill payers	Appendix A.8.3 summarises future customer preferences in relation to source preferences, reservoirs and water transfers. Future billpayers express a desire for water companies to be more transparent about water use and preservation methods. Some future customers suggest that water transfers should be a last resort, emphasising water company self-sufficiency and environmental concerns. They also express surprise that more people are not concerned about water quality post-transfer,

	particularly if it involves higher costs. Overall, future billpayers are generally positive about the concept of water transfers.
Vulnerable vs other customers	No differences were observed between vulnerable and non-vulnerable customers in relation to source preferences, reservoirs and water transfers.
Stakeholders vs customers	Appendix A.8.5 summarises some of the key themes relevant to source preferences, reservoirs and water transfers from the stakeholder consultation undertaken during the WRMP24 planning process. Stakeholder source preferences views are usually very specific, and related to very specific locations or their own business activities. Some stakeholders would prefer SSC to focus on demand management more than supply options, but the need for some short-term supply options was noted, whilst a focus on preserving long-term strategies should remain important. There was some enthusiasm for greywater recycling due to its low impact. Water transfers between regions were seen as sensible by some, but politically divisive by others. Here, stakeholders have a better understanding compared to other customer groups. Stakeholders did have some concerns and require more information about, for example, accurate supply forecasts, the feasibility of some proposed schemes, and sustainability issues with chalk aquifers. Stakeholders have niche, and often quite developed views in relation to source preferences, compared to SSC customers.

12. ACCEPTABILITY AND AFFORDABILITY OF WRMP24 PLANS

This report contains two different AAT sections; this next section will examine acceptability and affordability of the WRMP plans and the section after will examine the acceptability and affordability of the PR24 plans. Each section will review the customer feedback received about these two plans.

Bibliography

Report	Published Date	Participants	Sample Size	Project Objectives
Sustainability First – Looking to the long-term report (2018)	2018	n/a	n/a	This report summarises the work carried out by Sustainability First’s New Energy and Water Public Interest Network (New-pin) between 2015 and 2018.
SSC – PR19 Foundation Research June (2017) (Accent)	June 2017	HH and NHH customers	93 Total: 70 HH, 23 NHH	To understand customer priorities for service delivery both now and over the longer term (prompted and unprompted) and to check these against previously established priorities in PR14 work.
SSC – Appendix E - Customer Research Findings Summary CAM WRMP (2018)	2018	HH, NHH and future customers	7,000+	n/a
SSC – PR19 Data Triangulation Study SSW WRMP (2018)	2019	HH, NHH and future customers	9000+	Appendixes for SSWs PR19 triangulation research. A review of all SSW customer engagement activity relating to their WRMP focusing largely on customer priority.
SSC – WRMP24 - WRAP Theme 1 Research Findings (2021)	August 2021	HH, NHH and future customers	Total: 47 HHs: 28 NHHs: 10 Future customers: 9	To explore household, future and SME businesses customer preferences in terms of; environmental ambition, levels of service/resilience ambition, water efficiency ambition, and best value planning criteria. To ensure a “golden thread” of customer preferences in these strategic areas, which sets the context for the remainder of the engagement programme.
WRE – Club Customer	September 2021	HH and NHH customers, and stakeholders	HH: 20 (CAM 5, Essex & Suffolk 5:	To understand consumer context (general

Report	Published Date	Participants	Sample Size	Project Objectives
Engagement report (2021) (Blue Marble)			Anglian 10). NHH: 14 (Anglian 8, Essex & Suffolk 3, CAM 3) Stakeholders: 20 organisations across the 3 companies	environmental priorities, current awareness of long-term challenges and implications for water suppliers, perception of water suppliers). To explore expectations and priorities re environmental planning. To explore response to the 'best value' plan objectives. To explore options preferences (ranking of preferences and what drives importance). To explore intergenerational economics (response to affordability options to understand generational expectations).
South Staffs Water – Stakeholder Roundtable Feedback Summary (2021)	October 2021	Stakeholders: Attendees from councils, Citizens Advice, Natural England, Waterwise and consumer industry representatives	8 stakeholders	To consider stakeholder views at a formative stage of the plan development process.
Cambridge Water Stakeholder Roundtable (2021) (Community Research)	October 2021	Stakeholders: Attendees from a wide range of organisations, including local and national environmental organisations, a social housing provider, a local authority planning department, a university and an MP	18 stakeholders	To consider stakeholder views at a formative stage of the plan development process.
SSC – Customer Promises Tracking Research Report (2022) (Turquoise)	April 2022	HH and NHH customers	1,106 customers overall: 814 HHs and 292 NHHs	To monitor ongoing customer satisfaction against the key metrics that engagement has shown to be important to customers; these include hard and soft measures. To deliver on-going customer sentiment tracking against key brand statements. To probe awareness and usage of key services and track changes in the way customers wish to interact with SSC.

Report	Published Date	Participants	Sample Size	Project Objectives
				To monitor and track the impact of Covid-19 pandemic on customers – new objective added in 2020/21.
SSC – Household Affordability Income Analysis (2022)	June 2022	HH customers	4,419 customers overall: HH tracker: 800 From other SSC surveys: 3,619	To track a range of key service related and brand metrics each year, such as customer perceptions of “affordability of water bill”
SSC – Feedback on draft WRMP2024 from the WRAP (2022) (Community Research)	August 2022	HH NHH and future customers	26 overall: 13 CAM and 13 SSW (18 HHs, 2 futures and 6 SMEs)	This is the fourth activity with the WRAP (Water Resources Advisory Panel). Exploring strategic choices through an online forum, deep dives via an online forum, Zoom groups, and feedback on draft plan
CCW and Ofwat– Water Consumer Views (2022)	April 2022	HH, NHH and future customers	12 online focus groups with HHs, and 16 depth interviews with HHs and NHHs	Research aimed at understanding water consumers' views on water and sewerage services, what is important, views on Ofwat’s proposed common PC areas for PR24, any new areas for exploration and to test descriptions and measurements of PCs.
SSC – Feedback on draft WRMP2024 from the WRAP (2022) (Community Research)	August 2022	HH NHH and future customers	26 overall: 13 CAM and 13 SSW (18 HHs, 2 futures and 6 SMEs)	This is the fourth activity with the WRAP (Water Resources Advisory Panel). Exploring strategic choices through an online forum, deep dives via an online forum, Zoom groups, and feedback on draft plan
SSC – Feedback on draft WRMP2024 from the WRAP (2022) (Community Research)	August 2022	HH NHH and future customers	26 overall: 13 CAM and 13 SSW (18 HHs, 2 futures and 6 SMEs)	This is the fourth activity with the WRAP (Water Resources Advisory Panel). Exploring strategic choices through an online forum, deep dives via an online forum, Zoom groups, and feedback on draft plan
SSC – WRMP24 Acceptability Testing Wave 1 Report (2022) (Turquoise)	September 2022	HH, NHH and future customers	HHs: 382 SSWs and 216 CAM. NHHs: 58 SSW and 20 CAM. Future: 25 SSW and 17 CAM	To provide a view of what is driving acceptability and or lack of acceptability of the plans, to determine whether customers find the

Report	Published Date	Participants	Sample Size	Project Objectives
				SSW/CAM WRMP draft plan acceptable. To aid SSC to communicate why the plan is acceptable or unacceptable to each region.

Overview

Stakeholders, particularly those that work with households who are struggling financially, are concerned about affordability of water bills, especially due to higher levels of deprivation in the South Staffs Region and the current cost of living increases. They agree that current customers should pay for future plans, but these customers need to be protected and prepared for any future bill increases. Customers generally find their water bills good value for money, but again the cost-of-living crisis is a concern especially with the current energy bills being so high. Cambridge customers tended to be less satisfied with value for money than South Staffs customers.

What is driving acceptability or lack of acceptability of the BVP plan?

According to Sustainability First – Looking to the long-term report (2018), 11% of households in England and Wales were at risk of affordability problems in water. In 2017, SSC – PR19 Foundation Research June (2017) (Accent) found that while the current bills were seen as value for money and SSW/CAM are seen as financially responsible, customers were keen to ensure that the plans incorporate the need to ensure affordability in what they perceived as an economically uncertain future. This trend continues into 2022 with CCW and Ofwat– Water Consumer Views (2022) finding that most customers, including lower income customers, don't so much mind the current price of bills, however they worry about potential sharp rises in the future. This is especially true for those living as family units.

SSC – *Appendix E - Customer Research Findings Summary CAM WRMP (2018)* delved into the acceptability and affordability of plans in 2018, where customers showed strong support for plans. 82% of customers found the plans acceptable (81% South Staffs, 83% Cambridge) and 73% found them affordable (72% South Staffs, 74% Cambridge). When testing acceptability of the proposed performance commitments, high levels of comprehension of the definitions was found and nearly two thirds of all participants found all of the proposed targets sufficiently stretching, which could be the driver of the acceptance levels.

Customers who attended SSC – *WRMP24 - WRAP Theme 1 Research Findings (2021)* saw their water bill as good value for money. They were most comfortable with bill increases for fitting more meters and educating customers; however, they were least comfortable with bill increases to reduce the frequency of restrictions. Yet, SMEs had stronger support for investing to reduce restrictions because their business could be affected. Customers were generally accepting of paying for future generations, but had mixed views for other regions. The mean average acceptable bill increase was approximately £20. Cambridge customers maximum acceptable bill increase per year was £120, but for South Staffs customers, this was only £70.

Customers' perception on the affordability of current clean water charges

SSC – *Customer Promises Tracker Annual Report (2023) (Turquoise)* found that Household satisfaction with value for money had risen by 2pp to 67% from the previous year; yet affordability fell slightly by 3pp across the region to 76% (75% South Staffs and 77% Cambridge) after two strong rises the previous 2 years. This is understandable, especially in light of the current cost of living increases. In fact, those most affected by the cost-of-living crisis were:

- those with a total household income under £23,000 a year, who were significantly less likely to agree that their water charges were affordable (66%)
- social grades of D or E, as well as those aged between 35-64, who were more likely to disagree that water charges were affordable (17% and 15% respectively).

The top reasons cited for all groups most affected by the cost of living crisis were: “being too expensive in the current financial situation”, “the rising cost of living and high inflation”, “prices of water have risen too high” and “shareholders are paid too much”.

Satisfaction with value for money in South Staffs region was 67% compared to 61% in Cambridge. Customers in the high social grades of A or B were significantly less satisfied with value for money (58%) which may explain the difference between the supply regions, with Cambridge Water having larger proportions of customers with higher social grades. Female customers were significantly more satisfied (71%) than males (60%).

WRE – Club Customer Engagement report (2021) (Blue Marble) summarised that concerns over affordability were heightened post Covid. Plans should be fair and affordable for all, and everyone was worried about rising costs. Inequalities highlighted by the pandemic created a more ‘citizen’ mentality where it was important to protect lower income/poorer customers, however, stakeholders (and some NHH) believe water is (too) cheap and under-valued. The need to protect the economically vulnerable was undisputed.

SSC – *Household Affordability Income Analysis (2022)* found that during 2021/22, households with an income level of £16,380 to £23,000 were least likely to agree their water bill is affordable - 71% - with 14% disagreeing with the statement, the most of any segment.

Affordability was often at the forefront of stakeholders’ minds, with concern for low-income and vulnerable household customers being an almost universal priority among stakeholders, with many highlighting the need to ensure customers in vulnerable groups are protected (*WRW - Updated Regional Plan (2023)*; *SSC - Your Water Your Say*; *SSC - CCW Consultation Response to CAM draft WRMP (2023)*). At the *South Staffs Water – Stakeholder Roundtable Feedback Summary (2021)* affordability was raised repeatedly due to the high levels of deprivation in the South Staffs region and the high profile of water poverty, stakeholders who work with customers who have financial problems were most likely to raise this issue. However, Affordability was also mentioned by stakeholders with an environmental focus. Stakeholders were keen for South Staffs to be as ambitious as possible to protect the environment and water supply but stressed that this needs to be balanced against what customers can afford. It was suggested that environmental improvements should be made slowly to protect struggling customers from steep bill increases that they couldn’t afford with the cost-of-living crisis. If bills do need to increase, stakeholders want South Staffs to protect and prepare struggling customers.

Do customers find the SSW/CAM WRMP draft plan acceptable in the context of WRE/WRW?

The literature reviewed did not provide sufficient evidence to inform this objective. This should be an area of focus for future research to help inform the delivery of WRMP24.

Customer views between the least cost and preferred BVP

WRE – Club Customer Engagement report (2021) (Blue Marble) found that customers were largely accepting of the idea of the best rather than the cheapest. And although it may not be the cheapest it may be better value for money overall because solutions are not a quick fix. However, it is noted that the terminology can be confusing to consumers as ‘best value’ in other contexts means the cheapest and they don’t always equate the idea of best value plan as affecting customer bills directly. Lower socio-economic groups (C2DEs) tend not to be aware that investment choices impact their bills.

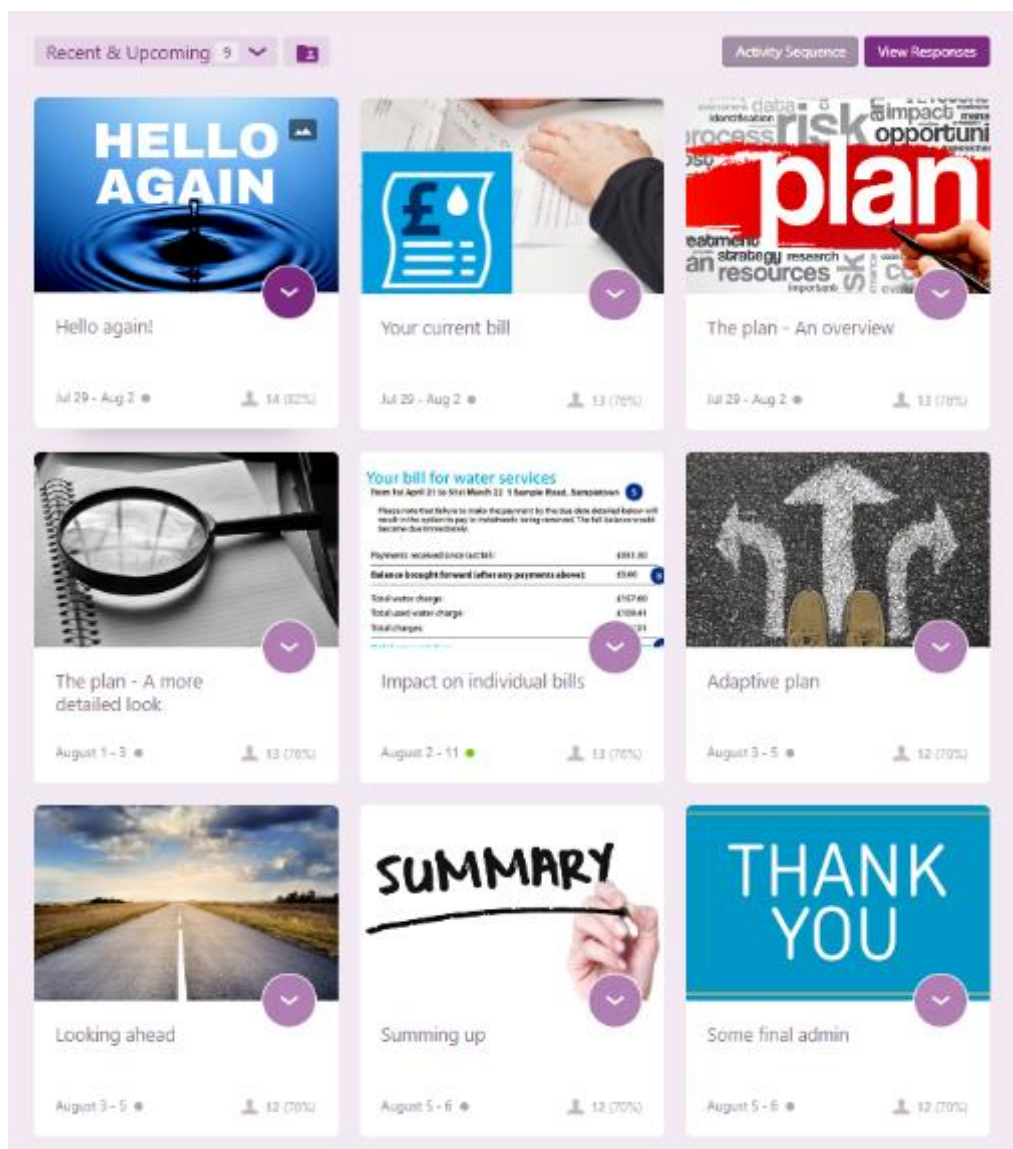
Early acceptability testing of WRMP24

The WRMPs in both of SSC’s regions have been developed in line with customer preferences over time, and at this time a draft plan has been tested qualitatively with customers and early results are available in the *SSC – Feedback on draft WRMP2024 from the WRAP (2022) (Community Research)*. The plans in both regions will be fully tested quantitatively in the Autumn of 2023 and the results incorporated into a revised version of this review in October.

The qualitative testing via *SSC – Feedback on draft WRMP2024 from the WRAP (2022) (Community Research)* provided participants with a series of tasks to complete online, including polling questions, written tasks and self-generated discussions (see Figure 10.1). Participants were also invited to comment on each other’s posts to generate

discussion amongst participants on the key topics. In one of the final tasks, the emerging findings were shared with participants to gauge their reactions to the wider group view. This was a way of increasing engagement and a response to learnings from the first Forum in the Summer of 2021.

Figure 10.1: Overview of group discussion topics used in SSC - Feedback on draft WRMP24 from the WRAP (2022) (Community Research)



The following three engagements cited are the first wave of studies designed to support the submission of SSC’s WRMP24 draft plan submissions and the costs and options tested with customers prior to publishing the plan. Although the customer views included may vary slightly with regards to the final plan, the current research available provides valuable insight into acceptability and affordability of the WRMP24 plan.

Acceptability and affordability of the WRMP24 Plan

SSC - Feedback on draft WRMP24 from the WRAP (2022) (Community Research) found 9 participants out of 13 in both regions, found the summary plan acceptable or somewhat acceptable before going on to review the plan in detail. Most participants from both regions believed it balanced the need for improvements with a sensible cost. After more detail was given around the current situation and future challenges for the customers’ respective regions, there was no change in acceptance level in SSW and in CAM, one additional participant (now 10 out of 13) found the plan somewhat or completely acceptable. When presented with the adaptive planning approach, 8 of 13 in the SSW region and 12 of 13 in the CAM region agreed or strongly agreed that such as approach was appropriate,

if necessary. The lower level of agreement in SSW mostly related to concern around possible associated costs if the plan needed to change.

Similarly, in SSC – WRMP24 Acceptability Testing Wave 1 Report (2022) (Turquoise), based on the uninformed stimulus of the plan, acceptability was high at 71% with the main spontaneous reasons given being ‘the plan is a necessary to meet demand/ climate change impacts’ (24%) and that the plan was ‘inexpensive/ acceptable increase/ value for money’ (15%). NHH customers were more accepting than household customers based on the uninformed stimulus (83%) and future customers slightly less accepting (63%). However, once customers became more informed about the options in the draft plan and the breakdown of the costs, acceptability of the plan among HH (64%) and NHH (72%) decreased whilst for future customers, it remained stable (62%).

One of the key reasons HH customers in SSC – WRMP24 Acceptability Testing Wave 1 Report (2022) (Turquoise) were less likely to accept the plan, once informed, was due to affordability of the proposed bills. The study found 4 out of the 5 top reasons centring around cost. Just under half (48%) of HH customers agreed that their future bill would be affordable with the CAM region significantly more likely to agree with this statement (59%) than SSW (43%). A higher proportion of NHH customers overall (60%) thought that the future bill would be affordable for their organisation. Among future customers, 42% were likely to agree that their future bill would be more affordable than their current bills although not being current bill payers, it could be argued they lacked the knowledge to make such a judgement.

In terms of adaptive planning acceptability in SSC – WRMP24 Acceptability Testing Wave 1 Report (2022) (Turquoise), 66% of HH customers found the use of adaptive planning acceptable, with the main reason given being it is sensible given uncertainty around changing climate and demand estimates (60%). HH customers who didn’t agree with adaptive planning were mainly concerned with potential cost changes and not the detail of the plan. Acceptability of adaptive planning among NHH was 72% and among future customers it was 53%.

In the SSC H2Online community – WRMP24 Acceptability and Affordability testing study (2022), which included more up to date, and higher bill impacts to deliver the plan, acceptability of the WRMP24 plan was still high at 80% before participants were shown the bill impact. Broken down by region, 72% of SSW participants found the plan to be acceptable and were particularly positive about the proposed reduction in water leakage. Acceptance was higher among CAM participants with the 92% who found the plan acceptable believing that the goals set by Cambridge Water were achievable. Concerns raised at this stage centred on the likely increase in bills needed to deliver the plan. It should be noted that H2Online Community members are typically more engaged and informed, particularly about issues relating to water resource management.

"Seems sensible to plan ahead for further expansion; particularly keen on preventing leakage" SSW respondent from SSC H2Online community – WRMP24 Acceptability and Affordability testing study (2022).

"This plan looks reasonable and achievable. This will ensure that future demands are met as the population grows" CAM respondent from SSC H2Online community – WRMP24 Acceptability and Affordability testing study (2022).

Once the bill impact was explained, acceptability of the plan decreased to 66% overall, mainly due to participants feeling the cost increases proposed were too high. Regionally, for SSW acceptability dropped by 11pp to 61% compared with CAM, where acceptability dropped 21pp to 71%.

"I would probably be able to afford it, if its split over a number of years, however I worry that some customers may not" SSW respondent from SSC H2Online community – WRMP24 Acceptability and Affordability testing study (2022).

"I am on a low income and although the plans are good, the cost may negatively impact my household" CAM respondent from SSC H2Online community – WRMP24 Acceptability and Affordability testing study (2022).

Customers’ perception on the affordability of current clean water charges and future charges in the WRMP24 plan

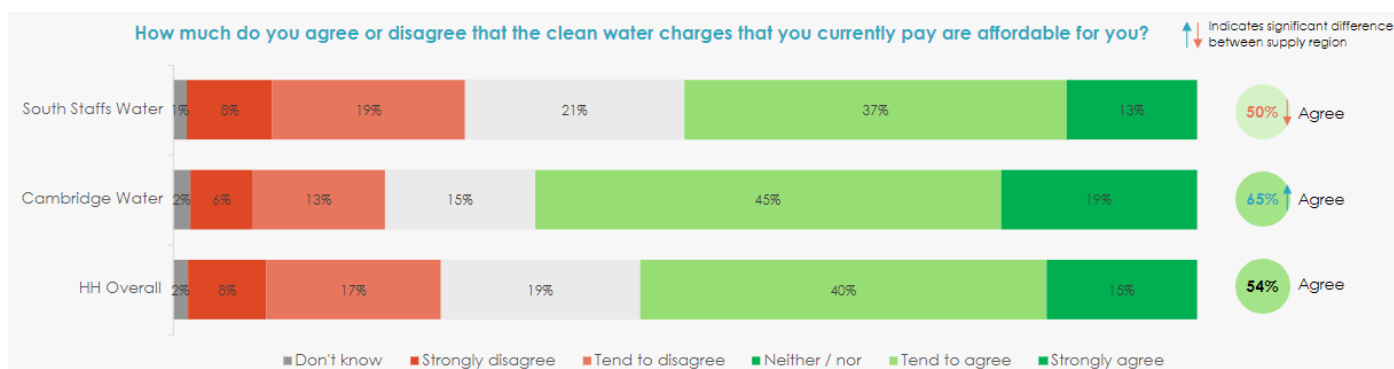
It is important to note in this section that the WRMP24 bill impacts shown in the three studies were tested for 2025-2050, without being able to inform participants of the proposed bill impact for all investments SSC would need to

make during the period 2025-2030 (PR24). This will however form part of the second wave of affordability testing in September 2023.

The SSC H2Online community – WRMP24 Acceptability and Affordability testing study (2022), found just under three-quarters (73%) felt current water charges were affordable, with agreement being higher for the SSW respondents (75%) than CAM respondents (68%).

However, in the SSC – WRMP24 Acceptability Testing Wave 1 Report (2022) (Turquoise) which achieved robust and representative sample, 61% of HH customers were satisfied with the overall service with more customers from the CAM region agreeing the clean water charges they currently pay are affordable compared to customers in the SSW region (Figure 9.1).

Figure 9.1: Customers’ perception on the affordability of current clean water charges

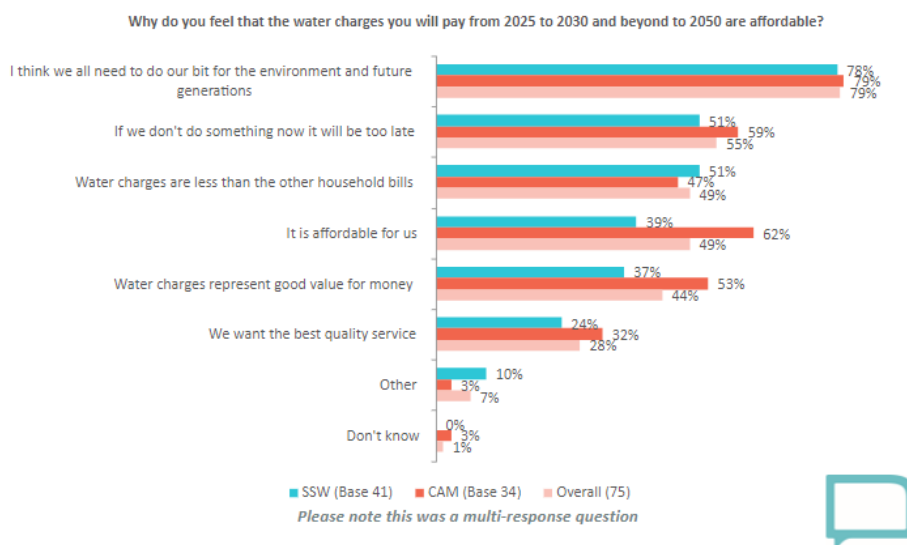


Once learning the impact of the WRMP24 plan on future bills in SSC H2Online community – WRMP24 Acceptability and Affordability testing study (2022), just over half (54%) thought proposed charges to deliver the plan would be affordable. The main reason for this included “doing our bit for the environment and future generations” (Figure 9.2).

“Provided there is support for those who would struggle to pay, it’s completely reasonable to increase charges to endure long-term supply.” SSW respondent from SSC H2Online community – WRMP24 Acceptability and Affordability testing study (2022)

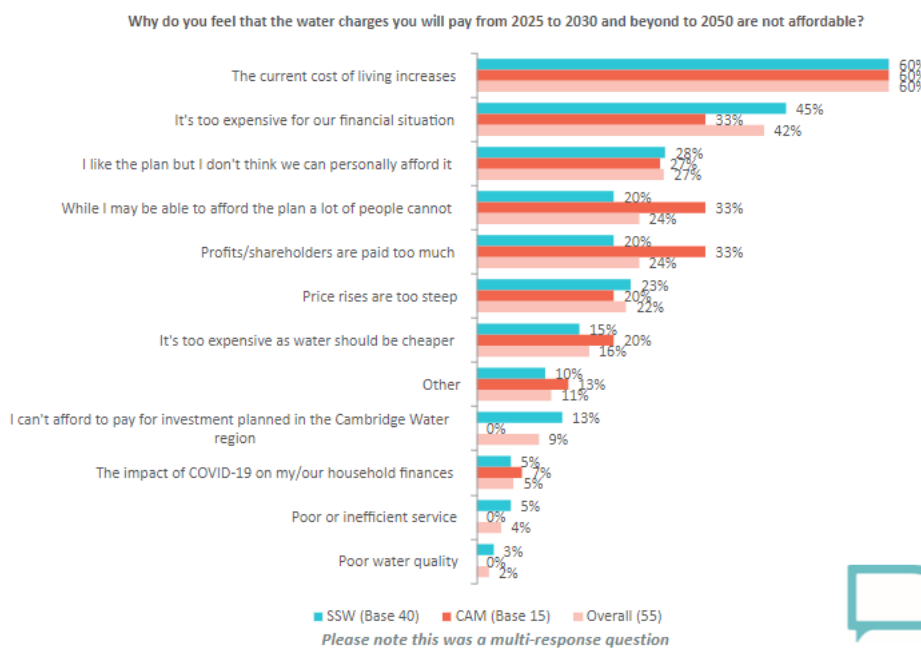
“I consider my situation to be borderline when it comes to affordability. There will be a great many individuals and families that will not be able to afford the rises as the current situation stands.” CAM respondent from SSC H2Online community – WRMP24 Acceptability and Affordability testing study (2022)

Figure 9.2: Reasons respondents felt the WRMP24 plan to be affordable.



Of the respondents who did not agree the proposed changes in the WRMP24 plan would be affordable, in a multiple-choice question, the overall main reason was the current cost of living followed by it being too expensive for respondent's financial situation (Figure 9.3).

Figure 9.3: Different reasons respondents felt the WRMP24 plan to not be affordable.

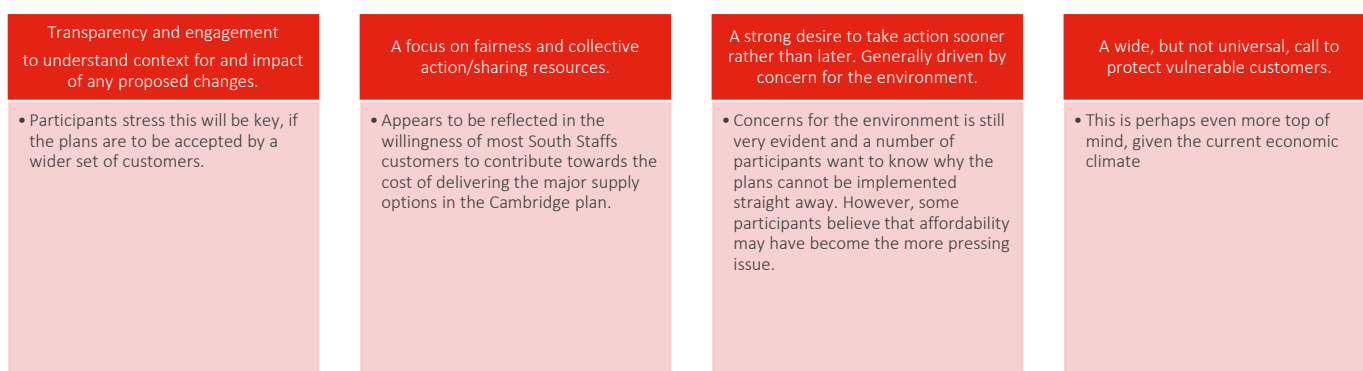


In the *SSC Feedback on draft WRMP24 from the WRAP (2022) (Community Research)*, in terms of affordability, once individuals were presented with what their water-only bill could look like from 2025 based on the WRMP24 plan, 8 of 13 participants in both regions agreed or strongly agreed that the bill will be affordable. In the SSW region, one SME disagreed that the bill was affordable whilst two SME in the CAM region had concerns about future inflation and the lack of support for businesses.

Golden threads

One area to flag from the WRAP report is that the key themes (golden threads) running throughout the research programme are still evident (see Figure 10.2) in the draft plan presented.

Figure 10.2: Golden threads evident in SSC Feedback on draft WRMP24 from the WRAP (2022) (Community Research)



Golden Threads: Acceptability and affordability of WRMP24 plans

Golden Threads	The need for customer information and engagement	Perceptions of ‘Best value’ are affected by how stakeholders understand the investments that are being made and how this benefits customers, now and in the future, so in this respect information, and engagement as important as ensuring that bills are perceived as reasonable.
	Call for collective responsibility and fairness	There is wide acceptance among stakeholders that the responsibility for future investment should be shared by current customers in the form of paying for that investment now, but it should primarily be focussed on their region. The perceptions that water bills offer good value for money is a good basis for this support currently, but the cost-of-living increases and how its impacts are distributed across consumers will potentially challenge this in the immediate future (see emerging thread below).
	Concern for the environment	A consistent theme is the observation that while stakeholders generally recognise the importance of environmental ambition and the pressing issues related to climate change, immediate concerns loom larger, notably in the form of the rise in the cost of living and the diminishing ability of current customers to pay for long term investment.
	Protection for vulnerable customers	Customers and stakeholders clearly recognise the importance of assisting low income and vulnerable customers. They also recognise this as an important responsibility of SSC, and by implication, many accept that this must be paid for through all customers’ bills.
Emerging thread	Cost of living	The area of plan acceptability and affordability naturally highlight the cost-of-living increases most strongly, suggesting heightened awareness among customers and stakeholders of the need for good value investments balanced against the potential need to defer some longer projects if this will release resources to address the current needs of customers.

Demographic Splits: Acceptability and affordability of WRMP24 plans

The table below provides a brief summary comparison of each of the key demographic groups, related to the acceptability and affordability of WRMP24 plans. Please see the appendix for detailed tables of each split.

Demographic group(s)	Key findings/ comparisons
SSW vs CAM	Appendix A.9.1 summarises SSW and CAM preferences in relation to acceptability and affordability of WRMP24 plans. Participants in CAM were much more resistant to bills changing within the WRMP24 plan. Participants across both regions believed that the WRMP24 plan delivered a good balance between improvements to services and affordability for the customer. In general SSW customers were more concerned for their future bill prices than CAM customers, while CAM customers favoured investing in services such as leakages.
HH vs NHH	Appendix A.9.2 summarises HH vs NHH preferences in relation to acceptability and affordability of WRMP24 plans. It appears that NHHs were more accepting of the plan than HHs, as well as thinking their future bills will be affordable.
FBP vs current bill payers	Appendix A.9.3 summarises future customer preferences in relation to acceptability and affordability of WRMP24 plans. Future billpayers have limited interaction with water providers and often lack responsibility for their water and bill visibility. Future billpayers exhibit higher willingness to pay (WTP) values for protecting wildlife and habitats, emphasising their concern for environmental conservation and the importance of a company's environmental credentials.
Vulnerable vs other customers	Appendix A.9.4 summarises vulnerable customers' preferences in relation to acceptability and affordability of WRMP24 plans. A majority of vulnerable customers, those who are on lower-income and lower-socio economic grades, did not find their current bills affordable due to the cost-of-living crisis and fear any potential sharp rises in the future. Some are also unaware that SSC investments would impact their water bill.
Stakeholders vs customers	Appendix A.9.5 summarises some of the key themes relevant to affordability and acceptability from the stakeholder consultation undertaken during the WRMP24 planning process. Stakeholders appear concerned with the idea of increasing bills, affordability and the cost-of-living crisis. This is in accordance with almost all customers, such as HHs, NHHs and FBPs, as the rising cost of living is a prevalent topic across all customer groups.

13. Acceptability of PR24 Plan

Acceptability of PR24 Plan Bibliography

In-text reference	Evidence	Fieldwork Date / Insights gathered	Participants	Sample Size	Project Objectives
SSC Customer Priorities Tracker - Qualitative wave 2 Research - May 2022	Priorities Research Qualitative Insights – Year 3 (Accent) – May 2022	May-22	HH and NHH customers	32 HH, 12 NHH	Explore what matters to customers now and in the future to root SSW/CAM plans in the customers’ world. Understand what customers want and expect SSW/CAM to focus on in the short term and long term to 2050. Track and measure any changes in short- and long-term priorities and what is driving these changes.
SSC Priorities Research Tracker (2023)	Accent Priorities Research Quantitative Insights – Year 3	Quant research 2021 – 2023	HH customers	2021: 511 HH 2022: 1,054 HH 2023: 1,072 HH	Provide a benchmark against which customers’ priorities will be tracked for both wholesale and retail services. Explore any differences between uninformed/informed priorities and qualitative/quantitative insights. Understand the customer impact of the cost-of-living crisis (2023).
SSC PR24 LTDS Research Presentation, Turquoise for SSC, July 2023	Turquoise SSC PR24 LTDS Research Presentation July 2023	Published July 2023	HH, NHH and future customers	Qualitative: 34 HHs, 12 NHHs, 6 FBPs Quantitative: 980 HHs (including 82 FBPs), and 100 NHHs	To understand customers attitudes and perceptions towards SSC’s long-term vision to 2050 and their spontaneous preferences in terms of long-term delivery. Also, exploring SSC’s performance and future targets in 10 key ambition areas, and to understand the main reasons that drive customer preferences, and to explore the issue of intergenerational fairness.
SSC Customer Tracking 2022/23 Annual Report	SSC Customer Tracking 2022/23 Annual Report	March 2023	HH and NHH customers	Total 1134 HH = 837 (268 CAM, 569 SSW)	To monitor ongoing customer satisfaction, deliver on-going customer sentiment tracking, probe awareness and usage of key

				NHH = 297 (93 CAM, 204 SSW)	services and track changes in the way customers wish to interact with SSC.
SSC PR24 CSA Research	SSC PR24 CSA Research, 2023	February – April 2023 (Unpublished)	HH and NHH customers	43 customers via 6 qualitative focus groups. 10 in-depth HH interviews and 4 NHH. 1314 HH and 149 NHH quantitative survey	This research was conducted in order to gather insight into customer willingness to pay and acceptance of SSC's CSA plans. As well as to understanding the main supporting and opposing factors towards this plan.
SSC Young Innovators' Panel Interim Report (awaiting additional survey data)	SSC Young Innovators' Panel Interim Report (awaiting additional survey data) – Blue Marble	August 2023	Future customers	25 involved with the panel, and 43 (so far) survey respondents	Hearing the views of future customers (16-18 year olds), to be triangulated with other young and future audiences as part of the PR24 evidence base.
SSC Social Tariffs Research 2023	SSC Social Tariffs Research 2023 - Qa Research	Publication: 1 st September 2023 FW: 17 th July-21 st August 2023	HH and SHs	Qual: 6 SHs in online depth interviews, 24 HHs in online groups, 28 HHs in in-person workshops Quant: 1238 direct survey HH completes, 130 panel completes HHs, 99 F2F completes with vulnerable HHs, 23 PSR survey completes, and 21 H2Online community survey completes.	To engage with consumers about the future development of the Assure tariff, and establish customer views towards a possible new affordability tariff aimed at those struggling to pay their water bills, but who don't qualify for Assure due to their HH income being too high.
SSC PR24 Affordability and Acceptability testing - Quantitative findings 2023	SSC PR24 affordability and acceptability testing - Quantitative findings 2023 - Accent	Sept 2023	HH and NHHs	987 HHs 117 NHHs (82 SSW and 35 CAM)	A survey to provide views on the affordability and acceptability of SSC's PR24 plan.

Concerns over finances and rising cost of living

It has been evident that finances and affordability remain key to customers' views and decisions. The *Accent Priorities Research Qualitative Insights Year 3* report (2022) found that HH customers' key concerns related to managing HH finances. This research found that since moving out of the pandemic, any optimism was short-lived and has been since replaced with significant concerns regarding the cost of living. Similarly, the report shows that NHH concerns are also economically rooted. Since the first year of this research, financial concerns have escalated and become more important to customers.

"Prices are going up too much, if water is another one that goes up, then it's going to cripple people, I think" CAM, future customers from *Accent Priorities Research Qualitative Insights Year 3*

Further, the importance of affordable bills was also highlighted in the *Accent Priorities Household Tracker Year 3 Quantitative Insights* research (2023). This research asked customers what their spontaneous priorities were. The second most mentioned priority was reducing prices/ lowering bills. When this was measured through a Max Diff exercise as one of 20 attributes, it also ranked second out of a list of multiple initiatives (score of 11.6). The report noted a few changes in rankings year on year, and financial bill support increased by 1.4 intensity points (priority scores are a measure of preference intensity on a scale of 1-100) and 1.3 intensity points in the last few years (from 2020 to 2023). The reasons that customers supported bill affordability as a top priority was partly due to fear that some households might not be able to afford their bills without going into debt or sacrificing personal hygiene. There were also concerns over rising cost of living, and a recognition that money is going to be tight for people over the next few years, so it must be spent wisely.

The *SSC Young Innovators' Panel Interim Report (2023)* highlighted that future customers are also concerned about rising bills. It was noted that bills feel more unpredictable than before the cost-of-living crisis. Water is essential, and these future customers felt strongly that investments should not make bills unaffordable, and that price rises should be spread out across the generations.

Value for money

The *Accent Priorities Research Qualitative Insights Year 3 (2022)* results show that the qualitative value for money baseline appears mixed. As aforementioned, the current economic situation means all HH bills are a concern for consumers. Participants were hopeful that water bills will continue to be stable and not follow energy bill patterns. Some participants felt their current water bill is good value, mainly because it is not as high as other utility bills. However, some others think that at all bills are high, including water.

During the *SSC Company Specific Adjustment Research PR24 Final Report* quantitative survey (2023), respondents were asked about VFM, and, as the qualitative results from the same study showed, the results across the board were positive. It was NHHs in SSW that tended to give the most positive response, with 72% saying they felt SSC give either good to very good value for money. HHs in SSW gave a lower score with 59% responding they got good value for money for the services they received from SSC. The corresponding scores for CAM were 69% (NHH) and 64% (HH) respectively. These VFM scores are broadly in line with those of other SSC research findings, such as in their *Promises Tracker*, which found that overall household satisfaction with VFM was 67% during 2022/2023.

High level response to business plan

The *Accent Priorities Research Qualitative Insights Year 3* report (2022) explored customers initial responses to SSC's 'Looking to the future' business plan. The high-level response to the plan was very positive, and when mapping back spontaneous long-term priorities to this it made customers feel that SSC were covering the challenges raised and meeting future expectations.

The *SSC PR24 Affordability and Acceptability Testing Quantitative Findings* show that the level of acceptability for the proposed plan was high amongst both CAM and SSW customers, with around 70% in both groups stating they found the proposed business plan acceptable. There were no observable distinctions between the two groups in terms of their acceptability. As one might expect, individuals who found it easy to pay their projected future water only bills

were significantly more inclined to express a higher level of acceptability. The main reasons that participants accepted the plan was because it addresses the long-term challenges and focuses on the right services. Trust was significantly higher for customers in SSW and the current good service was higher for CAM customers. Those who found the plan unacceptable, mainly did so due to the cost of the bill increases and a perception that company profits are too high. Customers in SSW were significantly more likely to report that they could not afford the proposals for their water services as a reason for the unacceptability of the plan. Overall, the most important areas of investment was through to be protecting the environment, followed by improving water quality. Customers in SSW area put significantly more importance on improving water quality when compared to those in CAM.

The *SSC Young Innovators' Panel Interim Report (2023)* shows that future customers found SSW's PR24 business plan acceptable overall, and they were reasonably positive about SSW's future plans. Water quality and environmental improvements were seen as the priority areas for these future customers, and both feel critical, seeing as they reflect the primary functions of a water company. Although future customers found the plan acceptable overall, they did have a few areas of concern. Firstly, they were concerned about rising bills as mentioned earlier, due to rising costs of living and some students thinking that customers should not pay for investments, especially in areas where companies are seen to be underperforming. Students want more detail about SSW's future plans so they can judge them more accurately. This includes more examples of investments and details about the positive impacts of investments.

Affordability of current and future clean water bill

The *Accent Priorities Household Tracker Year 3 Quantitative Insights (2023)* results show that, compared to before the pandemic, concerns about HH bills were significantly higher. When compared to year 1 and 2, a significantly higher proportion of customers in year 3 (2023) reported concerns with paying their HH bills. This was against the backdrop of spiralling inflation, the cost of living, and more. Concern with paying bills applied to current timing, and also when thinking about the next 12 months. The *Customer Priorities Tracker* also showed that concerns over ability to pay household bills has increased, but this is not strictly related to water bills. Before the pandemic, 51% of customers felt they had concerns about their ability to pay any household bills now or in the future, but this increased to 84% in 2023, and 85% when considering the next 12 months.

The *Turquoise SSC PR24 LTDS Research Presentation (2023)* found that 29% of SSC HH customers find it difficult to afford their water bill, whilst 35% found it easy. It appears CAM customers are slightly more likely to find it easy to afford their water bills, with 38% finding it easy, compared to 34% of SSW. Similarly, 25% of CAM HHs said it was difficult, whilst 31% of SSW did. When looking at SEG, DE groups were more likely to find it difficult to afford (54% said difficult), whilst ABs found it easier (53% said it was easy). When looking at NHH results, the story changes slightly. Overall, 62% of NHHs said it was easy to afford, but when analysing by region, SSW were actually more likely to find it easy (69%) compared to CAM (47%).

The *SSC Company Specific Adjustment Research PR24 Final Report (2023)* also asked customers how easy or difficult they found it to afford their current clean water bill. In terms of being able to afford their current bill, under half (47%) of the sample (households and non-households combined) said it was easy or fairly easy. It was NHHs in CAM that found it most easy (65%), followed by HHs in CAM (58%). HHs in SSW found it the least easy to afford their current clean water bill, with 42% finding it easy to afford.

The *SSC PR24 Affordability and Acceptability Testing Quantitative Findings* also asked participants about the affordability of their current water bills. When considering their combined water bills (not just water only), just under a third (30%) of the overall sample thought it was easy to pay these bills. This figure is significantly higher in Cam (40%), compared to SSW (28%).

It appears that looking into the future, at AMP8 bills, some customers think they might struggle to pay. When the *SSC Company Specific Adjustment Research PR24 (2023)* survey showed participants that bills are likely to increase by around 25% for the period 2025-2030, most customers were understanding and accepting of this. Customers in the quantitative survey were also asked how easy it would be to pay their future clean water bill, with this increase in mind and 29% felt it would be either very or fairly easy. These figures show a reduction from earlier in the survey when customers were asked about affordability of their current bill, where positive agreement stood at 47%. At a

regional level, the 25% increase in water bill was considered more acceptable in CAM (54% of NHH and 42% of HH felt this would be easy to afford). This compares to SSW where 24% of HH customers and 25% of NHH customers thought it would be easy to afford.

When isolating customers with any vulnerability from the rest of the sample (for how this was defined please see Appendix J), we can see that almost half (48%) of the vulnerable customers thought it would be very difficult or fairly difficult to afford the AMP8 bill, compared to 35% of non-vulnerable customers.

Some thought this rise was expected, due to other bill increases in the utilities world. Others felt negatively about this increase, and mentioned being shocked, disappointed, and other negative words. On the other hand, some were more positive, and exhibited that this increase was understandable and reasonable. When analysing these responses alongside how easy or difficult respondents said it would be to afford these clean water bills from the period of 2025 to 2030, unsurprisingly, those who said they found it difficult to pay were significantly more likely to use negative words in their initial reaction than those who would find it easier to afford, and vice versa.

Out of the respondents who said it would be 'fairly easy' or 'very easy' to afford the proposed increase, 36% used positive words when initially reacting to the rise, compared to only 4% of those who said they would struggle to afford it. In a similar trajectory, 42% of those who said it would be 'fairly difficult' or 'very difficult' to afford the increase used negative words in their initial reactions, compared to 15% of those who felt as if they could afford it. The survey also asked people how they were feeling (e.g. in a good mood or bad mood) at the time of completion. Unsurprisingly, those in a positive mood at the time of completing the survey were more likely to use positive words when talking about the increase, compared to those who were in negative moods (24% compared to 14%). Moving on, respondents who were satisfied with the overall service they receive from SSC (those giving a rating of 8, 9 or 10 on a 10-point scale) were significantly more likely to use positive words when talking about the AMP8 increase compared to those who were unsatisfied (those giving a 1, 2 or 3 rating) with the service (21% compared to 8%). However, whilst almost a quarter (24%) of those who were satisfied with SSC's service still used negative words when reacting to the increase, this is still lower than the proportion of customers dissatisfied with the service who used negative words (41%) in response to the proposed bill increase.

The *SSC PR24 Affordability and Acceptability Testing Quantitative Findings* also asked customers how affordable they think their future water bills would be. The proposed combined bill recorded a noticeable decrease in the affordability rating when compared with current bills, with 14% overall rating the proposed future bill as fairly or very easy to pay. It appears that CAM customers are more likely to find their future bills easy to afford compared to SSW customer. Respondents from CAM (25%) exhibited a higher affordability rating when compared to those in SSW areas (11%). Nearly half of the entire sample (47%) expressed concerns about their ability to pay the proposed combined bill, finding it very or fairly difficult to pay. SSW showed higher concerns (51% thinking it will be difficult) compared to CAM (31%). Around a third of the sample (36%) adopted a neutral stance regarding this projected combined bill, by selecting neither easy nor difficult to afford. When isolating affordability for the clean water only bill, overall affordability for the future bill increases to 19% (compared to 14% for the combined bill) and net difficult to pay decreased to 35% (compared to 47% for combined). Regional differences remain apparent at the clean water only bill level, with more CAM customers (26%) thinking their bill will be easy to afford, compared to 17% of SSW.

Short term vs long term bill increases

In the *Accent Priorities Research Qualitative Insights Year 3 (2022)* research participants were shown stimulus slides to understand preferences for short- or long-term bill increases. The majority of customers, regardless of NHH or HH status, age or social economic grade, opted for what they see as a compromise of a natural bill, with just a minority supporting short- or long-term investment.

A minority were in favour of the 'pay now' preference. Here, the drivers were altruism and worrying about the future generations, as well as a sentiment of wanting to get it out of the way. Some were concerned that the situation could worsen and perhaps people won't be able to pay in the future. There were also some conversations around the fact that water bills are lower than others so there is some room for flexibility. However, customers would want some guarantee that money would be well spent, as well as being assured through transparent updates that bills would not then increase again in the future.

The majority of customers sat in the 'natural' category. This was seen as the least notable option, as it would likely involve a gradual increase and would therefore be less impactful on HH finances. A smooth increase over time should ensure that current service is still maintained. Others mentioned that this option feels 'fairest' for everyone, and fits with the current economic strain.

Lastly, some customers thought that SSC should opt for the 'pay later' option. This was because any increase at current felt unaffordable, and therefore people must focus on themselves or their family. Some customers admitted they felt slightly embarrassed admitting this, but they stressed the need to survive.

The *SSC Young Innovators' Panel Interim Report (2023)* introduced future customers to the idea of 'bill phasing'. The research found that future customers see steady bill increases as the fairest option for society, and the majority chose this option, as it means increases are shared equally between generations, and because it is important to minimise bill shocks during the cost-of-living crisis. However, some future customers did notice that the phasing up investment was the better option for the younger generation financially. When applying this concept to improving network resilience specifically, the phasing up option was preferred, as the option where all generations pay equally was seen to potentially underinvest in the future (as it looked like there would be less investment overall).

Intergenerational fairness

The *Turquoise SSC PR24 LTDS Research Presentation (2023)* found that, in terms of intergenerational fairness, the majority of customers think it is fair to contribute to the cost of maintaining infrastructure for both present and future generations. This is due to water being seen as a basic human entitlement that should be managed equitably across generations. However, there was some argument from respondents that new technologies will be cheaper and better in the future so it could be worth waiting before investing. It is believed that all customers should contribute to maintaining water infrastructure, and cost should be spread evenly. That being said, this depends on the urgency of the infrastructure needs and the impact on water affordability. It is vital to consider affordability, especially amongst vulnerable customers.

The *SSC PR24 Affordability and Acceptability Testing Quantitative Findings* shows that CAM customers are significantly more likely to want bill increases to start sooner than SSW customers, with 52% of CAM and 40% of SSW customers selecting 'an increase starting sooner'. On the other hand, 41% of SSW customers claimed they did not know enough to make a decision, which is significantly higher than those in CAM (32%).

As aforementioned, the *SSC Young Innovators' Panel Interim Report* shows that future customers tended to agree that steady bill increases were the fairest option for society because different generations will be contributing the same amount to these improvements.

Company Specific Adjustment (CSA)

The *SSC Company Specific Adjustment Research PR24 (2023)* survey asked customers about their willingness to accept, and to pay for a CSA (company specific adjustment). When asked how much they would contribute to a CSA in the qualitative phase, HH respondents suggested around the £4 to £5 per month would be acceptable. Those unhappy at paying more rejected mainly on the principle of the CSA, rather than being unable to afford more. When a maximum increase of £4.50 a year was shown to HH respondents in the qualitative research, the majority customers were accepting. On the NHH side, spontaneous figures suggested were around the 5% level, so again, the maximum amount of 2.5% when then shown, was largely accepted. However, some customers in the qualitative groups disagreed with the CSA on principle, and felt no increase would be acceptable, even as little as 50p per year, and felt it was unfair asking customers to pay it.

The quantitative survey used a stated preference technique in the quant called Contingent Valuation Method (CVM). In the quantitative survey, a CSA of £2.50 per year was found to be acceptable for HH customers, and the percentage figure for NHHs was 1.56%. When comparing the qualitative and quantitative results, the quantitative survey respondents generally accepted a lower increase than the customers in the qualitative phase, but this was likely due to the prompted manner in which the question was asked in the survey. The lowest scoring group of HH customers were those who felt they got poorer value for money from SSC (voted 1-3 on a 5-point scale), who gave an average

value of £1.79. Alternatively, those that felt they got good value for money from SSC (voted 4 or 5 on a 5-point scale), gave a fairly high WtP value of £2.92. A similar pattern was also seen with satisfaction levels, although the gap was less pronounced. Customers most satisfied with the overall service from SSC (those that voted 8-10 on a 10-point scale), gave a WtP of £2.75, whilst the less satisfied (voted 1-7 on a 10-point scale), were willing to pay £2.00 for the CSA. This was the second lowest WtP score amongst HH customers. Among NHH, the firmographic differences were less pronounced, with the majority of groups giving a similar value. A difference of note identified was among those who did not think SSC offered good value for money (WtP value of 1.09%), compared to the overall WtP value of 1.56%. NHHs who did think SSC gave good VFM gave a relatively high WtP of 1.7% for a CSA.

Golden Threads

Golden Threads	Protection for vulnerable customers	As financial concerns and the rising cost of living take centre stage, worries about bill affordability grow, especially for those already struggling. Vulnerable individuals express fears of being unable to meet their bills without going into debt or compromising essential needs.
Emerging thread	Cost of living	People are increasingly worried about their finances and struggle to afford their bills, especially water bills. This concern has become more significant over time. Some customers fear going into debt or sacrificing basic needs due to rising living costs. This financial strain can affect their willingness to accept additional costs for maintaining water infrastructure, and other proposed investments. SSC must balance business plan developments with customers' ability to pay, especially for vulnerable groups.

Demographic Splits: Acceptability and Affordability of PR24 plans

The table below provides a brief summary comparison of each of the key demographic groups, related to customer priorities. Please see the appendix for detailed tables of each split.

Demographic group(s)	Key findings/ comparisons
SSW vs CAM	Appendix A.10.1 summarises SSW and CAM preferences in relation to acceptability and affordability of PR24 plans. Overall, whilst both SSW and CAM participants considered the proposed bill changes to be acceptable, CAM participants appeared better positioned to afford the changes and were more accepting of the specific figures.
HH vs NHH	Appendix A.10.2 summarises HH vs NHH preferences in relation to acceptability and affordability of PR24 plans. Both HHs and NHHs have some financial concerns, and these have grown over recent years. NHHs are more likely to think that SSC offers high VFM compared to HHs, as well as one study showing NHH are more likely to find their current bills easy to afford. Another study found that ease of affording current and future water bills fluctuated between HHs and NHHs, depending on which SSC region customers were in.
FBP vs current bill payers	Appendix A.10.3 summarises future customer preferences in relation to acceptability and affordability of PR24 plans. Future customers are concerned about rising bills and the cost of living, which is something that is now evident across all customer groups. Future customers thought focusing on water quality and the environment should be the key areas of focus of SSC's PR24 plan. Whilst this is consistent with the priorities of some other customers, it appears that the environment

	<p>might now be a higher priority to future customers than to other customers, in light of the aforementioned cost of living taking precedence for some other customer groups.</p>
<p>Vulnerable vs other customers</p>	<p>Appendix A.10.4 summarises vulnerable customers' preferences in relation to acceptability of PR24 plan. Vulnerable customers were more likely to find the AMP8 bill very difficult or difficult to afford.</p>

14. CUSTOMER SERVICE

Report	Published date	Participants	Sample Size	Project Objectives
Aptumo – Affordability and the Water Sector (2022) (Echo)	2022	HH customers	2,000 HHs	Research asked bill payers how their financial situation has changed over the last year or so, how they are dealing with these changes and what their expectations are for the next few months.
CCW – Customer Licence Condition Research (2023) (Walnut)	January 2023	HH customers	64 HHs for online community, focus groups and diary task, as well as 14 depth interviews with digitally disconnected customers	Purpose of this research was to understand customers’ expectations of water and wastewater companies in relation to specific areas of customer service and support, their views on what principles the new licence condition should include, customer views on the guidance proposed to support the interpretation of the licence condition, and the range and diversity of views that customers have in relation to this.
CCW – Testing the Waters (2022)	January 2023	NHH customers	Total: 1,825	To track awareness and activity in the water retail market in England. To analyse business customers’ satisfaction with various aspects of their water, sewerage and retail services in 2022.
CCW – Evidence Review of Retail Business Water Market (2023)	January 2023	NHH customers	n/a	Desk research and synthesis of existing research to focus on 4 themes from business customers’ experiences: experience of the market, perceptions of the market, causes of adverse impacts and examples of best practices.
CCW – Water Matters (2023) (DJS Research)	April 2023	General UK HH customers	Total: 5,502 CAM: 150 SSW: 150	Tracking survey which tracks the views of household customers on the services they receive from water companies in England and Wales.
Ofwat – Business Customer Insight Survey (2022)	January 2022	Registered businesses, charities and public sector organisations based wholly or mainly in England	n/a	To gain further insight from business customers about their experiences and views concerning the business retail water market, including the extent to which they have engaged with the market, how far their needs and expectations have been met, and

				the reasons for these outcomes, as well as concerning the impacts of the Covid-19 pandemic.
Ofwat - Trust and Perceptions Views on the Water Sector (2023)	February 2023	HH customers	2,016 HHs (and boost of 300 participants from ethnic minority communities, and 300 from Wales)	This research was commissioned to develop insights on the reputation of the water sector, the level of trust in the sector, and views on river water quality.
SSC – Customer Promises Tracker Annual Report (2023) (Turquoise)	March 2023	HH and NHH customers	Total: 1,134 HHs: 837 CAM 269 SSW 569 NHHs: 297 CAM 93 SSW 204	To monitor ongoing customer satisfaction, deliver on-going customer sentiment tracking, probe awareness and usage of key services and track changes in the way customers wish to interact with SSC.
SSC – Customer Promises Tracking Research Report (2022) (Turquoise)	April 2022	HH and NHH customers	Total: 1,106 HH: 814 NHHs: 292	To monitor ongoing customer satisfaction against the key metrics that engagement has shown to be important to customers; these include hard and soft measures. To deliver on-going customer sentiment tracking against key brand statements. To probe awareness and usage of key services and track changes in the way customers wish to interact with SSC. To monitor and track the impact of Covid-19 pandemic on customers – new objective added in 2020/21.
SSC – PR24 BAU Data (2022)	n/a	n/a	n/a	Customer Satisfaction Metrics, C-Mex scores, Complaints Data, Contacts Data, Trend Contact Data.
SSC – PR24 Qualtrics Sentiment themes (2023)	March 2023	n/a	n/a	A review of how incidents are impacting on customer satisfaction
SSC – Customer Priorities Tracker Qual Year 1 (2020) (Accent)	October 2020	HH customers	c60 in total	To understand customers’ uninformed and informed priorities in the short and long term. To understand what factors drive any changes in priorities including whether there are any wider “Water Industry” trends. To understand whether there have been changes since Summer

				2017 and what has driven those changes.
SSC – Customer Priorities Tracker Quant Year 2 (2022) (Accent)	April 2022	HH customers	Total: 1,054 SSW: 701 CAM: 353	Provide a benchmark against which customers’ priorities will be tracked for both wholesale and retail services. Explore any differences between uninformed/informed priorities and qualitative/ quantitative insights. Understand the customer impact of Covid-19 and, from 2022, the cost-of-living crisis.
SSC – Customer Priorities Research Tracker Quantitative Insights Year 3 (2023) (Accent)	May 2023	HH customers	Total: 1,072 CAM: 372 SSW: 745	Provide a benchmark against which customers’ priorities will be tracked for both wholesale and retail services. Explore any differences between uninformed/informed priorities and qualitative/quantitative insights. Understand the customer impact of the cost-of-living crisis (2023).
SSC – Customer Service Themes: Top CX Impacts and Themes (2023)	April 2023	HH and NHH customers	n/a	Data from CMeX, Qualtrics, Call/ Complaints / Incident Report data to triangulate common themes and trends to determine opportunities for key stakeholders to consider.
Water UK – Omnibus Research (2022) (Savanta)	December 2022	UK general adult population	2,061	To examine the public’s opinion of the water industry (including on nationalisation) and the effect of the cost of living.
UK Customer Satisfaction Index (2023)	July 2023	UK general adult population	10,000 consumers giving 45,000 responses (6,000 responses for utilities sector, 25% of which related to Water)	The UKCSI provides an objective, independent perspective on the state of customer satisfaction in the UK, enabling organisations to assess their performance compared to others in their sector, and with some of the UK’s leading service organisations across a range of sectors.
UK Customer Satisfaction Index: Utilities Sector Report (2023)	January 2023	UK general adult population	6,000 responses for utilities sector, 25% of which related to Water	The UKCSI provides an objective, independent perspective on the state of customer satisfaction in the UK, enabling organisations to assess their performance compared to others in their sector, and with some of the UK’s leading service organisations across a range of sectors.

Customer service introduction

The qualitative and quantitative results from the *Priorities Research (SSC – Customer Priorities Tracker Qual Year 1 (2020) (Accent), SSC – Customer Priorities Tracker Quant Year 2 (2022) (Accent) & SSC – Customer Priorities Research Tracker Quantitative Insights Year 3 (2023) (Accent)* shows that ‘efficient customer service’ is consistently a key ‘hygiene’ priority for SSC customers. HH and NHH customers mentioned customer service spontaneously as a basic and expected short-term priority. Customers also mentioned the need for quality staff, speedy responses, and both human and digital communication. As a basic priority, customers want SSC to continue its good customer service levels, as well as having contingencies in place for the case of various needs.

The importance of customer service is also recognised by Ofwat and is an essential part of their licence conditions for water companies⁶. The *CCW – Customer Licence Condition Research (2023) (Walnut)* report focused on water customers (not those specifically of SSC) and found that most customers are relatively disengaged from their supplier and simply expect a reliable supply, accurate bills and issues to be resolved quickly. Unsurprisingly, when there are queries or issues, customers want to be able to contact their water company quickly and easily, and have issues resolved efficiently and professionally.

The *Priorities Research* also asked for any sought after enhanced features for customer service, and a usable app was mentioned. Here, SSC customers expressed that they would like real time communication and greater transparency of information. When expanding this view into longer-term priorities, some features related to customer service were still seen as important. As a hygiene feature, customers want SSC to maintain efficient customer service through multiple channels, and this would be enhanced by embracing technological changes through website or app provision. However, there was an important theme that SSC should ensure it offers appropriate contact channels for all customers, given some may only want to engage by phone or face-to-face.

The priorities tracker insights are supported by BAU insights from Qualtrics, social media comments and other external benchmark reports like UKCSI.

During the qualitative *Priorities Research* customers were asked to predict future challenges that might affect the water industry. Some of the unprompted challenges included ‘instant service’, with mentions of the need to meet the requirements of demanding customers, provide instant messaging and balancing the need for human interaction. Another future challenge that arose was ‘securing staff’, as well as managing and retaining the right staff, highly trained to offer the best levels of service. Therefore, customer service tends to be considered as an important aspect for water companies to perform well at.

Overall customer satisfaction

The recent *UK Customer Satisfaction Index (2023)* report indicates that the average customer satisfaction score in the utilities sector is 69.5 out of 100, a drop of 4.6 points compared to July 2022 and the lowest score since 2014. The score is also lowest on the list of 13 sectors, including tourism leisure, retail (non-food), retail (food), and services. However, within this, the water sector performs better than energy in 2023 (72.6 v 67.9), and in 2022 the water sector had a positive NPS score (8.7) versus a negative one for energy (-9.9). When looking at average satisfaction among water companies alone, we can see that 2023’s score was 72.6, a drop in satisfaction score of 3.5 points compared to the year before.

In 2022, SSC’s UKCSI average satisfaction index score performs slightly above the average for the water sector (75.7 v 74.8) with a positive NPS score of 19.4 (v 8.7 for the water sector). This data is not available for 2023 as the UKCSI survey did not achieve sufficient numbers of SSC customers to report on, which can happen given the company’s relatively small customer base versus other utility suppliers.

The *CCW – Water Matters (2023) (DJS Research)* report surveyed HH customers (including those in the SSC region), and results show that in 2022:

- 92% of HH customers in England and Wales were satisfied with their water supply. The data for SSW and CAM areas show that satisfaction is 93% amongst HH customers.

- HH customer satisfaction with customer service (among all HH customers, not just SSC), has declined over the last 7 years (when considering things like bill frequency and content, meter readings and payment options).
- 77% of water customers overall were satisfied with customer service, which is a slight decrease from 2021 (78%).

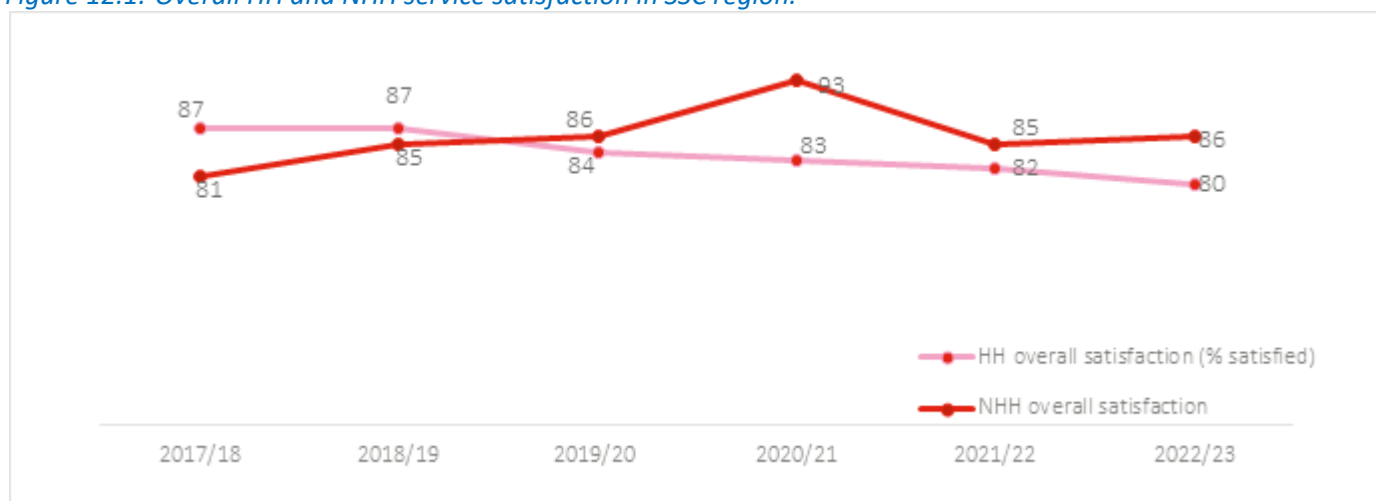
The *SSC – Customer Promises Tracker Annual Report (2023) (Turquoise)* reported that overall SSC household customer satisfaction had fallen by 2 percentage points to 80% compared to 2021/22 (*Figure 12.1*). The average score given for overall service across both SSC regions this year was 8.18 out of 10 (excluding DKs), which is below SSC’s proxy CMEX CES target of 8.38 and slightly below last year’s average of 8.22. A closer inspection show satisfaction dropped significantly in Q4 (to 7.69) which coincides with the communication around the SSC cyber-attack. The main reason that household customers cited for being satisfied with the overall service was because they were ‘happy with the service and/or had not experienced problems with the service’ (56%), and this was similar across both regions. However, satisfaction levels did differ slightly by region in 2022/23. In SSW region it fell 1pp (to 81%), whereas satisfaction in the CAM region dropped by 5pp (to 77%). Household customers in the SSW region were more likely than CAM customers to cite ‘good customer service/helpful/easy to deal with’ as a reason for satisfaction (10% compared to 5%).

In 2022, the *CCW – Testing the Waters (2022) report* showed that, across England and Wales, overall satisfaction for water services among non-household customers fell in 2022 compared 2020/21, from 91% to 88%.

If we turn our attention to SSC specifically, *Figure 12.1*, from the *SSC – Customer Promises Tracker Annual Report (2023) (Turquoise)*, shows that overall non-household satisfaction with SSC was 86%, which is a slight increase (of 1pp) from the 2022 results in the *SSC – Customer Promises Tracking Research Report (2022) (Turquoise)*. However, before 2022 the non-household satisfaction score was more varied. The 2022 report shows that this 85% figure fell by a statistically significant 8pp from 2020/21, but this did follow a significant 7pp rise from 2019/20. Focusing back on 2023, NHH satisfaction was slightly higher amongst businesses in SSW region (87%) than in CAM (82%). NHH satisfaction was significantly lower amongst businesses who reported experiencing poor customer service relating to the wholesale aspects of their water supply (60%).

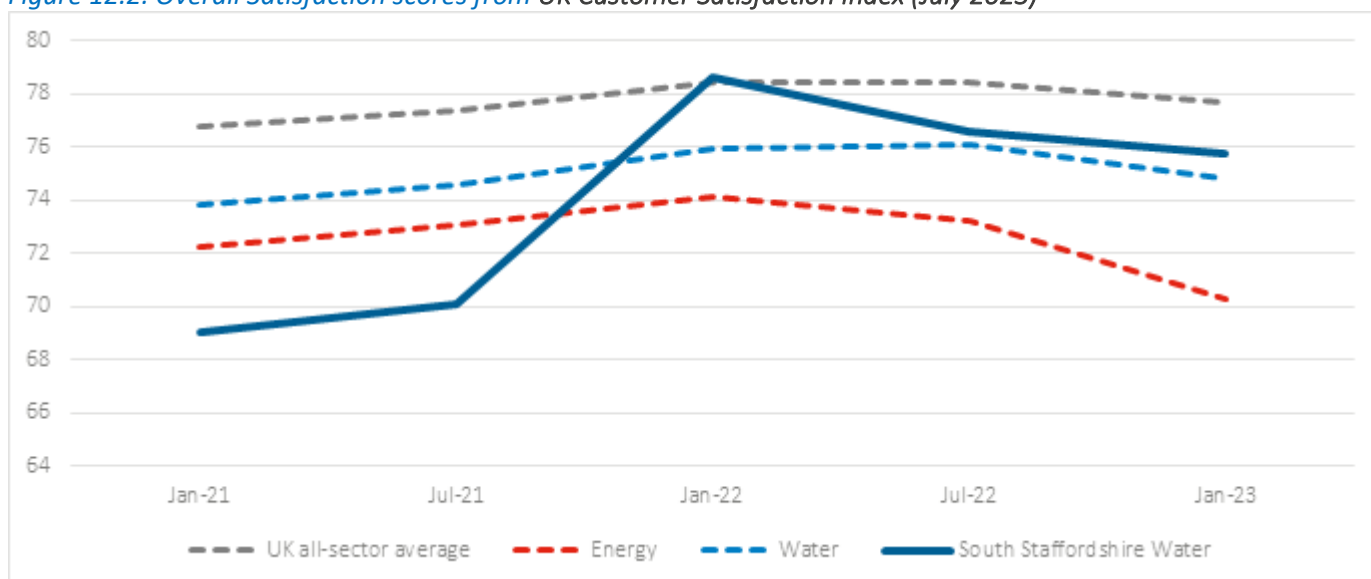
The increased level of NHH satisfaction in 2020/21 may in part reflect methodological issues, where the large increase in decision-makers working from home made survey recruitment harder. Certain ‘office based’ sectors with historically lower satisfaction levels were under-represented in the 2020/21 period. This situation may then have then settled back in subsequent years as working from home became more normalised.

Figure 12.1: Overall HH and NHH service satisfaction in SSC region.



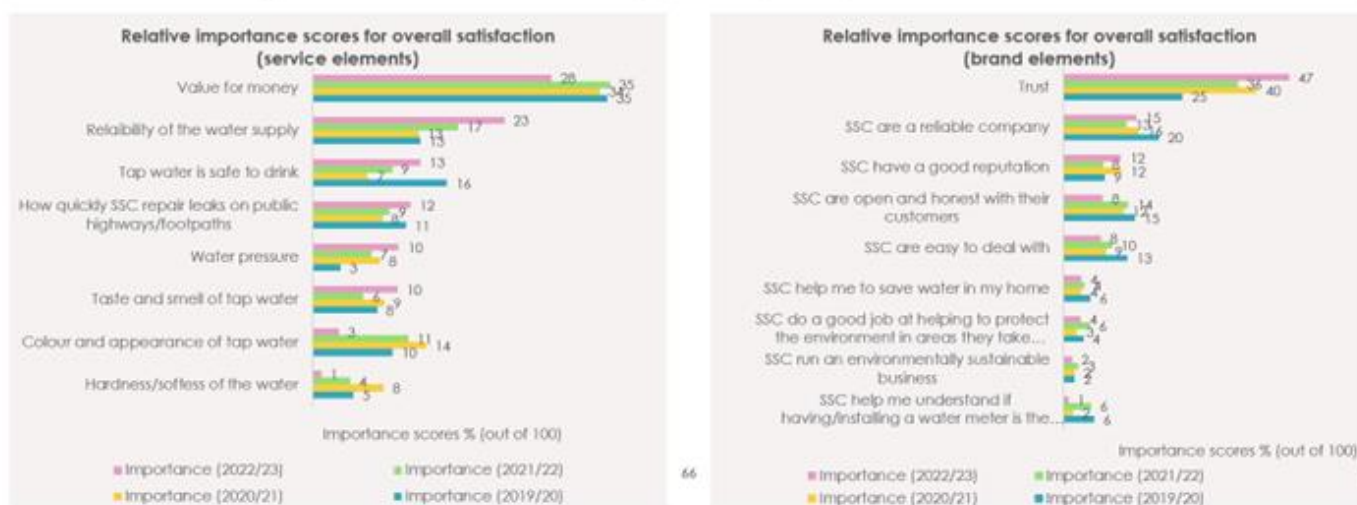
The UKCSI satisfaction scores from 2021, 2022 and early 2023 for SSC v the water sector and the utility sector (*UK Customer Satisfaction Index: Utilities Sector Report (2023) & UK Customer Satisfaction Index (2023)*) as a whole is shown in *Figure 12.2*. This suggests that, relative to the water sector as a whole, overall satisfaction has held up for SSC over the last year after bouncing back strongly in early 2022.

Figure 12.2: Overall Satisfaction scores from UK Customer Satisfaction Index (July 2023)



Key drivers of overall satisfaction (over all customers) were identified in the Customer Tracking research (SSC – Customer Promises Tracker Annual Report (2023) (Turquoise)), as shown in Figure 3.3 below. ‘Value for money’, ‘Reliability of water supply’ and ‘Trust’ in the SSC brand emerge as the most important drivers. ‘Reliability of the water supply’, ‘Water pressure’, and ‘Trust’ have increased in importance over the last 4 years.

Figure 12.3: Drivers of service satisfaction in SSC region.



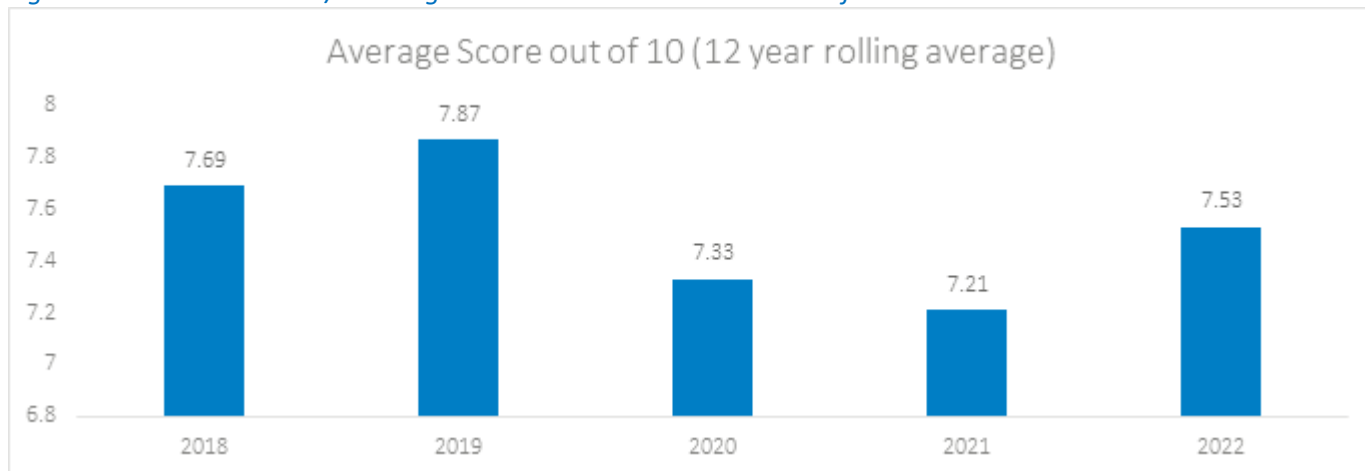
Another lens through which we can assess satisfaction is the SSC – Customer Service Themes: Top CX Impacts and Themes (2023) work. When collating data from CMeX, Qualtrics and call statistics, emails and root cause data, we can clearly see which themes have the most impact upon the customer journey with SSC customers. The main customer experience themes that emerged are; wait times, poor online experience/ self-serve, billing issues/ payments, adequate agent support, and poor business communications. For example, the Incidents Qualtrics Review data shows that customers gave more mixed reviews regarding agents’ performance, with some negative comments around tone and attitude in February and March, compounded by agents being unable to give an adequate resolution for online service failures and the cyber incident. Key driver analysis shows that the agent performance and customer effort as the leading drivers of customer satisfaction, with First Contact Resolution just behind. Therefore, if SSC focused on improvements in these areas, overall customer satisfaction scores might increase.

Trust

Nationally, trust in Water/Sewerage companies (CCW – Water Matters (2023) (DJS Research)) declined markedly between 2019 and 2021, but recovered somewhat in 2022 (Figure 12.4). The Water UK – Omnibus Research (2022) September 2023

(Savanta) study supports this with 78% of UK adults saying that they trust their water company in December 2022, which is slightly up from 73% in August 2022. However, the *Ofwat - Trust and Perceptions Views on the Water Sector (2023)* report found that customers' trust in their water companies to deliver on multiple areas including ensuring good quality water, providing a reliable service, and providing good value for money for customers, had steadily fallen throughout 2022.

Figure 12.4: Trust in Water/Sewerage customers – annual scores out of 10 – 2015 – 2021

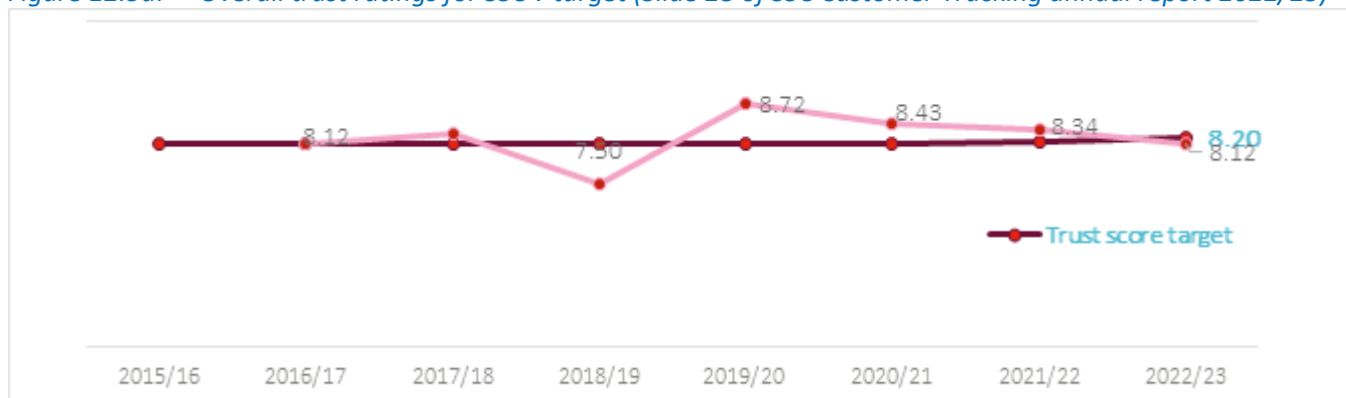


The UKCSI trust score for SSC in early 2023 is 7.3, which compares favourably with utilities in general (6.9) and is the same as the average across water companies (7.3).

The *SSC Customer Tracking Research Reports (SSC – Customer Promises Tracker Annual Report (2023) (Turquoise) & SSC – Customer Promises Tracking Research Report (2022) (Turquoise))* show that trust in SSC has steadily declined over the last four years (see Figure 12.5a), to the point where it is now below the AMP7 target rating for 2022/23 of 8.2 out of 10. This is the first time that the target has not been met, although the target does progressively increase by 0.05 each year. This would suggest that the uptick in trust scores seen nationally for water companies has not yet been reflected in SSC.

The trust score recorded a significant fall to 7.53 in Q4 which coincided with the communication around the SSC cyber-attack. It will be important to monitor how much of an impact this will have on trust scores into the future.

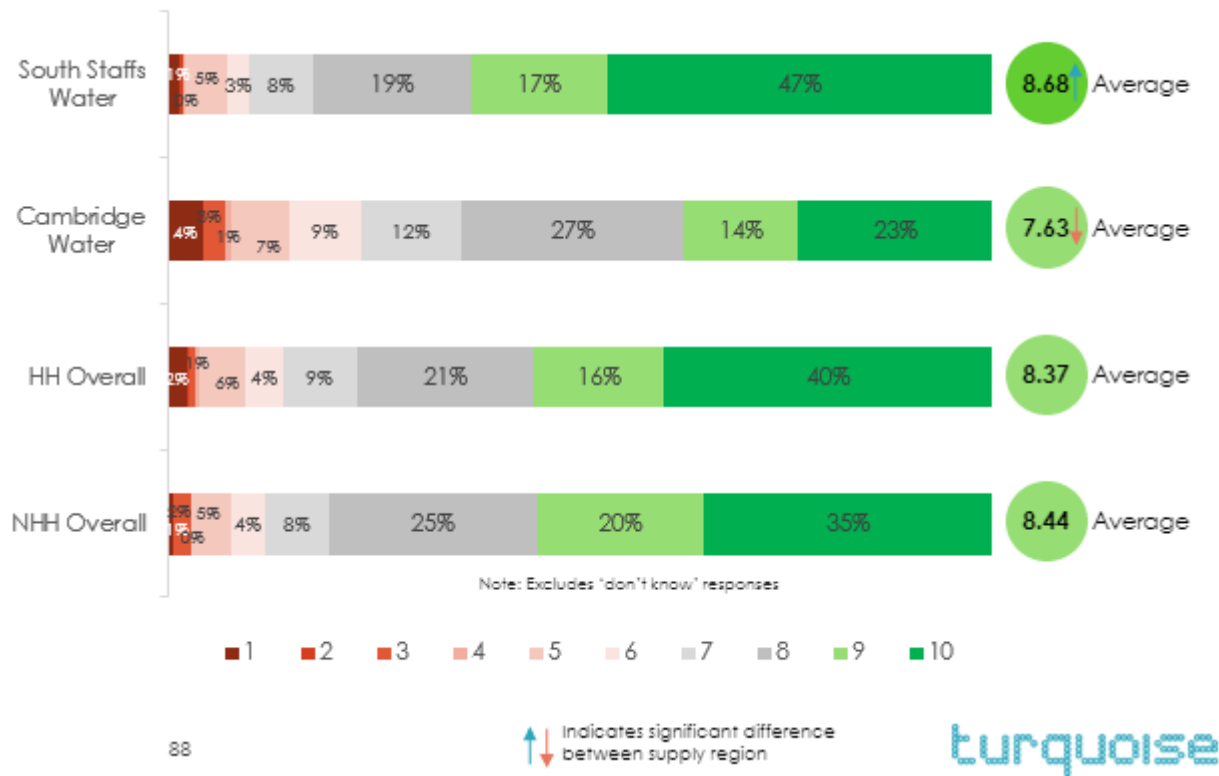
Figure 12.5a: Overall trust ratings for SSC v target (Slide 28 of SSC Customer Tracking annual report 2022/23)



When focusing on regional differences, it is apparent in the *SSC – Customer Promises Tracker Annual Report (2023) (Turquoise)* that there are higher levels of trust among SSW household customers, compared to CAM customers. In 2021/22 SSW's average trust rating was 8.46, whilst CAM was 8.06. As Figure 12.5b highlights, this regional difference has grown during 2022/23, where average trust scores are significantly higher among SSW household customers (8.36) than CAM customers (7.59). Although a smaller sample size, the *CCW – Water Matters (2023) (DJS Research)* results from both regions supports this general sentiment, with CAM customers exhibiting higher levels of trust of their water company (7.34), compared to SSW customers (7.17), although both figures are higher than the national average of 7.01.

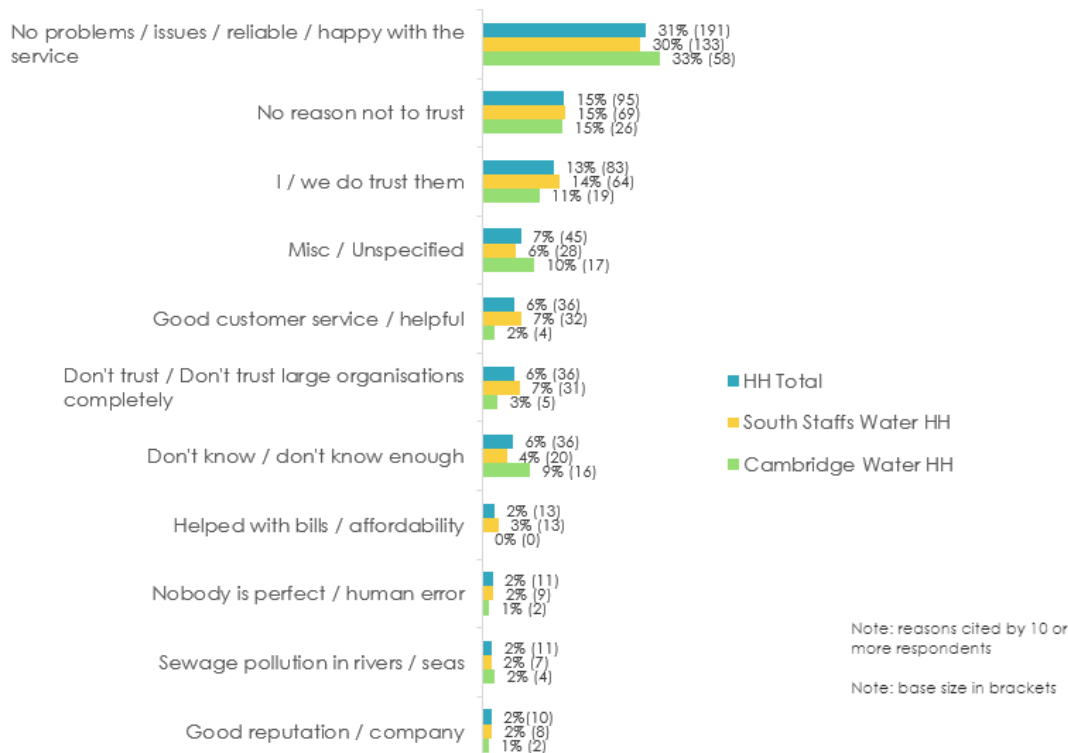
Further, when turning attention back to the SSC – Customer Promises Tracker Annual Report (2023) (Turquoise), across both regions, the report shows that customers with an AB social grade reported lower levels of trust, with an average score of 7.66, compared to 8.52 amongst DE social grade. These different levels of trust by region may to some extent relate to the level of contact with the company, which is generally lower in CAM than in SSW (CAM customers are less likely to have contacted SSC in the last year: 17% in CAM v 28% in SSW).

Figure 12.5b: Overall trust ratings for SSC, by region and by household and non-household in 2022/23 to date



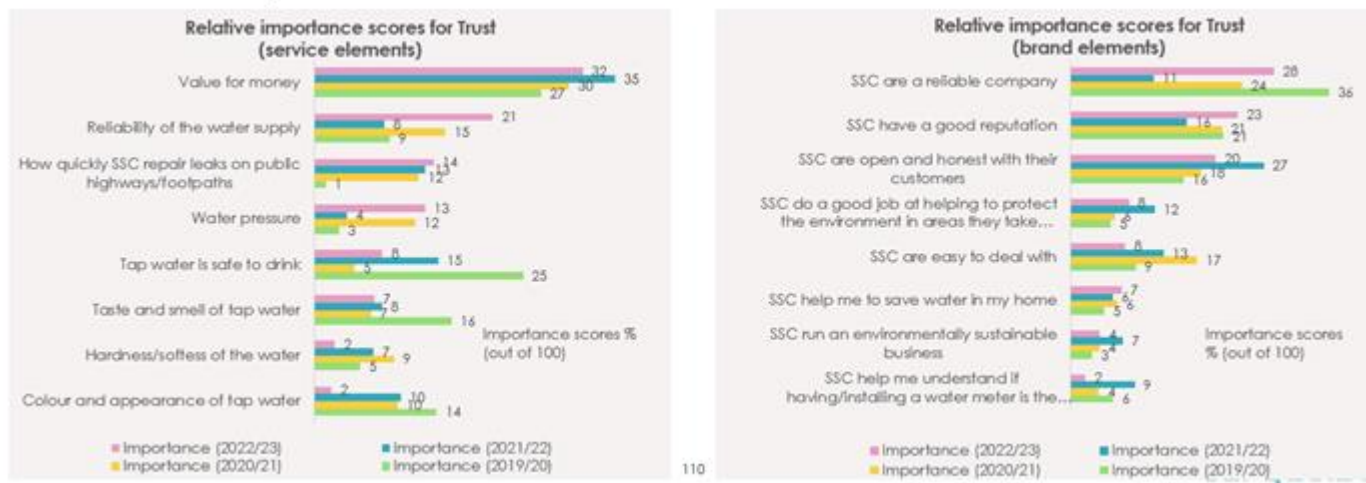
As depicted in Figure 12.6 below, the main reasons given by household customers for positive trust scores in the SSC – Customer Promises Tracker Annual Report (2023) (Turquoise) were that they had ‘No problems / issues / reliable / happy with the service’ (31% of SSC HH customers) that they have ‘no reason not to trust them’ (15% of SSC HH customers), or that they ‘do trust them’ (13% SSC HH customers). Only 6% of SSC customers cited ‘good customer service/ helpful’ as a reason to trust SSC, which was slightly higher in SSW region (7%), than in CAM (2%). The reasons for trusting SSC showed no significant regional or demographic differences.

Figure 12.6: Reasons for positive trust scores given by household customers in 2022/23 YTD



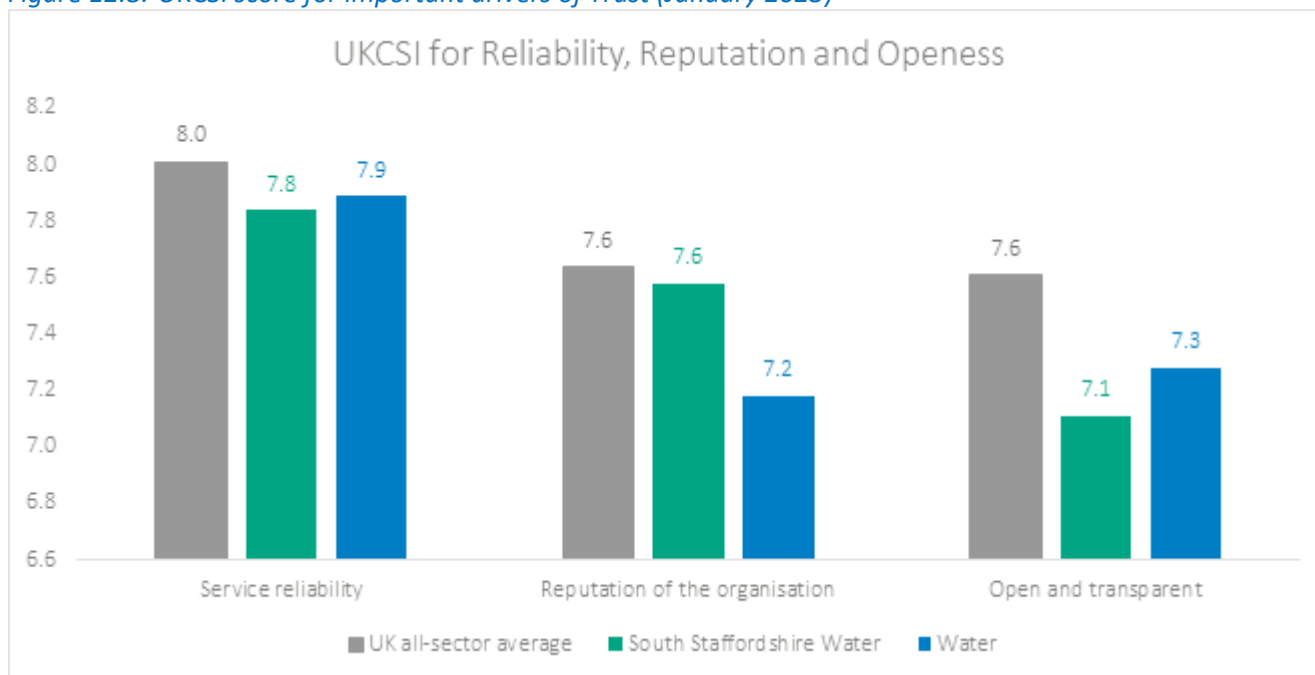
Given the strong association of Trust in the SSC brand with overall satisfaction, the drivers of trust (*Figure 12.7* below) are similar to those of satisfaction, with ‘value for money’, ‘reliability of the water supply’ and ‘SSC are a reliable company’ all featuring strongly. However, the comparatively strong showing of ‘SSC are open and honest with their customers’ is noteworthy, as it is a much stronger drivers of trust than of satisfaction.

Figure 12.7: Drivers of Trust for all customers



Encouragingly, there are high levels of agreement with the statement ‘SSC are open and honest with their customers’ (72% of HH customers and 79% of NHH customers, excluding ‘don’t knows’), but *Figure 12.8* suggests there could be room for improvement: compared to the water sector, SSC is about average for reliability, strong for reputation but weaker in relation to ‘open and transparent’.

Figure 12.8: UKCSI score for important drivers of Trust (January 2023)



If we turn our attention to the reasons for low trust scores (scores of 1-6, out of 10) in the *SSC – Customer Promises Tracker Annual Report (2023) (Turquoise)* the main reasons given were that customers ‘don’t know enough’ about the company (16%), and ‘don’t trust/ don’t trust large organisations completely’ (13%). Unsurprisingly, the SSC data breach was the third most cited reason for negative trust scores, despite only being relevant in Q4 2022/23. A quarter of all customers who gave a negative trust score in this latest quarter cited the data breach as a reason. This may be part of a general trend; for example, the UKCSI score for trust in the utility sector as a whole has declined over the last year up until January 2023 (falling from 7.2 to 6.9), and the water sector also (7.5 to 7.3).

There were no significant regional or demographic differences at the small sub-sample level. In contrast to these negative trends over all customers, the *SSC – Customer Promises Tracker Annual Report (2023) (Turquoise)* to date found the average trust score for non-household customers had slightly increased from the year prior from 8.26 to 8.27. This correlates with the trends observed for overall satisfaction, where HH scores have steadily declined while NHH scores have remained higher and slightly better for this year than last. This would suggest that perceptions of the overall standard of the service received go hand in hand with levels of trust.

Contact between customer and company

According to the *UK Customer Satisfaction Index: Utilities Sector Report (2023)*, 22% of water customers experienced a problem their water company in the last three weeks with a problem; of these, 14% related to cost (=3% of all water customers). This compared relatively well with the Energy sector, where cost-related problems occurred over twice as frequently (23% of energy customers experiencing a problem, with 30% related to cost = 7% of customers). However, both sectors compare less well to the average for all sectors (16% with problems, 12% related to cost = 2%).

Looking at water companies more specifically, the *Aptumo – Affordability and the Water Sector (2022) (Echo)* report saw a lot of mentions of financial insecurity and its impact customers in the water sector. We should also keep in mind that different types of customers might need more support in paying their bills, and that some customers may be more likely to reach out for help than others. For example, although not specific to SSC, the *Aptumo – Affordability and the Water Sector (2022) (Echo)* report found that half of younger consumers (aged 16-25) struggled to pay any household bills, compared to 32% of customers overall.

“For the younger age groups, budgeting and paying bills could be a new responsibility for many. Reaching out to them to offer advice or support as they take their first steps towards independent living and registering as a named

bill payer could be the best time for water companies to establish that long-term relationship.” Aptumo – Affordability and the Water Sector (2022) (Echo).

Looking at customer contact more generally (not specific to cost of living support), we can see customers are contacted for other reasons. In the *Ofwat - Trust and Perceptions Views on the Water Sector (2023)* results from CCW, customers were asked if they had heard or seen any communications from their water company in the last year, and if so, what this was about. Most recall seeing communication from their water company, most often in relation to the importance of saving water (43%), changes to their bills (29%), and water problems in the area (27%). Almost a quarter of the sample (24%) recalled receiving communications about support available for those that are struggling to pay their bill, which seems higher than the other studies suggest. It should be kept in mind that these findings are not specific to SSC.

When focusing our attention on SSC specifically, it appears that the majority of household customers have been in contact with SSC at some point, for any reason. The *SSC – Customer Promises Tracker Annual Report (2023) (Turquoise)* found that over a quarter (28%) of household customers cannot recall ever contacting SSC. SSW customers were significantly more likely to have had contact within the last 12 months (28%), compared to those in CAM region (17%). The *CCW – Water Matters (2023) (DJS Research)* research also explored how many customers had contacted their water company. Across England and Wales, 20% of HH customers had contacted their water company within the last year, and similar levels of contact were shown for CAM HH customers (21%). In contrast, fewer SSW customers in the Water Matters survey (16%) had contacted SSW within the last year. A reason mentioned for contacting their water company was to complain (4% of SSW contact and 3% of CAM contacts, compared to 2% for overall industry average). Although the observation is based on very small samples, it is of note that less SSW customers were satisfied with how their query was handled (67%), compared to CAM customers and to the overall industry average (78% and 74% respectively).

Most recently, *SSC – PR24 Qualtrics Sentiment themes (2023)* indicated that the score given to the ‘customer effort’ involved when they contacted SSC declined significantly, from a 72% rating positive to 62%. It was observed that ‘phone, online service and cyber incidents are all having a similar [negative] impact in terms of c.sat score’. For non-household customers across England and Wales, the *CCW – Testing the Waters (2022)* report shows that similar numbers to those of household customers reported having contacted their retailer in the last year. In 2022, 21% of non-household customers contacted their water retailer with an enquiry or complaint. The *CCW – Testing the Waters (2022)* report also found that non-household customers across England and Wales, who recalled being contacted by their retailer in 2022 in relation to advice and support for billing, are more satisfied across multiple key measures than those who had not been contacted. These levels include overall satisfaction, perceptions of value for money, and trust and care for customers. These findings coincide with the *CCW – Evidence Review of Retail Business Water Market (2023)* from a year prior, 2021. Within this review, findings from the *Ofwat – Business Customer Insight Survey (2022)* found that 29% of customers had been in contact with a retailer in 2021, and large organisations and metered customers more likely to have had contact with their retailer. The overwhelming reason for contact was also regarding bill enquiries, as shown in the *CCW – Testing the Waters (2022)* report. Of those who had been in contact with a retailer, 59% stated that they were satisfied with the contact they had, and 32% were dissatisfied.

Means of contact

Ofwat and CCW’s *CCW – Customer Licence Condition Research (2023) (Walnut)* report explored contact preferences for customers of water companies (not specifically SSC). This research found that different types of customers displayed different attitudes, and hence alternative preferences regarding contact type. For example, younger participants and future customers were seen as more transactional, and hence preferred digital channels.

Meanwhile, older customers exhibited the need for more personal contact and reassurance, including being able to speak to someone by telephone. Means of customer contact cannot be a one solution fits all, and it should be kept in mind that vulnerable customers can have varied and very specific needs during regular service provision and incidents, and therefore water companies need to proactively identify and meet such needs.

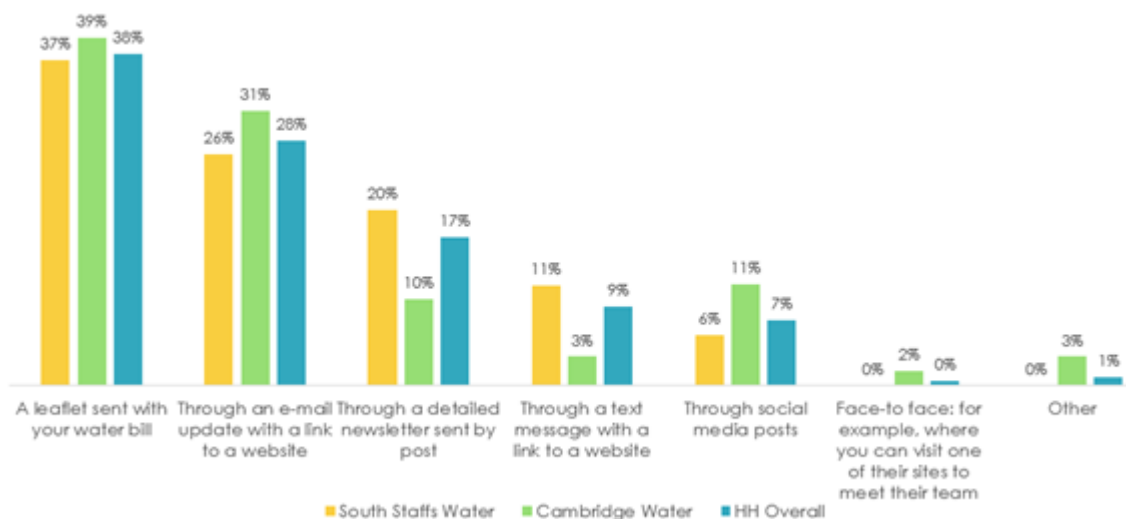
The *Ofwat - Trust and Perceptions Views on the Water Sector (2023)* found that the more ways in which people hear from their water company, the more likely they are to see that company as customer-centric. Furthermore, this research found that those who thought their water company acts in the interest of customers were more likely to remember receiving all types of communication, except for letters/bills. For example, 34% who thought their company acts in the interest of customers remembered receiving an email from their water company, compared to 18% of those who disagreed with the idea their water company acts in the interest of customers. Therefore, it is clear that recollection of customer contact, and customer views on brand sentiments, are interrelated. This enhances the view that multi-channel delivery is effective, and it can lead to inflated brand perceptions of a company.

Focusing our attention on SSC, the *SSC – PR24 BAU Data (2022)* also shows that customer satisfaction metrics fluctuate depending on the means of contact. It is also evident that customer satisfaction measures have fallen in recent times. Across the SSC region as a whole, the overall average customer satisfaction score was 8.10 by phone, and 7.60 by other channels, between July and September in 2022. Both scores have slightly fallen from 8.47 by phone, and 7.98 by other channels in July-Sept 2021.

Additionally, the *SSC – PR24 BAU Data (2022)* shows some differences between the SSW and CAM regions. In 2022, the overall customer satisfaction score for contacts via the phone was higher in SSW, with a score of 8.25, compared to 7.48 in CAM. Both of these scores are lower than in 2021, when SSW was 8.51, and CAM was 8.36. The fall in CAM was significant. Customer satisfaction for contact through other channels shows a similar picture, with SSW significantly outscoring CAM (7.84 vs. 6.88 in 2022). Satisfaction with contact via other channels has also dropped in both regions since 2021, when SSW scored 8.28 and CAM scored 7.11.

When asked how they would like to be updated by SSC with regard to their long-term plans and investments, the *SSC – Customer Promises Tracker Annual Report (2023) (Turquoise)* found that most customers channel preference was either a leaflet sent with their water bill (38%), or via an email updated with a link to SSC’s website (28%). There is a regional difference here too. As depicted in *Figure 12.9*, higher proportions of CAM customers wanted to be contacted via leaflets sent with the bill or through an email with a website link, whilst a higher proportion of SSW customers preferred to receive a detailed letter sent via the post.

Figure 12.9: Shows household customer channel preferences, split by region.



If we take a step back and look at the water industry more in general (not specific to SSC), the *Aptumo – Affordability and the Water Sector (2022) (Echo)* paper also shows that customer communication preferences differ. For example, respondents were asked how they would prefer service providers to contact them to offer advice and supports on payments and budgeting and 68% said email, 54% said post, 47% said telephone, 29% said messaging service, 20% said home visit and 19% said video call. The answers provide are a little different than the SSC specific preferences, but this may be due to different options given and the fact that the SSC question asked about communication related to long-term plans and investment, whilst the *Aptumo* question asked about advice and support regarding budgeting and payments. Additionally, the *CCW – Evidence Review of Retail Business Water Market (2023)*

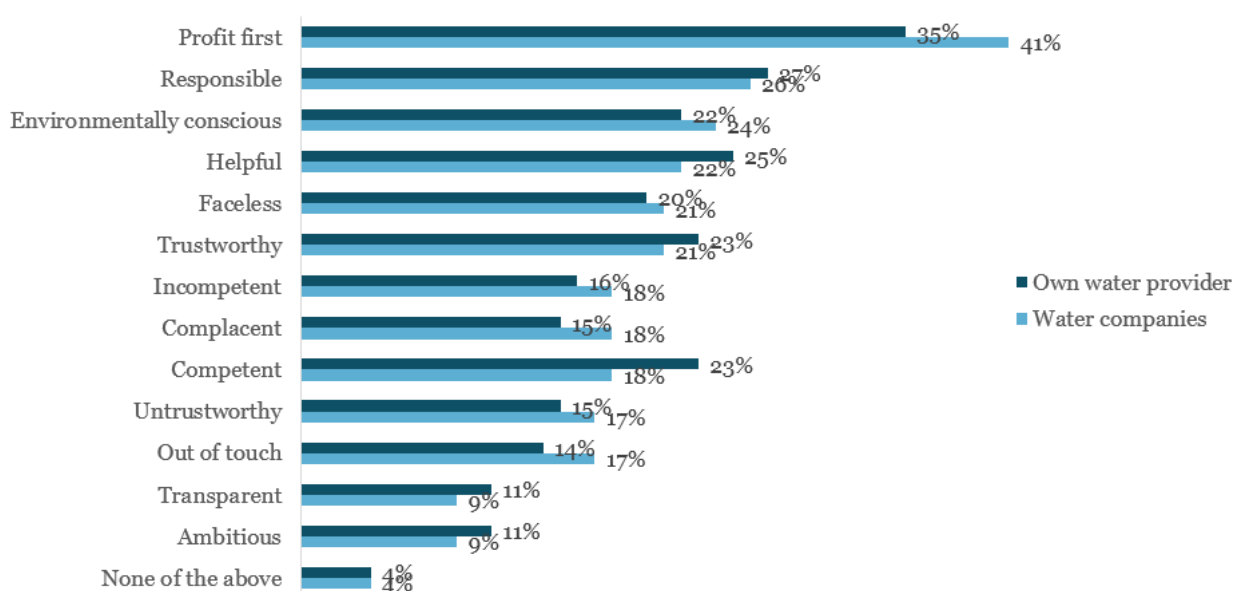
corroborates this amongst NHH customers too, with businesses expecting a multi-channel approach, for example including online account information, emails, letters and text communications to be kept up to date by suppliers. Nevertheless, the *Aptumo – Affordability and the Water Sector (2022) (Echo)* report shows that suppliers are realising now more than ever that making communication as easy as possible for customers is key to establishing a successful long-lasting relationship. Hence, carefully managing customer data and making the fullest use of a variety of channels is key, which SSC ought to keep in mind.

Perceptions of the SSC brand

Before focusing on SSC specifically, for context there is data about the UK water industry in general available in the *Ofwat - Trust and Perceptions Views on the Water Sector (2023)*. Here, customers were asked which words they would use to describe water companies in general (out of a pre-determined list). 41% of respondents said ‘profit first’ about water companies in general, but this drops a little when describing their own water company (to 35%). Other words chosen to describe water companies are shown in the graph below.

Figure 12.9a: Words customers thought best describe water companies in general, and their own water company.

Impression of water companies vs own water company



The rest of the section looks at the SSC brand specifically. Overall, the *SSC – Customer Promises Tracker Annual Report (2023) (Turquoise)* and the *SSC – Customer Promises Tracking Research Report (2022) (Turquoise)* to date have found that household perceptions of the SSC brand remain strong and largely positive in most areas. There are some concerning longer-term negative trends for SSC, particularly related to perceptions of being seen as a reliable company and having a good reputation. It tends to be that overall, household customers in the SSW region view the brand in a more favourable light on average than customers in the CAM area. This relates to significantly lower agreement scores from CAM customers for reliability, reputation, being ‘open and honest’, being ‘easy to deal with’, and feeling confident that SSC has plans to ensure we don’t run out of water in the future. As previously noted, CAM customers are less likely to have contacted SSC in the last year, so these lower scores may in part reflect less recent experience of SSC customer service.

The following section summarises the findings for the brand statement questions from the *Customer Tracking Research Reports* surveys. As indicated in *Figure 12.10*, not all of these brand statements closely align with the customer service theme, only the most relevant points have been drawn out.

The SSC brand statement that saw the most customer support amongst all groups in both 2022 and 2023 is ‘they are a reliable company’. In 2023, 77% of all HH customers and 78% of NHH customers agreed with this statement. Agreement with this statement was slightly higher amongst SSW HHs (79%), than CAM HHs (72%). However, amongst the household sample, the proportion of those viewing SSC as having a good reputation was significantly

lower amongst CAM customers (54%), compared to SSW (71%). In 2023, the next highest scoring brand statements for both household and non-household customers related to customer service; ‘they are easy to deal with’, and ‘they are open and honest with their customers’. Once again, CAM household customers reported lower agreement for these three brand statements than SSW household customers:

- ‘Easy to deal with’ (% agree): CAM 55% vs. SSW 62%
- ‘Open and honest’ (% agree): CAM 56% vs. SSW 65%.

Among non-household customers, the highest scoring brand statement in the *SSC – Customer Promises Tracker Annual Report (2023) (Turquoise)* was SSC being reliable (78%), followed by 71% agreeing with the statement ‘they have competent staff who do what they say they will do’, and 70% agreeing with ‘if something goes wrong, they sort it out quickly’.

Figure 12.10: Shows agreement with SSC’s brand statements, split by region, and HH and NHH customer type.

2022/23 Summary.



	Overall HH	SSW HH	CW HH	NHH
Brand Statements (% of customers who agree with the statement)				
They are a reliable company	77%	79%	72%	78%
They have a good reputation	66%	71% ↑	54% ↓	68%
They are easy to deal with	60%	62%	55%	54%
They are open and honest with their customers	62%	65%	56%	64%
They have competent staff who do what they say they will do*	Not tracked for this audience			71%*
If something goes wrong, they sort it out quickly*	Not tracked for this audience			70%*
I feel confident that SSC has plans in place to ensure we don't run out of water in the future	63%	66%	57%	Not tracked for this audience
They help me to save water in my home / organisation	46%	48%	42%	13%
They are environmentally focused and do a good job at helping to protect the environment in the areas they take water from	44%	45%	41%	51%
They help me to understand if having/installing a water meter is right for me	44%	46%	39%	Not tracked for this audience
They run an environmentally sustainable business	44%	45%	41%	43%
They do a good job at playing an active role in your community – such as sponsoring local projects or visiting schools to teach pupils the value of using water wisely	25%	25%	23%	Not tracked for this audience

The *CCW – Water Matters (2023) (DJS Research)* study asked customers a few questions which could be related to brand perceptions. Customers were asked if they agree that their water company cares about the service they provide to customers, and overall, 59% of HHs agreed. The equivalent figures for SSW and CAM were 59% and 58% respectively.

Complaints

The 2023 complaints data from the *SSC – Customer Service Themes: Top CX Impacts and Themes (2023)* shows that the number of complaints was stable for the year up to March 2023, but increased markedly for that month. The number of complaints for SSC in total ranged from 72 (Apr 2022) to 174 (Feb 2023), but then increased to 438 in March. Both SSW and CAM regions saw the complaints level for March 2023 YTD as being triple that of March 2020. Over the year to date in 2023, the chief complaint related to charges to customer’s account, followed by dissatisfaction with the digital journey and then accounts issues. In March 2023, dissatisfaction with the digital journey became the dominant complaint, accounting for 36% off all complaints that month, compared to just 16% over the year. It is possible that these steep increases are associated with the cyber incident that SSC experienced, which resulted in more customers being dissatisfied in relation to the digital journey.

A steady decline in ratings for ‘customer effort’ (How easy or difficult it was to resolve their query) reflects the difficulty that customers experienced in March, where wait times were by far the biggest reason for dissatisfaction, followed by a poor online experience.

When focusing on non-household customers across England and Wales (not specific to SSC), the *CCW – Testing the Waters (2022)* report shows that the vast majority of complaints were about bill issues (72%), whilst only 9% related to poor customer service.

It is useful to consider how well customers feel that their complaints are handled, and the Utilities Sector Report from the *UKSCI UK Satisfaction Index* shows that for water companies, the average satisfaction for handling a complaint is 7 out of 10, which is higher than that of energy companies (5.5 out of 10). However, this figure is not specific to SSC.

Golden Threads

Golden Threads	The need for customer information and engagement	<p>The majority of customers have not had recent contact with SSC. Communication and engagement are clearly important when it comes to customer satisfaction ratings, so it would be beneficial for SSC to have more engagement with their customers, with a specific focus on customer service dealings.</p> <p>Further, satisfaction scores are higher for those customers who contacted SSC via the phone, compared to through other channels. Digital contact is growing, but is often associated with lower satisfaction than telephone contact. A focus could be on improving the digital contact experience, alongside maintaining telephone contact experience.</p> <p>This goes hand in hand with issues pertaining to the cyber incident, highlighting that SSC should focus on greater communication, to build up trust levels amongst customers.</p>
Emerging thread	Cost of living	<p>The topic of cost of living is of growing importance to customers, and it comes as no surprise that customers would probably like to be contacted by their water supplier (and other utilities suppliers) about support that can be provided for this issue.</p>

Demographic Splits: Customer priorities

The table below provides a brief summary comparison of each of the key demographic groups, related to customer priorities. Please see the appendix for detailed tables of each split.

Demographic group(s)	Key findings/ comparisons
SSW vs CAM	Appendix A.11.1 summarises SSW and CAM preferences in relation to customer service. Overall, SSW customers have a more positive view of SSC, with higher overall satisfaction and rank SSC higher on a number of attributes e.g., helpful, reliable, good customer service.
HH vs NHH	Appendix A.11.2 summarises HH vs NHH preferences in relation to customer service. Customer service is important for both HHs and NHHs, and it appears that HH satisfaction has been slightly falling in recent years (since 2017/18), whilst NHH results are more varied, but have recently been seen to increase very slightly.
FBP vs current bill payers	Appendix A.11.3 summarises future customer preferences in relation to customer service. The majority of future customers, don't anticipate much interaction with their water company. They exhibit a high level of tech-savviness and a demand for proactive service from their supplier. They heavily rely on technology for accessing accounts, making payments, and receiving real-time information about water services, including updates on interruptions or changes in water pressure. All future

	billpayers supported SSC's aim of becoming the best-performing company in the utilities sector before 2050.
Vulnerable vs other customers	Appendix A.11.4 summarises vulnerable customers' preferences in relation to customer service. For vulnerable customers, proactive customer service with a personal touch was the strongest communication preference. This is likely because a more transactional approach, where efficiency is key, is regarded as unable to provide the time and reassurance needed in respect to their vulnerable circumstances, or specific needs during regular service provision and in the event of incidents. Proactive customer service seems to be more likely to build trust in SSC.
Stakeholders vs customers	Appendix A.11.5 summarises SSW and CAM preferences in relation to water quality. In general, SSW customers are more satisfied with their water quality in comparison with CAM. Both regions had different priorities in terms of water quality, with SSW focusing more on water discolouration and smell; and CAM being highly focused on the hardness of water. However, water hardness was an important issue in both regions.

15. WATER QUALITY

Report	Published Date	Participants	Sample Size	Research Objectives
CCW and Ofwat– Water Consumer Views (2022)	April 2022	HH, NHH and future customers	Online focus group: 12 Depths: 16	Research aimed at understanding water consumers' views on water and sewerage services, what is important, views on Ofwat's proposed common PC areas for PR24, any new areas for exploration and to test descriptions and measurements of PCs.
CCW – Public Views on the Water Environment (2021) (Community Research)	July 2021	HH and future customers	Total: 62	The Consumer Council for Water (CCW) wished to conduct research into how people value and understand the water environment, their preferences for how it should be managed, and their views on current policy directions, taking account of the difference in policies between England and Wales.
SSC – Customer Priorities Desk Research (2020) (Accent)	September 2020	Various	13 reports	Review current SSC understanding of its customers' priorities, as reported in SSC research outputs. Review methodologies for customer priorities measurement, including a review of research conducted by other water companies for PR19. Review Ofwat expectations for PR24, as set out in Ofwat's recent Time to Act strategy paper.
SSC – Customer Promises Tracker Annual Report (2023) (Turquoise)	March 2023	HH and NHH customers	Total: 1,134 HHs: 837 CAM 269 SSW 569 NHHs: 297 CAM 93 SSW 204	To monitor ongoing customer satisfaction, deliver on-going customer sentiment tracking, probe awareness and usage of key services and track changes in the way customers wish to interact with SSC.
SSC H2Online – All activities relating to water quality (2022) (Explain)	2022	HH customers	Total: 605, across several polls CAM: 277 SSW: 328	A number of polls within the SSW and CAM regions concerning various water quality activities and attributes.
SSC – LTDS Report (2023) (Turquoise)	July 2023	HH, NHHs and future customers	Qualitative: 34 HHs, 12 NHHs, 6 FBPs Quantitative: 980 HHs (including 82 FBPs), and 100 NHHs	To understand customers' attitudes and perceptions towards SSC's long-term vision to 2050 and their spontaneous preferences in terms of long-term delivery. Also, exploring SSC's performance and future targets in 10 key ambition areas, and to understand the main reasons that drive customer preferences, and to explore the issue of intergenerational fairness.

SSC – NERA Willingness to Pay for Water Services at PR24 (2022)	December 2022	HH, NHH customers and future billpayers	Total: 1250 CAM: 424 SSW: 833 Future billpayers: 54	Aimed at designing, implementing and analysing a stated preference survey in order to gain an estimate of customer WTP for service improvements from SSC with the overall aim of informing their PR24 business plan. HH, NHH and future customers were of specific focus.
SSC – ODI Research (2023) (Accent and PJM Economics)	March 2023	HH and NHH customers	Total: 807 HH: 609 NHH: 198 Medically vulnerable: 109 Communications vulnerable: 90 Life-stage vulnerable: 89 Financial vulnerable: 27	Aimed at analysing further segmentation of SSW and CAM Water customer values on top of previous Collaborative ODI research by Ofwat and CWW
SSC – ODI Research Pilot (2022) (Accent)	June 2022	HH and NHH customers	552 total interviews	A review of methodological options aimed at informing ODI rate for PR24.
SSC – PR19 Data Triangulation Study SSW WRMP (2018)	2019	HH, NHH and future customers	9000+	Appendixes for SSWs PR19 triangulation research. A review of all SSW customer engagement activity relating to their WRMP focusing largely on customer priority.
SSC – South Staffs Water Quality Metrics (2022)	July 2022	n/a	Data from SSW customers' in-bound water quality contacts. 1,515 for the period 2021/22.	Review of SSW customer contacts between 2017 and 2022, looking specifically at the drivers behind trends in contacts and recommendations for SSW
Severn Trent – WRMP24 (2022) (DJS Research)	May 2022	HH and NHH customers	HH: 624 NHH: 149	Measure customers' preferences for water resources, levels of service and the options or plans that Severn Trent might create to address any changes to levels in service or to address a supply-demand deficit. To develop a Best Value Plan in line with Water Resource Planning guidelines.
SSC – Water Hardness Triangulation Conversation (2018)	2018	HH and NHH customers	3,010 SSW HH and NHH, 1,889 CAM HH and NHH	Discusses SSW and Cambridge customers' priorities and grievances around water behaviours and developments, as well as their willingness to pay for these developments.
SSC – WRMP24 - WRAP Theme 1 Research Findings (2021)	August 2021	HH, NHH and future customers	Total: 47 HHs: 28 NHHs: 10 Future customers: 9	To explore household, future and SME businesses customer preferences in terms of; environmental ambition, levels of service/resilience ambition, water efficiency ambition, and best value planning criteria. To ensure a "golden thread" of customer

				preferences in these strategic areas, which sets the context for the remainder of the engagement programme.
SSC – Willingness to Pay Research (2018)	June 2018	HH and NHH customers	Total: 1,999	Understand customers’ willingness and ability to pay for various services and investment levels for water services over the period of 2020-2025. This research looked specifically at customers’ priorities for service investments and the value placed in these investments.
SSC – WRMP Themes 1 and 3 Quantitative Insights (2022) (Accent)	April 2022	HH and NHH customers	Total: 1,180 CAM:427 SSW: 753 HHs: 1,028 NHHs: 152	Core purpose of this study was to provide evidence of customer response and support for; managing droughts, universal metering, leakage, environmental ambition.
SSC – WRAP Deep Dives (2021) (Community Research)	November 2021	HH, NHH and future customers	87 customers overall: CAM: 45 SSW: 42 Future customers: 15	To explore household customer, future customer and SME business customer views in depth on; universal metering and water transfers.
Severn Trent – Strategic Report (2022)	2022	n/a	n/a	A strategic report on the activities of Severn Trent and Hafren Dyfrdwy.
Water Club Changes of Source (2022) (Britainthinks)	June 2022	HH and NHH customers	Qualitative Phase: 98 HHs. Quantitative Phase: 1,762 HHs, 198 NHHs	To review existing evidence. To identify and fill knowledge gaps about attitudes towards water source change. Provide a clear and actionable framework for water companies to use when communicating water source changes in future.
WRW - Updated Regional Plan (2023)	March 2023	n/a	Triangulation of 120 pieces of research	To ensure the customer input in the regional plan is up-to-date by including the latest knowledge (by conducting a triangulation of the most recent customer and stakeholder research).

Overview

In general, it was found that the term water quality tended to be used interchangeably by customers for the hardness, taste, smell and safety of one’s water. SSW customers tend to prioritise water quality more when compared to Cambridge ones, with the only exception being the hardness of their water (*SSC – Customer Priorities Desk Research (2020) (Accent)*). HH customers’ priorities tended to revolve mostly around ensuring that their water was perceived as safe to drink and use, with NHH customers giving even priority towards most water quality attributes.

Customers are most often concerned with water quality issues that directly affect them and their water usage. This mainly involves the hardness and physical qualities of their water over lower-level issues and environmental concerns. They are very resistant to changes in these qualities and want to be informed of any changes as soon as possible, with information on why this change is necessary and how it will affect them.

Water quality as a topic area is usually poorly understood by customers, with multiple factors being associated under quality as an overarching term. This section will cover the four main themes of water quality, being taste, smell and appearance; the hardness/softness of water, water safety and the risk of temporary do not drink or boil water notices, and lead piping.

Issues affecting Water Taste, Smell & Appearance

Customer Experience

Customer experience with the taste, smell and appearance of water is usually regarded as relatively high. The *SSC H2Online – All activities relating to water quality (2022) (Explain)* stated that most (76%) SSW customers had never had any issue with their water supplier.

“Our water tastes lovely and fresh I always run the cold tap a little bit as I think it makes the water taste a bit better and colder. But it’s always a nice refreshing drink. I’ve never had to contact South Staffs Water.” SSW Customer from the SSC H2Online – All activities relating to water quality (2022) (Explain) report.

However, when there are issues, some customers play them down or state that they are never a serious issue:

“Just drink my water straight from the tap, tastes good 95% of the time with just occasionally an odd taste but doesn’t deter me from drinking!” SSW Customer from the SSC H2Online – All activities relating to water quality (2022) (Explain) report.

CCW and Ofwat– Water Consumer Views (2022) reports an increase in satisfaction in the colour and appearance of tap water in rolling averages in England and Wales over a 10-year period up until 2022.

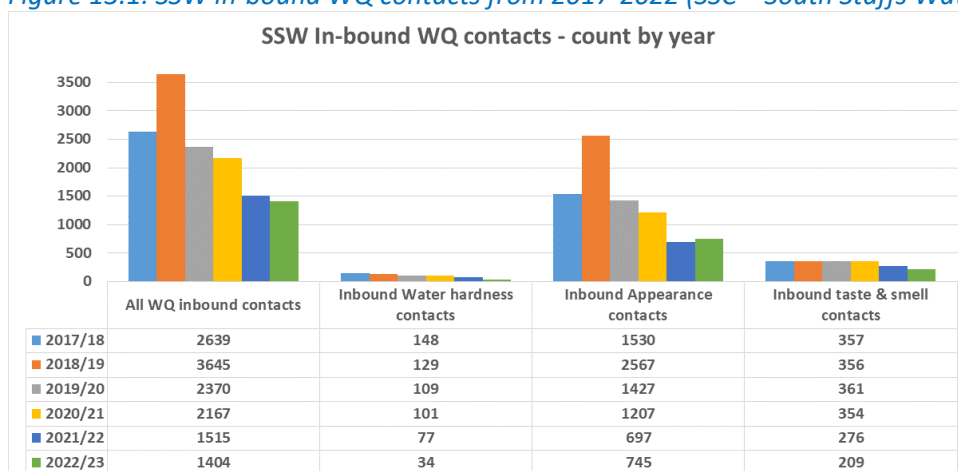
This is further reflected in the *SSC – Customer Promises Tracker Annual Report (2023) (Turquoise)* which demonstrates that satisfaction with the taste and smell of tap water having risen 2pp to 81% and satisfaction with the colour and appearance of water having risen 2pp to 87% in the 2022/2023 period.

Other reports such as the *WRW - Updated Regional Plan (2023)* display a more stable year-on-year average, showing little change in satisfaction between 2021 and 2022. However, despite this, customers are generally satisfied, with two-thirds stating that they have experienced no major water quality related issues.

It is of note that some reports display a decrease in satisfaction over the same timeframe, such as *CCW and Ofwat– Water Consumer Views (2022)*, stating that SSC customers’ satisfaction in the colour and appearance of their water has dropped from 67% in 2019/2020 to 46% in 2021/2022 and satisfaction with taste and smell ratings dropping from 58% to 38% over the same period. It is important to note that these drops indicate only a decrease in satisfaction, and not an increase in dissatisfaction, with previously high ratings being substituted for current more neutral ones. This is thought by *CCW and Ofwat– Water Consumer Views (2022)* to be attributed to a general lower mood due to current world events, specifically the Covid-19 pandemic, and an increase in remote working resulting in more opportunity to experience issues with home water quality.

Despite relatively positive views on water taste, smell and appearance, appearance customer contacts generally make up the majority of total inbound water quality contacts, taking up 745 out of a total of 1404 contracts in the year 2022/2023 (See *Figure 13.1 for full WQ inbound contact information*) (*SSC – South Staffs Water Quality Metrics (2022)*). Of these contacts, the most common concerns relating to water quality in 2023/2023 were water being “cloudy or brown” and “appearing aerated/bubbles”.

Figure 13.1: SSW in-bound WQ contacts from 2017-2022 (SSC – South Staffs Water Quality Metrics (2022))



During the period of 18/19 to 21/22, 53% of all SSC contacts about water quality concerned orange/brown discolouration, affecting mainly SSW customers (75% of contacts), over CAM ones (26% of contacts). These occurred most commonly during the summer months of May and August and appear to have only a short-term impact on overall customer satisfaction when they occur in isolated incidents.

The most common concern relating to taste and smell relates to Chlorine, covering 47% of SSW and 44% of CAM contacts, with the second most prevalent reason being musty or earthy smells/tastes, covering 24% of SSW and 20% of CAM contacts. This is particularly a problem during the summer months, especially during unseasonable weather, and has a smaller, but longer-term impact on satisfaction when compared to taste and colour.

“I am not particularly impressed by the taste of the water because there is always a light chloride smell and taste” SSW Customer from the SSC H2Online – All activities relating to water quality (2022) (Explain) report.

Regional Differences in Experience

When looking at surface level differences in experience, NHHs report slightly more service issues (59%) when compared with HH (53%). Water discolouration is reported on more in the SSW region, while taste and smell reports are more common in CAM (see Figure 13.2) (SSC – WRMP Themes 1 and 3 Quantitative Insights (2022) (Accent)). While across a different time frame, this can be compared to 18% of Severn Trent customers being inconvenienced by discoloured water over the year prior to March 2022 (Severn Trent – WRMP24 (2022) (DJS Research)), and national averages of 11% of HH and 19% of NHH experiencing discolouration of water from their taps, 2022, and 9% of HH and 16% of NHH experiencing taste and/or smell issues with their tap water in the last 12 months prior to May 2022 (see Figure 13.3) (SSC – ODI Research Pilot (2022) (Accent)).

Figure 13.2: Water Service Contacts in the SSW and CAM areas over the past 2 years. Service issue data from March 2022, water discolouration, taste, and smell data from May 2022 (Accent Quant Themes 1 and 3, 2022)

		Any Form of Service Issue	Experienced Water Discolouration	Experienced Taste and Smell Issues
SSW & CAM	HH	53%		
	NHH	59%		
SSW			13%	7%
CAM			11%	11%

Figure 13.3: National Average for water discolouration, taste and smell contacts from any time in the past and YTD May 2022 (ODI Research, 2022)

	Experienced Water Discolouration		Experienced Taste and Smell Issues	
	Any time in the past	YTD May 2022	Any time in the past	YTD May 2022
HH	19%	11%	13%	9%
NHH	28%	19%	21%	16%

According to the 2017 web survey *SSC – Water Hardness Triangulation Conversation (2018)*, 64% of SSW and 73% of CAM customers drink more tap than bottled water and cite that the main reason for doing so is to save money and protect the environment, rather than tap water being the preferred taste. However, some customers mentioned the need to boil or filter their water first due to disliking its taste.

This is repeated in an online study of often more engaged customers (*SSC H2Online – All activities relating to water quality (2022) (Explain)*), where the majority of participants (69% SSW, 63% CAM) only drank tap water; however, this was only due to bottled water being perceived as a waste of money. Some participants mentioned that tap water has to be refrigerated or filtered as it “tastes off” on its own. In SSW, the most commonly cited reason for filtering was the water’s hardness (22%), with the second being a dislike for its taste (13%), while in CAM, the most popular reason related to taste (18%), with the smell of the water being the joint-second most popular reason (14%).

Customer Priority

Water taste, smell and appearance has been listed as a high unprompted priority in both Cambridge (*SSC – WRMP24 - WRAP Theme 1 Research Findings (2021)*) and SSW (*SSC – Customer Priorities Desk Research (2020) (Accent)*), with attitudes towards investment suggesting that improving the quality and taste of water should be a key focus both for HH and NHH groups.

SSC – Customer Priorities Desk Research (2020) (Accent) suggests that overall, SSW customers appear to prioritise water quality more when compared to CAM ones. When broken down into HH and NHH customers, overall, HH customers focused more on water safety, while NHH customers focused on a broader range of water quality aspects including water discolouration, taste and smell (*SSC – Willingness to Pay Research (2018) & SSC – Customer Priorities Desk Research (2020) (Accent)*). According to *SSC – Willingness to Pay Research (2018)*, when looking at NHH customers, smaller companies in SSW tend to place less weight on the taste and smell of their water compared to the smaller companies in CAM, while public companies in both regions tend to place more weight on the issue of discolouration when compared to the average.

A focus on high water quality over other water attributes in HH samples, compared with a general preference across all attributes in NHH samples can be seen in stated preferential data for customers’ WTP for improvements in SSC services. This showed a general WTP across all NHH customers for all water attribute improvements, with HH customers largely showing the same, however, these were dictated by an array of geographic and personal factors (*SSC – NERA Willingness to Pay for Water Services at PR24 (2022)*). CAM customers tended to have a higher WTP across all water quality attributes when compared to SSW, including water taste, smell, and appearance, which is attributed by *SSC – NERA Willingness to Pay for Water Services at PR24 (2022)* to an increase in water hardness in the region, resulting in lower general water quality satisfaction, and higher WTP for improvements. CAM C2DE SEG groups, those who were financially or socially vulnerable, as well as women in this region, showed a much lower WTP than the CAM average, however, this was not statistically significant. When those demonstrating protest attributes were excluded (i.e., those who did not accept that service improvements should be paid for through bill increases, or did not trust that the improvements would be delivered upon), a non-significant higher WTP was found in SSW customers when compared with the baseline group, and a significantly higher WTP was found in CAM participants.

This higher valuation for water quality attributes in Cambridge participants translates over to Willingness to Accept (WTA) values as compensation for incidents, with CAM customers across all groups giving higher WTA values for most water quality scenarios in the *SSC – ODI Research (2023) (Accent and PJM Economics)*, CAM NHH customers gave much higher compensation acceptance values for water, taste, and appearance incidents compared with SSW ones (however, this study involved a relatively small sample regarding CAM NHH customers, resulting in wide confidence intervals). Interestingly, SSW HH customers gave slightly higher WTA values regarding water taste and smell incidents (both 6-hour and 24-hour incidents), however, this was a very minor difference.

Participants seem to engage more with information that directly relates to them. This is particularly relevant when there is a service change, with customers wanting to know the key information concerning the change and why it was necessary, as unwanted changes bring about highly emotive responses (*Water Club Changes of Source (2022) (Britainthinks)*). According to the *SSC – WRAP Deep Dives (2021) (Community Research)*, content relating to changes to taste, smell and appearance tends to promote the most emotive responses.

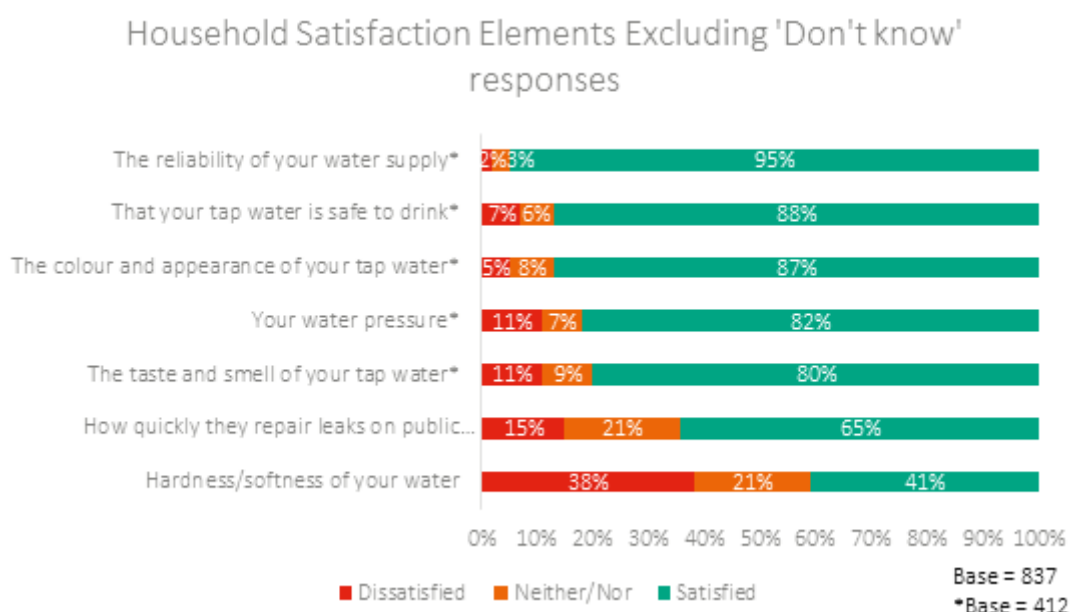
This is especially relevant concerning water taste, with 39% of respondents across the UK stating that they would dislike being told of possible changes to their water hardness or taste (*Water Club Changes of Source (2022) (Britainthinks)*). This is true even though the majority of participants could not taste the difference between different water samples at a level that would be expected of a water transfer (*WRW - Updated Regional Plan (2023)*). Personal preference and convenience appear to be some of the highest rated factors when considering water taste, with high quality water being prioritised much higher than environmental concerns (*SSC – PR19 Data Triangulation Study SSW WRMP (2018)*), and a key reason for a lack of support for water transfers being due to a personal preference concerning water taste. However, despite this, others suggest that the taste is something that they would adapt to (*SSC – WRAP Deep Dives (2021) (Community Research)*).

Hardness/Softness of Water

Customer Experience

Customers taking part in the *Water Club Changes of Source (2022) (Britainthinks)* study generally felt that their water quality was fine in terms of hardness, despite this, the most commonly cited water quality issue across both the SSW and CAM customer bases concerned the hardness of their water and its associated cloudiness. When compared with previous years, the hardness/softness of water sources continues to be the area of service with the lowest satisfaction rating, with over 2x the dissatisfaction rating of other satisfaction elements in the *SSC – Customer Promises Tracker Annual Report (2023) (Turquoise)* sample (see Figure 13.4).

Figure 13.4: Household satisfaction with various service areas during 2022/23 (*SSC – Customer Promises Tracker Annual Report (2023) (Turquoise)*)



The SSC – Customer Promises Tracker Annual Report (2023) (Turquoise) reviews customer testimony relating to dissatisfaction with overall SSC services, with several citing hard water as a major reason for their dissatisfaction. NHH groups show the greatest dissatisfaction, with one of the lowest performing water factors being its hardness/softness. Many customers were concerned about “debris floating in their water” and “the hardness of the water causing an excess of limescale to build up”.

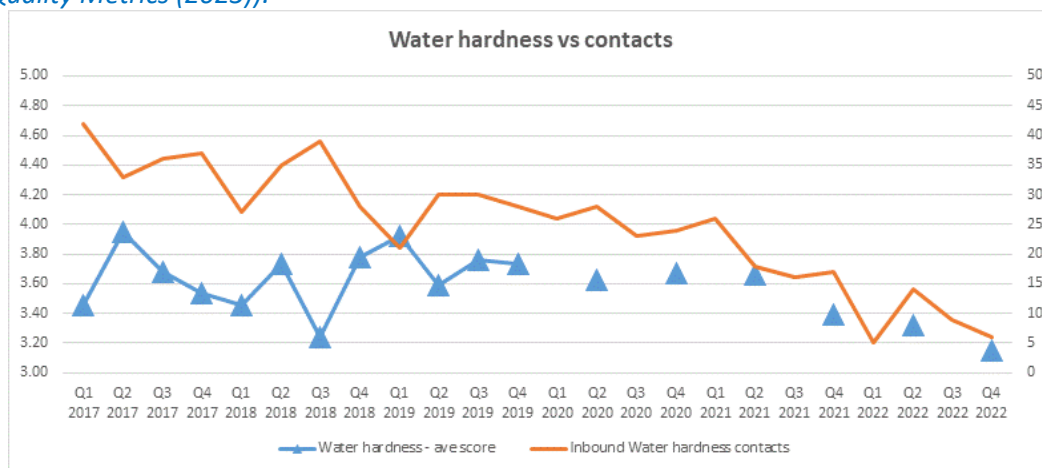
“The water is so hard it tastes horrible and the staff won't drink it.” – CW NHH customer from the SSC – Customer Promises Tracker Annual Report (2023) (Turquoise).

The number of customers experiencing any service issues during the year 2022/2023 rose to 79% from 46% the previous year due to the inclusion of “the impacts of hard water” option, of which 68% of participants had experienced. Without the inclusion of the impacts of hard water as a service issue, this 79% of customers drops to 55%, a 9% rise on the previous year. This rise in recorded service issues was particularly high in the Cambridge area, with 87% of customers reporting that they have experienced a service issue, compared to a still relatively high 58% in South Staffs.

Despite the aforementioned concerns regarding the hardness of water, the WRW - Updated Regional Plan (2023) found that when looking at customer complaints, hard water tended to only be raised as a strong concern for a vocal minority of customers. Water hardness contacts themselves appear to be relatively rare, with only 77 contacts being recorded in the 2021/2022 period, compared with 697 appearance contacts, and 276 taste and smell contacts in the same time frame (See Figure 13.1 for full contact data) (SSC – South Staffs Water Quality Metrics (2022)).

Additionally, the number of contacts appears to be shrinking, with only around 17 contacts occurring in Q4 of 2021, compared to 26 in Q1 of 2020, despite a relatively stable water hardness score throughout this period, with further decreases going into 2022 (See Figure 13.5).

Figure 13.5: Tracker for SSW water hardness average score vs water hardness contacts (SSC – South Staffs Water Quality Metrics (2023)).



While hard water is perceived negatively, customer water behaviour is rarely altered by water hardness (Water Club Changes of Source (2022) (Britainthinks)). Customers tend to have a general dissatisfaction with hard water in relation to kettles and fixtures, however this does not impact overall satisfaction scores significantly.

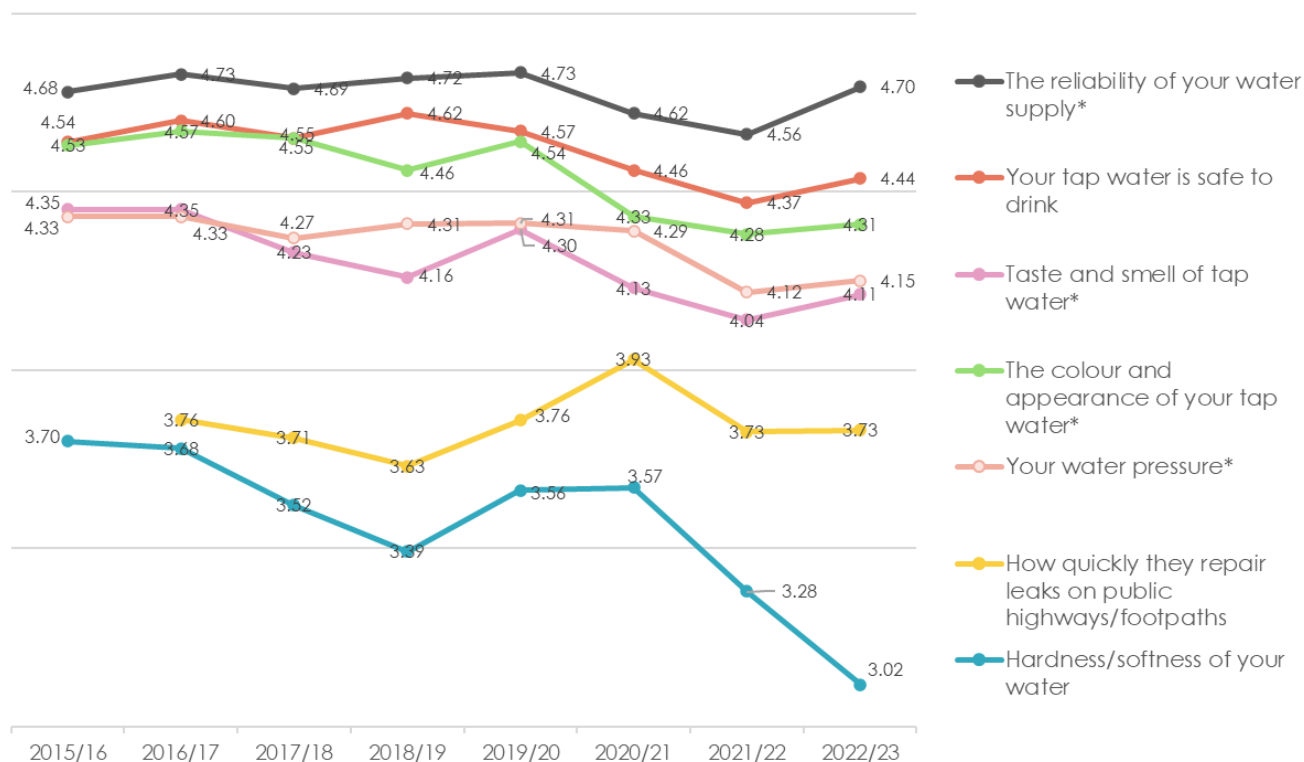
This is further supported when looking at the SSC – Customer Promises Tracker Annual Report (2023) (Turquoise), where despite the inclusion of “the impacts of hard water” option, thereby increasing the number of reported service issues, overall satisfaction with services was high (80% for households, 86% for non-households). When looking at scores from previous years, there has been little change regarding how HH customers feel about the hardness of their water, with around 40% satisfaction in the 2022/2023 period, compared with 42% the previous period. However, this masks the observation that there was a significant rise in dissatisfaction with the hardness/softness of water between 2021/22 and 2022/23 (37% dissatisfied v 24% previously). Thus water hardness/softness is the service element with by far the lowest overall satisfaction across SSC customers, but it is also the least important driver of overall satisfaction, making it less of a priority.

Across all of the water companies reviewed in *CCW and Ofwat– Water Consumer Views (2022)*, satisfaction ratings in terms of the hardness/softness of water was significantly lower (63% average satisfaction) when compared to all other aspects of water quality (e.g., reliability of supply, colour and appearance, safety, pressure, and taste/smell) (85-96% average satisfaction).

Additionally, hardness/softness satisfaction scores were significantly lower in comparison to the rolling 10-year average (68.1%). This is coupled with a net decrease in satisfaction across all attributes in 2021 and further highlighted by *Figure 13.6* from the *SSC – Customer Promises Tracker Annual Report (2023) (Turquoise)*. In *Figure 13.6* a sharp decrease in satisfaction scores for the hardness/softness of water can be seen during the 2021 period, although speculative, since this decrease occurs during the Covid-19 pandemic this could potentially be due to an increase in time spent at home due to remote working during the pandemic, thereby resulting in an increase of home water usage and an increase in the rate of limescale build up as an effect of harder water on home equipment (*SSC – South Staffs Water Quality Metrics (2022)*). Cambridge customers in particular were significantly more likely to be working from home both solely (16% Cam vs. 6% SSW) and most of the time (22% Cam vs. 12% SSW) (*SSC – Customer Promises Tracker Annual Report (2023) (Turquoise)*). This in-turn is felt more by customers financially due to replacement or cleaning costs during the current cost of living crisis, resulting in lower overall satisfaction.

Finally, in a February 2020 report by H2Online (As cited in *SSC – South Staffs Water Quality Metrics (2022)*), around one fifth of customers stated that they had had issues with their water quality in the past, however, they had never contacted SSC concerning these issues. These silent customers can have a large effect on C-MeX and other rating scores. The previously mentioned increased time spent at home as a result of the pandemic has been suggested by *SSC – South Staffs Water Quality Metrics (2022)* to potentially have led to an increase in silent customers, potentially impacting the aforementioned fall in scores following 2021.

Figure 13.6 shows HH Satisfaction with the Service Areas Trends (Avg. Score) from SSC Customer Tracking Research (2022)



Regional Differences in Experience

The *SSC – Customer Promises Tracker Annual Report (2023) (Turquoise)* identifies Cambridge as a particular area of concern in regards to the hardness/softness of local water. HH customers in this area rated their satisfaction with the hardness of their water (31%) significantly lower than the average score (41%). In contrast, SSW saw significantly higher satisfaction with the hardness of their water (46%). This can be seen reflected in the *SSC H2Online – All activities relating to water quality (2022) (Explain)* report where 83% of CAM respondents reported kettle scaling,

September 2023

Produced by Impact Research Ltd in strict confidence

72% reported shower head scaling, 66% reported scaling on taps, toilets or tiles, and 55% reported particles in their water.

A separate study by *CCW and Ofwat– Water Consumer Views (2022)* supports this, with SSW HH customers rating their satisfaction with the hardness/softness of their water significantly higher (72%) than the industry average (67%), compared with Cambridge customers, who scored their satisfaction as slightly lower (51%) than the average. When considering these scores, it is important to consider that the Cambridge area overall has much harder water when compared with the SSW region.

Internal analysis by SSC's water quality team shows that all CAM customers are served by water that is classified as "Very hard" or "Hard", compared to only 21% of SSW customers. This breaks down further, with 13.8% of CAM customers living in areas with "Very hard" water, compared with only 2.6% of SSW customers.

However, despite this, when looking back at the *SSC – Customer Promises Tracker Annual Report (2023) (Turquoise)*, 33% of SSW customers reported that they were fairly or very dissatisfied with their water, compared with 45% of CAM customers. Taking into account the number of customers living in areas of "Very hard" or "Hard" water, SSW has a higher ratio of participants dissatisfied with the hardness of their water to participants living in an area with hard water of 2.14:1, compared with 0.33:1 in CAM (104% higher dissatisfaction per person affected by hard water). This suggests that, despite CAM having an overall much higher proportion of customers living in areas of harder water, SSW customers are much more dissatisfied with the hardness of their water when compared with CAM customers when taking into account the actual numbers being supplied by the hardest water supply.

Customer Priority

While water hardness is an often-discussed issue, customer prioritisation on this issue seems to vary. On a general level, water hardness variations are rarely understood or considered by customers, and differences or issues with hard water are mainly noticed by customers who are travelling (*Water Club Changes of Source (2022) (Britainthinks)*). Therefore, water hardness prioritisation mainly concerns the immediately noticeable effects of hard water such as limescale.

During PR19, prioritisation of improvements to the hardness of water were relatively low for HH customers (1.9 in SSW and 2.6 in CAM, out of a 100-point allocation across various water quality attributes). Being the 12th (SSW) and 11th (CAM) highest rated attribute. However, this was likely due to water safety taking up a high proportion of total priority (38.4 SSW and 36.3 CAM). This was more evenly split for NHHs (6.1 SSW and 8.1 CAM), being the 8th (SSW) and 4th (CAM) highest-rated attribute.

In terms of WTP values, there was a willingness to pay up to a maximum of an extra £9.66 for larger water hardness improvements in SSW HHs, and £7.63 in CAM HHs. In comparison, SSW NHHs gave a maximum of a 3.3% increase, and CAM NHHs giving a 3.5% increase (*SSC – Willingness to Pay Research (2018)*).

While comparisons with PR24 are difficult due to differences in methodology, prioritisation relating to the hardness of water appears to be less popular, with only CAM ABC1 social economic groups showing a significant willingness to pay for improvements (*SSC – NERA Willingness to Pay for Water Services at PR24 (2022)*), contrasting with 2018 WTP values. This is likely due to Cambridge having harder water in general than the South Staffs region, with Cambridge residents, therefore, being more likely to be dissatisfied with the hardness of their water. The shift in which this region prioritised water hardness improvements more between 2018 and 2022 can again be explained by an increased effects of hard water on the home following an increase in home water usage and home working following the Covid-19 pandemic as previously covered, however, again this is speculative. SSW customers in *SSC – NERA Willingness to Pay for Water Services at PR24 (2022)* did show a non-significant willingness to pay for improvements to the hardness of their water during PR24 if those participants exhibiting 'protest responses' were excluded from the samples, as is the same with those with a lack of knowledge concerning the topic.

NHH customers appear to consider the hardness/softness of their water more than HH customers, being listed as a key priority of equal importance to water taste/smell/appearance, safety of the water to drink, and the issue of lead piping (*SSC – Customer Priorities Desk Research (2020) (Accent)*, *SSC – Willingness to Pay Research (2018)*). However, the PR24 study (*SSC – NERA Willingness to Pay for Water Services at PR24 (2022)*) did not show any positive WTP for this attribute among NHH customers.

SSC – *South Staffs Water Quality Metrics (2022)* revealed water hardness to have the lowest impact on C-Mex of any of the reviewed water aspects, and other aspects of water quality being seen as far more important, such as clean, good tasting water.

The SSC H2Online – All activities relating to water quality (2022) (Explain) provides some insight into how customers in the SSW and CAM region feel about the hardness of their water, with many stating that harder water is an inconvenience to them but, does not appear to have a significant impact on their day to day lives.

“I drink it straight from the tap but my partner prefers it filtered first and of course this takes out the hardness so makes a better-looking cup of tea” – Participant from the H2Online Community in the *SSC H2Online – All activities relating to water quality (2022) (Explain)* report.

“Scum on bath when emptying bath tub – yuck” – Cambridge Resident from the H2Online Community participant in the *SSC H2Online – All activities relating to water quality (2022) (Explain)* report.

“The coffee machine is the only appliance I feel the need to descale so limescale isn’t a big problem here” – Cambridge Resident from the H2Online Community participant in the *SSC H2Online – All activities relating to water quality (2022) (Explain)* report.

“I emailed Cambridge water when I first moved in as I was shocked at how hard the water was!”

– Cambridge Resident from the H2Online Community participant in the *SSC H2Online – All activities relating to water quality (2022) (Explain)* report.

Many of these residents noted that they have made significant investments in softening their water, through water softeners, Pozanni water filtering systems or kitchen tap filters, or smaller low-cost solutions such as the use of a Brita jug, Calgon washing machine products, or home limescale removal remedies.

“We installed a water softener a few years ago and suffer much less from the effects of hard water, perhaps you could expand the section on softeners and highlight their benefits” – Cambridge Resident from the H2Online Community participant in the *SSC H2Online – All activities relating to water quality (2022) (Explain)* report.

One resident highlighted that many of these solutions are not appropriate for all customers, pointing out that filters can have relatively little effect on water hardness, while softeners may not be appropriate to those on a low sodium diet.

“The previous comments often confuse water filters and water softeners. Filters can remove small particulates and usually remove the chlorine used in potable water treatment. They usually have no real effect on hardness. Softeners basically swap sodium for calcium (it is more complicated than that). This means that softened water has a lot more sodium. Depending on the level of hardness, this can be significant and should be considered by anyone who, for medical or other reasons, are on a low sodium diet. This should not be confused with water from low hardness areas. These are naturally low in Calcium and Magnesium but not high in sodium.” – Cambridge Resident from the H2Online Community participant in the *SSC H2Online – All activities relating to water quality (2022) (Explain)* report.

Additionally, while previously mentioned filtration and softening systems are useful for some, those with lower incomes are often less able to afford these solutions, with some customers (particularly those in the South Staffs region) feeling that it is unfair for them to pay extra for softer water.

“I believe that we as consumers pay enough for our water supply. And feel that shareholders should pay towards the water softening system. As we ordinary people are getting poorer by the week. As electricity and gas prices are to be increased and many people are having financial problems due to no fault of their own. Shareholders can put something back in to protect their stakes in shares. Also, water meters fitted to every property will benefit future water supplies and help reduce wastage, resulting in less water softening will be required” – South Staffs resident from the H2Online Community participant in the *SSC H2Online – All activities relating to water quality (2022) (Explain)* report.

However, despite this, several Cambridge residents reported a level of concern about the potential environmental consequences of installing a water softening plant, in addition to worries of further financial burdens on customers when investing in such a plant.

“Building a softening plant is a non-starter. Apart from the cost, there is a massive environmental impact, i.e. carbon footprint... Giving advice is cheap and can be effective; some sort of discounted product system would be welcome in these straitened times but for most customers that would just be robbing Peter to pay Paul so needs to be targeted” – Cambridge resident from the H2Online Community participant in the SSC H2Online – All activities relating to water quality (2022) (Explain) report.

The impact of the hardness/softness of water appears to be especially prevalent in the Cambridge area. This is reflected in the SSC – *Water Hardness Triangulation Conversation (2018)*, which reported that 37% of SSW customers were dissatisfied with the hardness of their water, compared with 62% of CAM customers. This can also be seen when looking at the same study’s WTP values, with 35% of the CAM HH sample stated they have previously had issues with hard water on their property, with the customers in the sample being willing to pay on average an extra £15.77 to soften the supply, compared with 23% experiencing issues in the SSW region, with those in the SSW sample being willing to pay an extra on average £12.30 to soften the supply.

Water Safety and Temporary Do not Drink Notices

Customer Experience

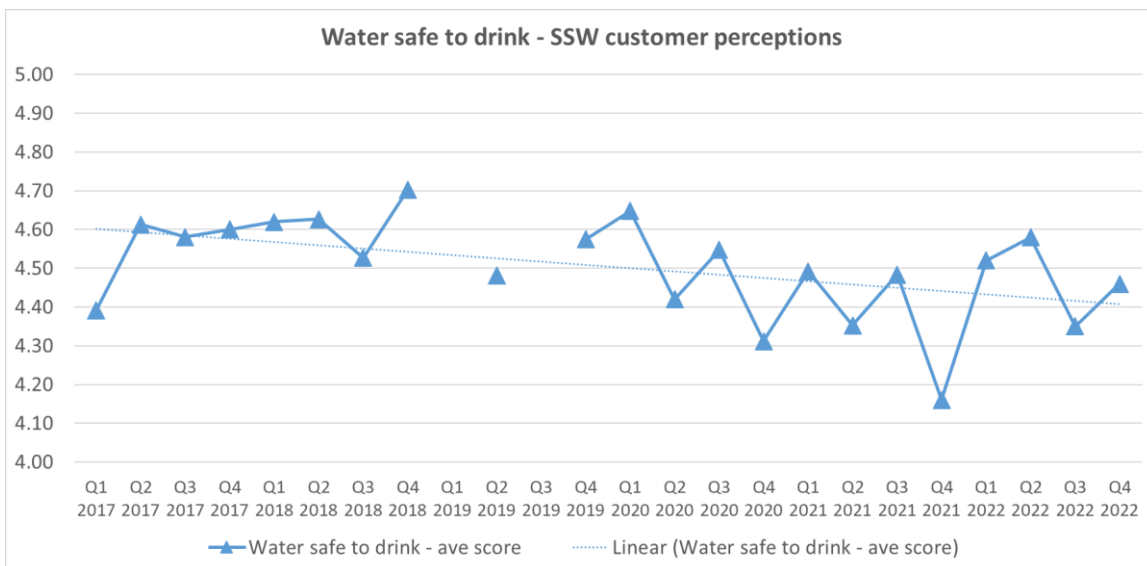
Do not drink and Boil water notices are relatively rare for customers, with only 11% of HH customers and 8% of NHH customers having received boil water instructions over the past 12 months, and 5% of HH customers and 11% of NHH customers having received do not drink notices (*SSC – ODI Research Pilot (2022) (Accent)*). In comparison, 4% Severn Trent HH customers reported having received notices to boil drinking water, while 8% of NHH customers did. *Severn Trent – Strategic Report (2022)* provides several examples where do not drink notices have been given out:

“A petrol spill that affected six industrial units resulted in do not drink notices being in place for an extended duration. The first call...report(ed) an “intermittent metallic taste and possible slight petrol odour”. The final restriction of use was lifted...eleven months later.” - Example of an incident listed in the Severn Trent – Strategic Report (2022), the incident took place in the Wessex Water Area between October 2019 and September 2020.

In terms of safety concerns, *CCW and Ofwat – Water Consumer Views (2022)* reports that satisfaction with the safety of drinking water has dropped by a non-significant amount since 2020, from 93% to a current 91% of customers rating high satisfaction. When looking at regional differences, satisfaction with the safety of drinking water in Cambridge was significantly higher than average (93%), while scores in SSW were slightly, but not significantly, above the average (92.5%).

This drop in satisfaction is reiterated in *SSC – South Staffs Water Quality Metrics (2022)*, which demonstrates a year-on-year decrease in perceptions and satisfaction with water safety in the SSC area (See *Figure 13.7*). This is mainly driven by a decrease in highly satisfied customers, rather than an increase in dissatisfaction, as in 2019/2020 69% of SSW customers gave a top score of 5 for water being safe to drink, which fell in 2021/2022 to 56% of customers. As previously mentioned, the reasoning for this is believed to be due to an increase in remote working during the Covid-19 pandemic, resulting in an increased opportunity to experience water issues, combined with a lower general mood in the UK resulting in less tolerance for water issues. There has been an improvement in satisfaction seen during 2022/23 versus 2021/22, which could be partly linked to more people returning to work more and so spending less time at home.

Figure 13.7: SSW customers water quality perceptions between Q1 2017 and Q4 2021, there is a long-term decline in scores being shown due to less top scores of 5 being given (SSC – South Staffs Water Quality Metrics (2022)).



Note: Missing data indicates where the metric was not tracked at the time due to questionnaire rotations across metrics tracked

Priorities

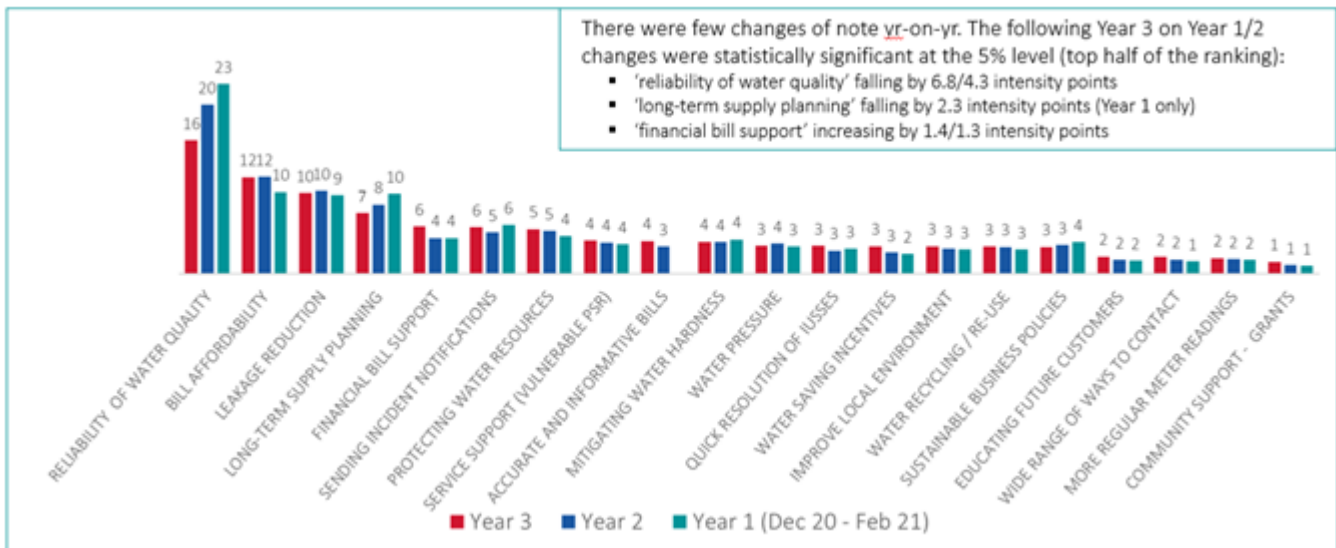
Water safety tends to vary on customer priority lists. The *CCW and Ofwat – Water Consumer Views (2022)* identified do not drink notices as a top customer priority, while boil water notices were ranked as a more middling priority. Clean and reliable drinking water is listed as the highest in ranked priority of 7 basic responsibilities water providers should provide, being more important than several environmental and financial priorities in *CCW – Public Views on the Water Environment (2021)*.

Additionally, in the *SSC – LTDS Report (2023) (Turquoise)* Water Quality was seen as a top tier priority, ranking 1st out of 10 during a quantitative survey, and 3rd during the qualitative workshops, with 93% of customers stating that they supported the ambition to further invest in this area to improve water quality and reduce instances of customers needing to contact the company to report concerns about their water supply. Support was mainly given to this area due to health reasons and a desire for safe drinking water, as well as reducing pollution and an expectation of high-quality supply. NHH were particularly supportive of this, both in the qualitative workshops and follow up quantitative surveys.

In the *SSC – PR19 Data Triangulation Study SSW WRMP (2018)*, priorities quantitative survey, 35% of participants rated water quality in the top 3 areas of priority, largely because the safety of drinking water attracted a disproportionate amount of attention, suggesting water safety in general is a high priority focus. Similarly, in a separate exercise, water being safe to drink scored 36.3 (38.4 when repeated) on a priority ranking of 100, compared to a middling score of 5.0 for reduced leakages, demonstrating that safe drinking water is a high-priority factor. When compared with other potential customer priorities, water quality (including water safety), and various other supply attributes were considered to be much more of a priority than environmental concerns (*SSC – PR19 Data Triangulation Study SSW WRMP (2018)*), mainly due to their direct personal effect on customers.

Data from PR24 research shows that water quality, including safe, clean and drinkable water, continues to rank as the number 1 priority for customers in both uninformed and informed priority scores, taking a 5th of total informed priority being assigned to the reliability of water quality on a 0-100 scale of preference intensity (*Figure 13.8*) (*SSC – Customer Promises Tracker Annual Report (2023) (Turquoise)*). This has dropped significantly since year 1 (by 6.8 intensity points), in response to a small increases in the priority of other factors such as bill affordability.

Figure 13.8: informed SSC customer priorities measured on a 0-100 scale across 2021/2022/2023 from the SSC – Customer Promises Tracker Annual Report (2023) (Turquoise)



However, in the *SSC – ODI Research Pilot (2022) (Accent)*, when given a list of potential disruptive scenarios involving water quality, HH customers did not consider boil water or do not drink notices to be in their top 4 impactful scenarios, although the top 2 areas with the highest impact scores were related to sewer flooding given its was a combined water and wastewater research project. This changed for NHH customers who considered a do not drink notice of 48 hours to be the second most impactful scenario listed when looking at the relative impact of each service issue. This was not the case when looking at the direct compensation required for each service issue, where do not drink notices for 48 hours was scored as the 4th most impactful scenario (note that this second NHH sample was relatively small with a sample of 49 compared with the sample of 100 during the relative impact section of the study).

When considering differences by customer type, *SSC – Customer Priorities Desk Research (2020) (Accent)* found that HH customers see water being safe to drink as a top service and investment priority. NHH customers still considered this to be a priority, however they considered it to be of equal priority to water taste and smell, lead piping, renewables, discolouration, and water hardness. SSW customers saw water being safe to drink as slightly more important (26%) when compared to CAM (24%) when ranking the importance of investment priorities.

These results are shared by *SSC – Willingness to Pay Research (2018)*, where safe, drinkable water took up over a third of total priority for both SSW (38.4%) and CAM (36.3%), when comparing priority options on a scale of 100, citing a strong concern for this issue, despite the low relative likelihood of a do not drink notice occurring. Overall, customers appeared to not consider other priorities of great importance when considering improvements when compared with the safety of drinking water. In contrast to many of the attributes tested, the PR24 research (*SSC – NERA Willingness to Pay for Water Services at PR24 (2022)*) supports this with a strong positive WTP value related to this attribute among HH and NHH customers (in the form of risk of a temporary ‘do not drink’ notice).

Lead Piping

Customer Experience

Despite a lack of understanding and attention towards lead piping, *SSC – Willingness to Pay Research (2018)* saw relatively high WTP values for lead pipe removal, with participants citing a higher level of expected service offered for customers’ money when compared to other factors. In contrast, in the recent SSC PR24 work (*SSC – NERA Willingness to Pay for Water Services at PR24 (2022)*), lead piping did not attract strong WTP (a modest amount in CAM and none in SST), despite improvements being selected by some half of customers.

It was thought that the lack of a positive WTP response in the NERA study, particularly in the SSW region, was partially due to an unwillingness to pay for things considered to be the customers’ responsibility (as most of these pipes are customer owned). This is supported by the fact that almost all customers in both regions are very supportive in the ambition for lead pipe removal by 2050 (96%) and almost two thirds (60%) a decade before that. This suggests that when customers are asked to infer WTP for lead pipe removal as part of a bundle of

measures (as per the 2018 PR19 work), they express a positive value, but when asked to directly pay for it, they demur (*SSC – NERA Willingness to Pay for Water Services at PR24 (2022)*), even though it is an important objective for them.

Priorities

Customer contact data relating to lead pipes is relatively sparse. When SSC customers were asked to list investment priorities unprompted, *SSC – Customer Priorities Desk Research (2020) (Accent)* foundation research found that lead pipes failed to appear as an important factor, suggesting that when uninformed, customers do not consider lead piping a priority. In addition to this, when ranking a known list of priorities, HH and NHH customers ranked lead piping as a bottom priority, behind water being safe to drink, unexpected loss of water supply, taste and smell, discolouration and water hardness.

Customer Preferences (2022) saw participants rating a number of water company activities by inconvenience, duration, health concerns, and likelihood, with lead piping ranked as a priority of middling importance, equal to boiling water notices, pollution, leaks, and affordability. Thus, it is seen as much less of a priority compared to high importance factors such as water interruptions, taste and smell, as well as do not drink notices.

When looking at individual groups, NHH customers in both the SSW and CAM areas, as well as younger customers in Cambridge, focused more on lead pipes as a priority when compared to other customer groups (*SSC – Willingness to Pay Research (2018)*). Nevertheless, in the recent PR24 work (*SSC – NERA Willingness to Pay for Water Services at PR24 (2022)*), no positive WTP was registered for this attribute, despite improvements being selected by a majority of respondents.

Golden Threads: Water Quality

Golden Threads	The need for customer information and engagement	Customers want to be informed of any potential changes to their water quality and hardness as soon as possible, and if there will be any effect on the quality of water that they personally receive.
	Call for collective responsibility and fairness	While unpopular, there was a general understanding that changes to water hardness can occur and that individual water quality incidents can happen. This is generally accepted, on the proviso that such incidents are rare.
	Concern for the environment	Customers have a general concern for the environment; however, many customers place personal and financial convenience above environmental concern and will prioritise water quality if necessary.
	Protection for vulnerable customers	There were no specific points relating to vulnerable customers, but it is important to maintain good quality supply for all customers, evidenced primarily in terms of the taste and smell.
Emerging thread	Cost of living	The enduring theme is that since PR19, affordability of bills and wider concerns related to the cost of living are taking more prominence in customers' priorities. Working at home during the Covid-19 pandemic resulted in increased usage of taps, kettles and other fixtures, which in turn has led to higher cleaning costs for customers and in some cases replacement costs, due to the impact of hard water. The issue is further exacerbated by the cost-of-living crisis.

Demographic Splits: Water quality

The table below provides a brief summary comparison of each of the key demographic groups, related to water quality. Please see the appendix for detailed tables of each split.

Demographic group(s)	Key findings/ comparisons
SSW vs CAM	Appendix A.12.1 summarises SSW and CAM preferences in relation to water quality. In general, SSW customers are more satisfied with their water quality in comparison with CAM. Both regions had different priorities in terms of water quality, with SSW focusing more on water discolouration and smell; and CAM being highly focused on the hardness of water. However, water hardness was an important issue in both regions.
HH vs NHH	Appendix A.12.2 summarises HH vs NHH preferences in relation to water quality. HH customers' priorities tended to revolve mostly around ensuring that their water was perceived as safe to drink and use, with NHH customers giving even priority towards most water quality attributes. Water quality issues tend to be slightly more prevalent and impactful to NHHs than HHs.
FBP vs current bill payers	Appendix A.12.3 summarises future customer preferences in relation to water quality. Among future billpayers, there is a preference for improvements in services related to hard water supply and lead pipes. In the SSW region, future billpayers show less preference for improvements. In CAM, future billpayers prioritise more improvements, including hard water supply and lead pipes. Overall, future billpayers are generally surprised that more people aren't concerned about water quality post-transfer, especially if it comes at a higher cost. They strongly support investing in environmental improvements, with consistent emphasis on water quality. Future billpayers have specific ambitions for improving drinking water quality and lead pipe removal, with a preference for spreading replacement costs across all customers. Whilst still an important area to address, lead pipe removal is considered a lower priority among future customers.
Vulnerable vs other customers	Appendix A.12.4 summarises vulnerable customers' preferences in relation to water quality. Vulnerable customers showed lower WTP than non-vulnerable customers, particularly from the CAM region. This difference, however, was not significant.

16. SUPPLIER RELIABILITY

Bibliography

Report	Published Date	Participants	Sample Size	Project Objective
CCW – Water Matters (2023) (DJS Research)	April 2023	HH customers	Total: 5,502 CAM: 150 SSW: 150	Tracking survey which tracks the views of household customers on the services they receive from water companies in England and Wales.
SSC – Customer Priorities Infographic (2022)	May 2023	HH and NHH customers	HH: 44 Vulnerable: 5	To provide insight presenting customers' priorities for now and the future.
SSC – Customer Priorities Tracker Qual Year 1 (2020) (Accent)	October 2020	HH customers	c60 in total	To understand customers' uninformed and informed priorities in the short and long term. To understand what factors drive any changes in priorities including whether there are any wider "Water Industry" trends. To understand whether there have been changes since Summer 2017 and what has driven those changes.
SSC – Customer Priorities Tracker Quant Year 2 (2022) (Accent)	March 2022	HH customers	Total: 1,054 • SSW: 701 CAM: 353	Provide a benchmark against which customers' priorities will be tracked for both wholesale and retail services. Explore any differences between uninformed/informed priorities and qualitative/ quantitative insights. Understand the customer impact of Covid-19 and, from 2022, the cost-of-living crisis.
SSC – Customer Priorities Research Qual and Quant Year 3 (2022) (Accent)	May 2022	HH and NHH customers	Total: 1,154 CAM: 353 SSW: 801	To identify and explore the priorities with SSW and CAM households and non-household customers and understand what matters to them now and for the future.
SSC – Customer Priorities Research Tracker Quantitative Insights Year 3 (2023) (Accent)	May 2023	HH customers	Total: 1,072 CAM: 372 SSW: 745	Provide a benchmark against which customers' priorities will be tracked for both wholesale and retail services. Explore any differences between uninformed/informed priorities and qualitative/quantitative insights. Understand the customer impact of the cost-of-living crisis (2023).
SSC – Customer Promises Tracker Annual Report (2023) (Turquoise)	March 2023	HH and NHH customers	Total: 1,134 HHs: 837 CAM 269 SSW 569 NHHs: 297 CAM 93 • SSW 204	To monitor ongoing customer satisfaction, deliver on-going customer sentiment tracking, probe awareness and usage of key services and track changes in the way customers wish to interact with SSC.

SSC – PR19 Foundation Research June (2017) (Accent)	June 2017	HH and NHH customers	Total: 93 HH: 70 NHH: 23	To understand customer priorities for service delivery both now and over the longer term (prompted and unprompted) and to check these against previously established priorities in PR14 work.
SSC – LTDS Report (2023) (Turquoise)	July 2023	HH, NHHs and future customers	Qualitative: 34 HHs, 12 NHHs, 6 FBPs Quantitative: 980 HHs (including 82 FBPs), and 100 NHHs	To understand customers' attitudes and perceptions towards SSC's long-term vision to 2050 and their spontaneous preferences in terms of long-term delivery. Also, exploring SSC's performance and future targets in 10 key ambition areas, and to understand the main reasons that drive customer preferences, and to explore the issue of intergenerational fairness.
SSC – NERA Willingness to Pay for Water Services at PR24 (2022)	December 2022	HH, NHH customers and future billpayers	Total: 1250 CAM: 424 SSW: 833 Future billpayers: 54	Aimed at designing, implementing and analysing a stated preference survey in order to gain an estimate of customer WTP for service improvements from SSC with the overall aim of informing their PR24 business plan. HH, NHH and future customers were of specific focus.
SSC – ODI Research (2023) (Accent and PJM Economics)	March 2023	HH and NHH customers	Total: 807 HH: 609 NHH: 198 Medically vulnerable: 109 Communications vulnerable: 90 Life-stage vulnerable: 89 Financial vulnerable: 27	Aimed at analysing further segmentation of SSW and CAM Water customer values on top of previous Collaborative ODI research by Ofwat and CWW
SSC – WRMP Themes 1 and 3 Quantitative Insights (2022) (Accent)	April 2022	HH and NHH customers	Total: 1,180 CAM: 427 SSW: 753 HHs: 1,028 NHHs: 152	Core purpose of this study was to provide evidence of customer response and support for; managing droughts, universal metering, leakage, environmental ambition.

Overview

In general, customers across both regions do not frequently experience low water pressure, unexpected supply interruptions or flooding of their property due to a burst pipe. As such, there are high levels of satisfaction for reliability of water supply related themes across various reports. Customers view having a reliable supply of water at a good pressure as a basic service which SSC should be delivering to a high standard so that daily activities such as showering are not impacted. Consequently, supply reliability is consistently a high priority for customers, with low water pressure initiatives in the mid-range for priorities. Customers also expect further investment and innovation in infrastructure such as pipe materials and technology to detect and predict problems to quickly fix and prevent unexpected supply interruptions and the chance of property flooding due to a burst pipe.

Low water pressure

Customer experience and satisfaction

Table 14.1: SSW Customers' experience of low water pressure (in the last 2-3 years)

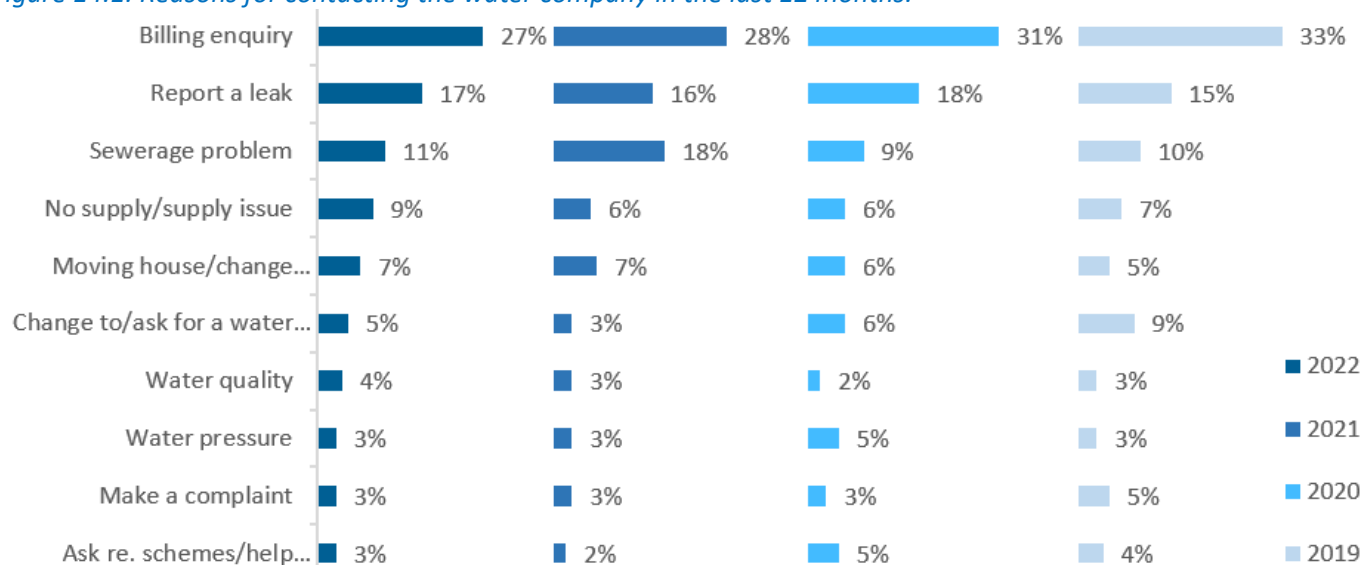
Study name	Percentage of those who experienced low water pressure SSC	Percentage of those who experienced low water pressure CAM
SSC WRMP Insight research March 2022	16%	19%
SSC Priorities Households Tracker Year 3 (June 2022 to March 2023)	19%	18%

The *SSC – WRMP Themes 1 and 3 Quantitative Insights (2022)* (Accent) gathered data on customers' response and support for several aspects of water management and reported that 17% of SSC customers had experienced low water pressure (19% in CAM and 16% in SSW) over the last two to three years.

Similarly, the *SSC – Customer Priorities Research Tracker Quantitative Insights Year 3 (2023)* (Accent) found 19% of SSC customers had experienced low water pressure (18% for CAM customers and 19% for SSW) in the last two to three years.

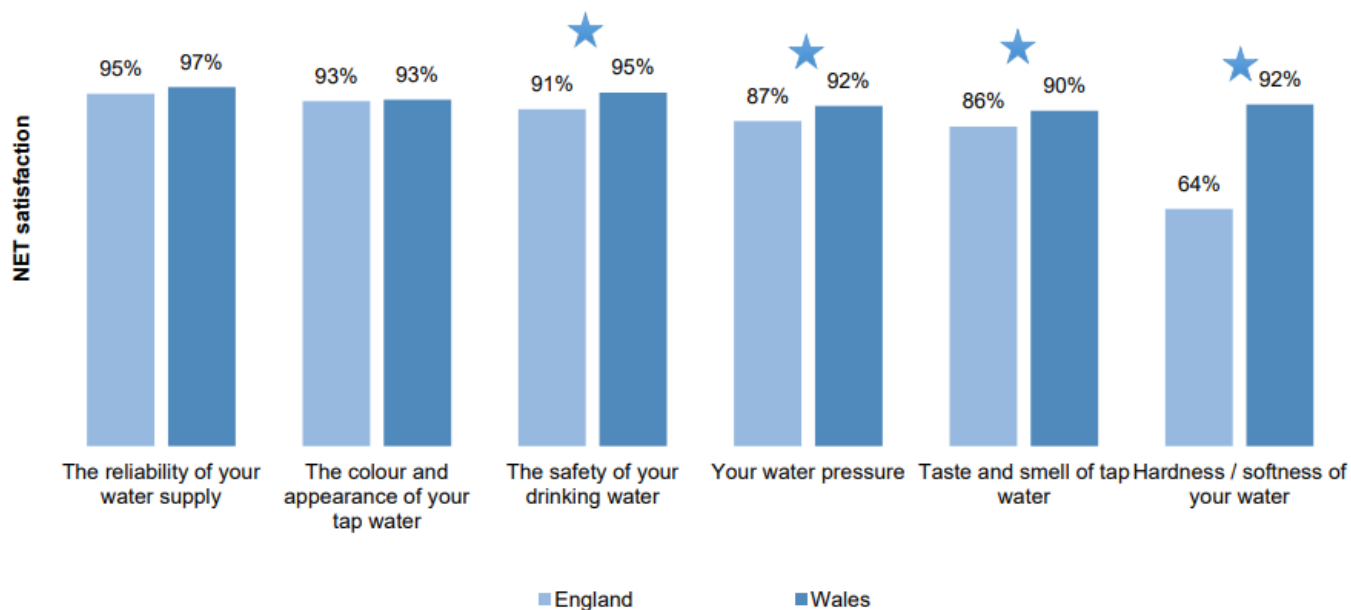
On a national level, from the *CCW and Ofwat– Water Consumer Views (2023)*, 4% of customers across England and Wales had contacted their water company due to water pressure (Figure 14.1). This was also an increase from 2021 and is the highest number of contacts because of water pressure between 2022 and 2019. More customers in Wales (92%) were satisfied with their water pressure than those in England (87%) (Figure 14.2).

Figure 14.1: Reasons for contacting the water company in the last 12 months.



Footnote: Reasons for contact below 3% for 2021, are not shown.

Figure 14.2: Satisfaction with aspects of water supply by nation



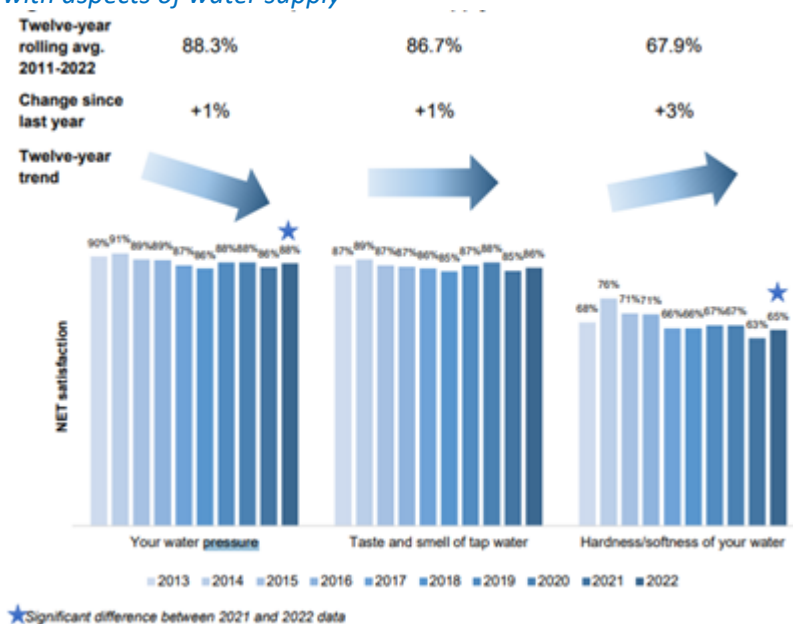
★ Significant difference between England and Wales

The SSC – Customer Promises Tracker Annual Report (2023) (Turquoise) found that overall, 82% of HH customers were satisfied with the water pressure, with little difference between the two regions as 83% HH customers were satisfied in SSW and 81% in CAM. Positively, 89% of NHH were satisfied with the water pressure overall.

Changes over time in customer experience and satisfaction

The CCW and Ofwat – Water Consumer Views (2023) so shows that over the last 10 years, satisfaction with water pressure has ranged between 86% and 91% across England and Wales, albeit with a slight downward trend (Figure 14.3).

Figure 14.3: Satisfaction with aspects of water supply



Compared with the 2022 industry average of 88%, both SSW (87%) and CAM (92%) perform better (Table 14.2). However, it is important to note that the base numbers are lower for both SSC regions at 150 customers each.

Table 14.2: Satisfaction with aspects of water supply 2022 – Water only Companies

Satisfaction with aspects of water supply (2020 data only)	The reliability of water supply	Colour and appearance of tap water	Safety of drinking water	Water pressure	Taste and smell of tap water	Hardness / softness of water
Industry (2022 base sample: 5502)	95%	93%	91%	88%	86%	65%
Total WoCs (2022 base sample: 1940)	96%	92%	90%	87%	85%	52%
Affinity Water (2022 base sample: 250)	96%	92%	89%	87%	84%	42%
Bristol Water (2022 base sample: 300)	97%	95%	94%	90%	88%	61%
Cambridge Water (2022 base sample: 150)	97%	95%	94%	92%	88%	49%
Essex & Suffolk Water (2022 base sample: 150)	98%	90%	86%	86%	84%	54%
Portsmouth Water (2022 base sample: 150)	96%	95%	93%	84%	88%	49%
South East Water (2022 base sample: 550)	92%	91%	89%	85%	84%	52%
South Staffs Water (2022 base sample: 150)	99%	89%	88%	87%	82%	63%
SES Water (2022 base sample: 151)	96%	94%	93%	84%	89%	58%

Footnote: Companies with the highest levels of perceived performance are highlighted in green text whilst lowest levels are highlighted in red.

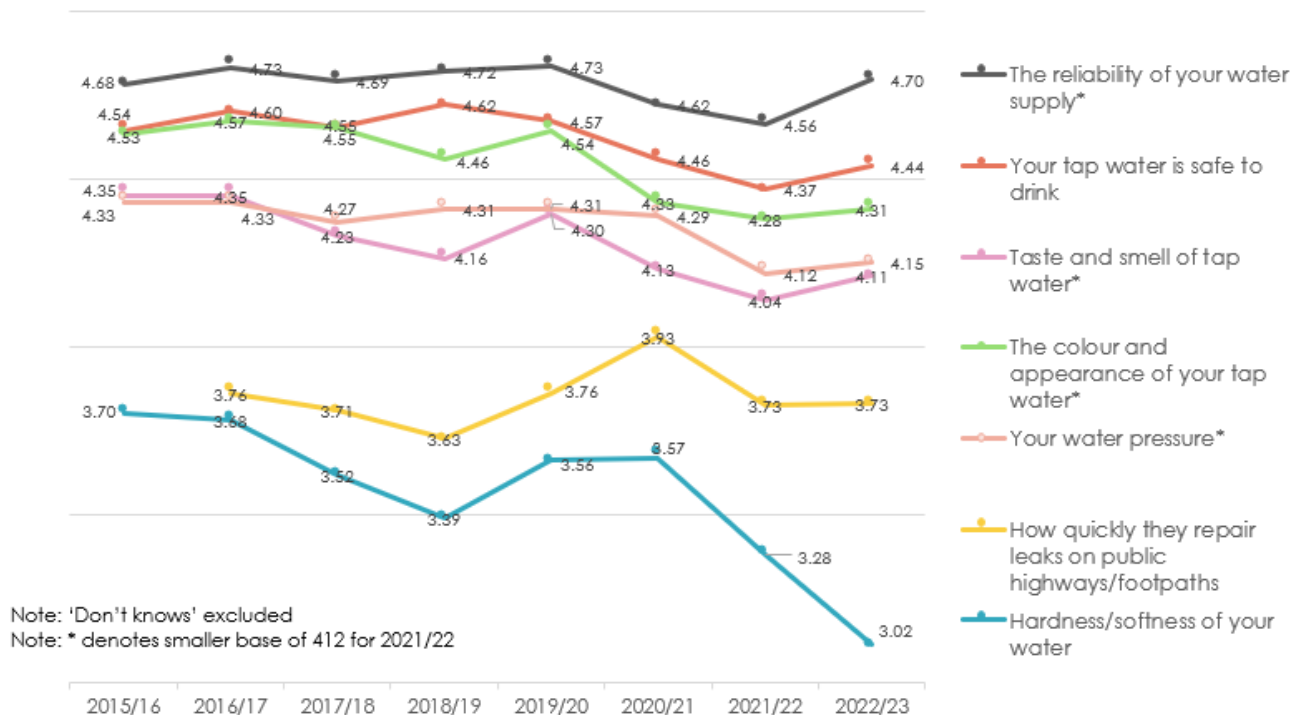
None the less, the 10-year rolling average for satisfaction with water pressure for both SSC (88.5%) and CAM (91.0%) are above the 10-year rolling average of the industry at 88.3% (Table 14.3). This suggests there is a level of consistency in the service being delivered to customers and their satisfaction level over the 10 years.

Table 14.3: Satisfaction with aspects of water supply – Water only Companies 10-year trends (arrows) and 10 year rolling averages.

Satisfaction with aspects of water supply (twelve-year trend)	The reliability of water supply	Colour and appearance of tap water	Safety of drinking water	Water pressure	Taste and smell of tap water	Hardness / softness of water
Industry (2022 base sample: 5502)	↔ 96.4%	↔ 92.8%	↔ 92.0%	↓ 88.3%	↔ 86.7%	↔ 67.9%
Total WoCs (2022 base sample: 1940)	↔ 96.6%	↑ 92.2%	↔ 91.3%	↔ 87.6%	↔ 85.8%	↓ 56.5%
Affinity Water (2022 base sample: 250)	↑ 96.1%	↑ 90.8%	↑ 89.1%	↔ 85.5%	↔ 82.7%	↔ 45.5%
Bristol Water (2022 base sample: 300)	↑ 97.2%	↑ 93.6%	↑ 92.6%	↔ 89.0%	↔ 87.7%	↓ 62.9%
Cambridge Water (2022 base sample: 150)	↔ 97.5%	↔ 94.8%	↔ 94.5%	↔ 91.0%	↔ 88.3%	↔ 52.2%
Essex & Suffolk Water (2022 base sample: 150)	↓ 97.2%	↔ 92.4%	↔ 91.1%	↓ 87.7%	↓ 87.5%	↓ 53.1%
Portsmouth Water (2022 base sample: 150)	↔ 97.4%	↔ 93.9%	↔ 92.9%	↓ 88.5%	↔ 88.4%	↓ 57.5%
South East Water (2022 base sample: 550)	↔ 95.7%	↔ 91.2%	↔ 90.7%	↓ 87.7%	↔ 83.1%	↓ 58.0%
South Staffs Water (2022 base sample: 150)	↔ 96.3%	↔ 92.0%	↓ 92.1%	↔ 88.5%	↔ 85.6%	↔ 70.6%
SES Water (2022 base sample: 151)	↔ 97.7%	↔ 94.8%	↔ 94.8%	↓ 88.3%	↔ 92.4%	↓ 66.4%

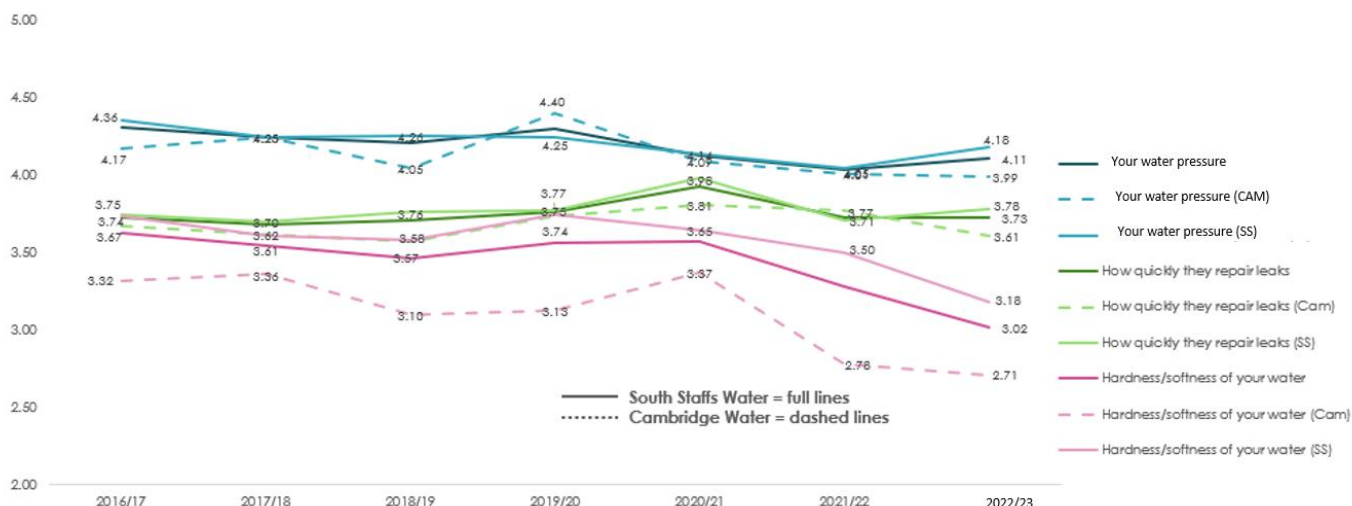
Providing more granularity for SSC, the SSC – Customer Promises Tracker Annual Report (2023) (Turquoise) notes that despite the high satisfaction rates, there have been falls in average satisfaction scores across all water metrics tested during 2015 – 2022. Compared to previous year, which was an all-time low since data collection in 2015 started, there has been a slight increase by 0.3 in 2022/23 for satisfaction with water pressure (Figure 14.4).

Figure 14.4. Average water pressure scores for SSW



When broken down by region, satisfaction with their water pressure was lower in the CAM region than SSW in 2022/23. Compared to the previous year, there is a bigger difference of satisfaction score between the two regions (Figure 14.5).

Figure 14.5: Average water pressure satisfaction scores between the two regions



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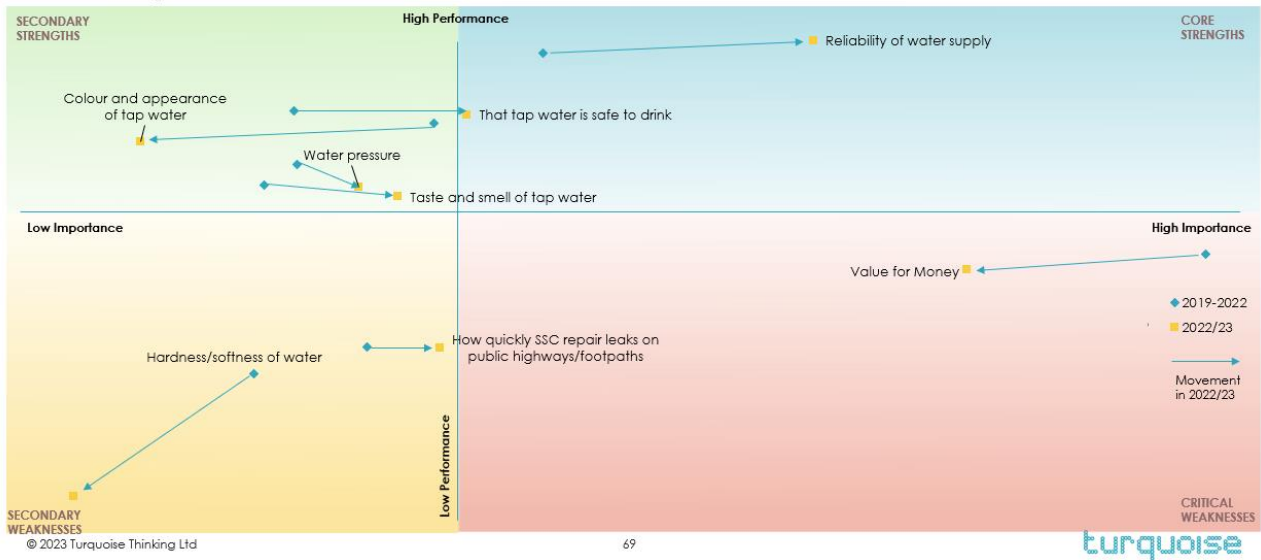
62
 How satisfied are you with the following areas of your clean water supply?
 Base = 837 *Base = 412



The SSC – Customer Promises Tracker Annual Report (2023) (Turquoise) includes a derived importance map based on statistical correlation to understand the hidden relationship between overall satisfaction and individual attributes.

The higher the score, the more significant role in overall satisfaction the individual attribute has. This analysis found the importance of water pressure in predicting overall service satisfaction had not changed much from last year (Figure 14.6). It remained a secondary strength in the top left quadrant where water pressure has less of an impact on the overall satisfaction levels compared to the 8 other service elements and even though the performance may be good for water pressure, the effect on overall satisfaction is weak with other, more prominent individual attributes such as value for money and reliability of water.

Figure 14.6: Derived importance map on overall satisfaction and individual water attributes 2019-22 – 2022/23



A derived importance map was also produced for understanding the relationship between value for money and individual attributes. Of the seven attributes included in the analysis, water pressure, which fifth out of seven in terms of importance for predicting VFM satisfaction on 2022/23 (Figure 14.7). Similar patterns were found between 2019-2022 when affordability and trust scores were included – water pressure was important, but not the most important (Figure 14.8).

It was interesting to note when looking on a year-by-year basis that water pressure became a stronger predictor during 2020/21, during the height of COVID lockdowns, but since 2021/22 has started to fall back towards the position it had in 2019/20. This provides evidence that during the period customers were at home, having good water pressure became a bigger influence on customers' overall satisfaction score.

Figure 14.7: Relative importance scores for VFM satisfaction (service elements)

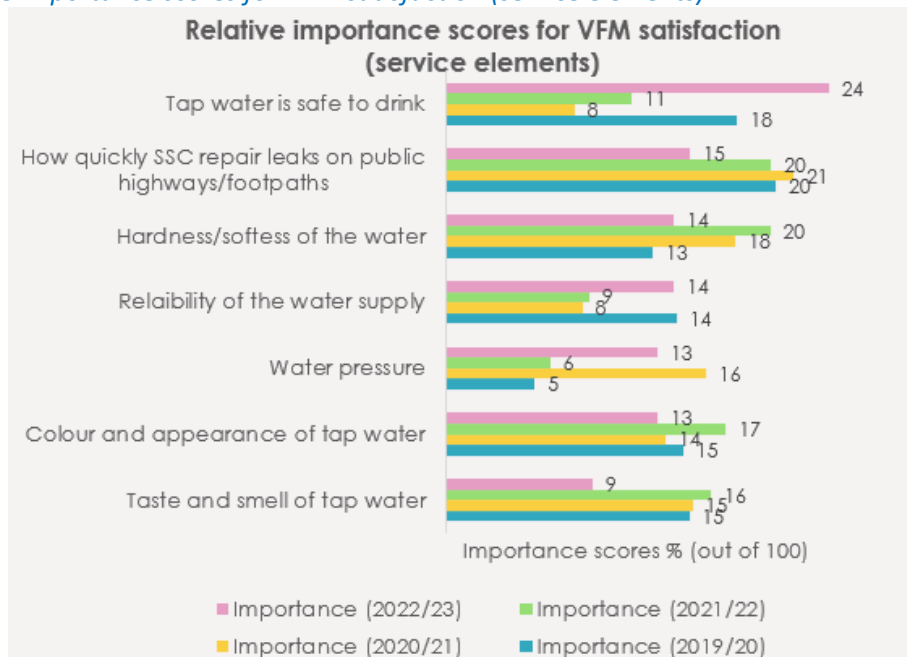
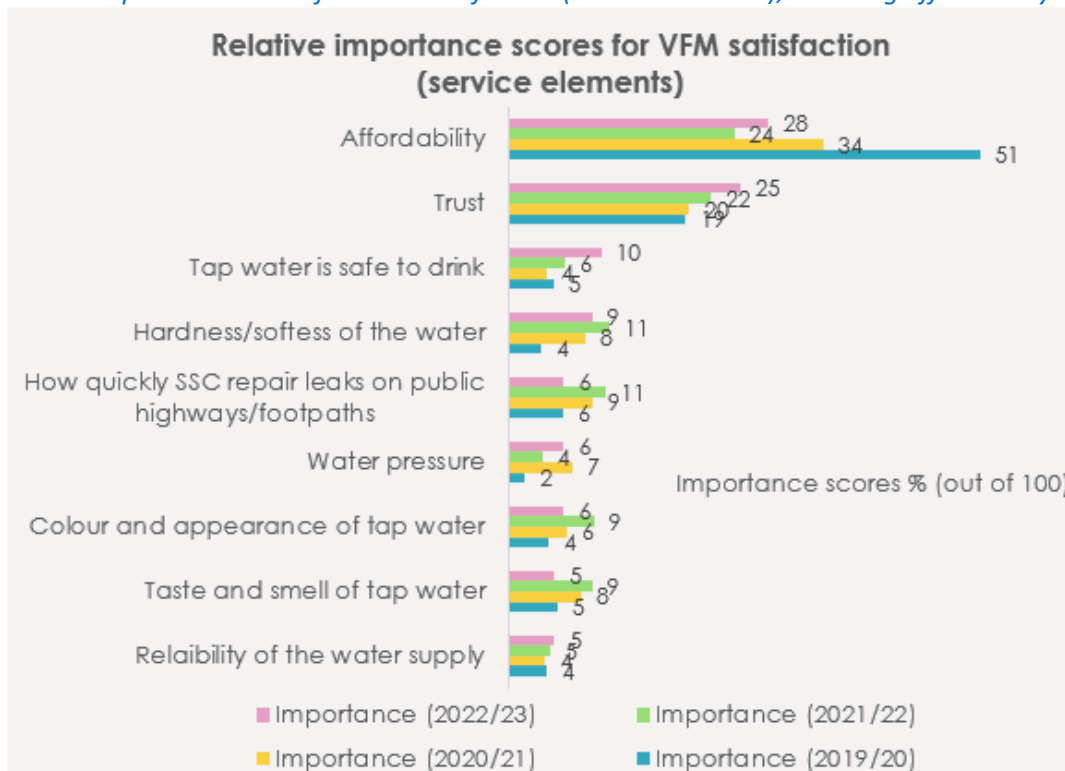


Figure 14.8: Relative importance scores for VFM satisfaction (service elements), including affordability and trust



Customer priorities and expectations

Customers expect continual water supply and pressure from SSC. This is supported by multiple studies including the *SSC – Customer Priorities Infographic (2022)* which aimed to provide insight presenting customers’ priorities for now and the future by speaking to customers from all walks of life.

From the *SSC – Customer Promises Tracker Annual Report (2023) (Turquoise)* study, customers considered water pressure to be a current ‘hygiene attribute’, meaning it is an expected basic service that should be provided currently. This study also conducted a maximum difference scaling (MaxDiff) analysis to assess preferences or priorities among the water related areas seen in *Figure 14.9*. SSC customers were presented with a series of areas which they had to rank as the most and least priority. The difference in selection frequency was then analysed to determine the relative importance/ priority of the options in a statistically robust manner.

Results from the Max Diff analysis found that having water coming out of taps at a pressure that does not impact the way water is used around the home (like showers) was identified as the 12th highest priority out of 20 other initiatives tested (*Figure 14.9*).

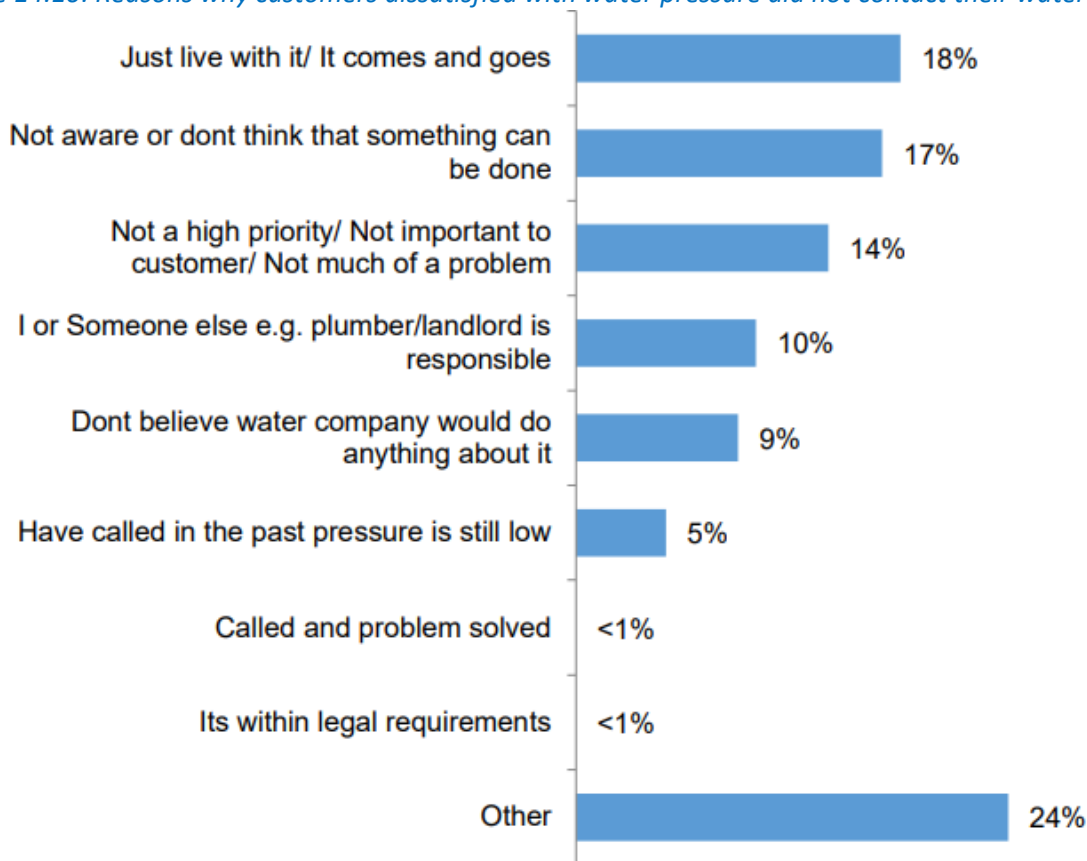
Figure 14.9: Quantitative ranking of initiatives - Top to bottom priority scores



The SSC – *Customer Priorities Research Qual and Quant Year 3 (2022) (Accent)* found when customers were asked to predict challenges for SSC, they predicted huge challenges for the water industry such as increasing infrastructure costs and addressing burst pipes, leakage and pipe pressure. When asked about spontaneous short-term priorities, both HH and NHH customers mentioned water pressure under the category of quality of water/ hardness. This was driven by the need to improve water pressure in the shower for HHs. Even on a wider community basis, the quality of water was the number one spontaneous short-term priority mentioned as a basic service, with maintaining good pressure being driven by the need to ensure quality in the light of population growth and climate change.

In the *CCW and Ofwat– Water Consumer Views (2023)*, 37% of customers who were dissatisfied with their water pressure contacted their water company in both England and Wales. However, for those who were dissatisfied and did not contact their water company, the number one reason was because they thought it was something they just live with or is something that comes and goes (18%) (Figure 14.10). Following closely, 17% also were not aware or did not know something could be done. This suggests some customers have no expectations from water companies in terms of responsibility and fixing issues related to water pressure. This, however, is through a lack of knowledge of what water companies may be able to do such as checking for leaks that may be causing a low water pressure.

Figure 14.10: Reasons why customers dissatisfied with water pressure did not contact their water company



Base: All respondents dissatisfied with water pressure and didn't contact their company about the issue (n=302)

This result, however, is more likely to be reflecting a more national picture than specific with SSW as out of the 453 customers who did experience issues with their water pressure, only 12 were from SSC and 11 from CAM with 42% and 36% contacting the company about water pressure, respectively (Table 14.4).

Table 14.4: Whether customers contacted water company about water pressure – Water Only Company

Made contact	2022
Industry (2022 base sample: 453)	37%
Total WoCs (2022 base sample: 178)	27%
Affinity Water (2022 base sample: 28)	21%
Bristol Water (2022 base sample: 20)	25%
Cambridge Water (2022 base sample: 11)	36%
Essex & Suffolk Water (2022 base sample: 15)	33%
Portsmouth Water (2022 base sample: 13)	15%
South East Water (2022 base sample: 53)	26%
South Staffordshire Water (2022 base sample: 12)	42%
SES Water (2022 base sample: 20)	30%

Caution: some low base sizes

In terms of WTP, the SSC – NERA Willingness to Pay for Water Services at PR24 (2022) study found across both regions, for both NHH and HH customers, there was no WTP for improving the experience of low water pressure - described as lasting up to 6 hours in this study - as the model returned negative values (Table 14.5). One possible explanation for the lack of WTP is that the consequences of experiencing low water pressure for up to 6 hours was not seen as a significant inconvenience by many customers. Certainly this attribute was among those with smaller proportions of customers choosing an improvement and the larger proportions choosing a downgrade (22% and 25% of HH customers choosing an improvement in SST and CAM respectively, 60% and 41% choosing a downgrade). This is much lower than the most improved attribute 'Supporting nature and wildlife' (65% and 57% choosing an improvement in SST and CAM, only 28% and 15% choosing a downgrade), but is above the least improved attribute 'Temporary Use Bans' wildlife' (only 11% and 15% choosing an improvement in SST and CAM, 65% and 58% choosing a downgrade). Broadly similar patterns were observed for NHH customers.

Table 14.5: Main model WTP per Unit Change from Status quo.

Attribute	Unit	HH WTP (£)		NHH WTP (% of bill)	
		SST	CAM	SST	CAM
A Customer service	reduction in the percentage of costumers that wait more than 10 minutes	-0.07	0.00	N/A	N/A
B Risk of temporary "do not drink" notice	reduction in number of properties that received "do not drink" notice	0.74	0.97	0.013	0.015
C Installing "smart" water meters	increase in the percentage of properties having an operational "smart" meter by 2030	-0.21	-0.30	-0.004	-0.008
D Hard water supply	increase in the number of properties that benefit from investment (thousands)	0.00	0.03	-0.0002	-0.001
E Lead pipes	reduction in the percentage of properties that have a lead supply pipe by 2030	-0.86	-0.13	-0.017	-0.017
F Water lost to leakage from pipes	reduction in the percentage of water that is lost to leakage	0.61	1.40	0.001	0.010
G Issues with tap water colour, taste, or smell	reduction in the percentage of properties experiencing issues with tap water per year (tenth of a percentage)	-0.17	0.11	-0.001	-0.014
H Chance of property flooding from a burst pipe	reduction in the flooding incidents per year	0.16	1.03	0.002	0.005
I Low water pressure	reduction in the percentage of properties experiencing low pressure per year (tenth of a percentage)	-0.27	-0.12	-0.003	-0.001
J Supporting nature and wildlife	increase in the number of acres protected and enhanced (tens)	0.03	0.28	0.0002	0.003
K Unplanned short interruptions to water supply	reduction in the percentage of properties experiencing a short interruption per year (hundredth of a percentage)	-0.19	-0.01	-0.002	-0.002
L Risk of temporary use ban, including hosepipes	reduction in the percentage chance of temporary use ban in a given year	-5.99	-0.30	-0.089	-0.024

Note: NHH customers were not asked about attribute A (customer service).
Source: NERA analysis of SSCW WTP survey

Pressure attracts a value when measured in terms of what customers would want to be compensated for if they experience a drop in water pressure, as measured in the *SSC – ODI Research (2023) (Accent and PJM Economics)* and shown in Table 14.6. However, it is clearly ranked below a number of other issues, most important of which are an unexpected supply interruption and drought restrictions.

Table 14.6: WTA values for service issues

	HH	NHH
Emergency drought restrictions (2 months)	£292	£22,071
Unexpected water supply interruption (24h)	£307	£29,140
Do not drink notice (48h)	£211	£14,669
Boil water notice (48h)	£201	£9,093
Unexpected water supply interruption (6h)	£172	£10,709
Water taste and smell (24h)	£118	£7,756
Discoloured water (24h)	£134	£5,540
Discoloured water (6h)	£99	£5,222
Water taste and smell (6h)	£108	£5,915
Planned water supply interruption (6h)	£76	£9,219
Unexpected low water pressure (6h)	£70	£4,238
Hosepipe ban (5 months)	£48	£1,353

Priorities within subgroups – region, gender and FBPs

Across the sources, subgroup differences were observed within various demographics. In the *SSC – Customer Priorities Research Tracker Quantitative Insights Year 3 (2023) (Accent)* report, a significant difference was defined as:

1. having a rank difference of at least 3 places
2. at least one initiative is in the top third of the ranking (1st to 7th rank)
3. the difference between priority scores is statistically significant at the 10%.

No significant regional differences were found between CAM and SSW for water pressure ranking. In year 3, 21% of respondents ranked water pressure as most important – contrasting with 58% for water quality and positioned 9th when all attributes are ranked by this measure, level with water saving incentives. In the previous year, it was a little more important, with 27% ranking it as most important.

Water pressure was also a higher priority for high income households (*SSC – Customer Priorities Research Tracker Quantitative Insights Year 3 (2023) (Accent)*) male customers, those who had previously contacted SSC regarding low pressure and those who are in SSC’s attitudinal segment C (*SSC – Customer Priorities Tracker Quant Year 2 (2022) (Accent)*).

As shown before, water pressure is only a priority once a reliable supply of good quality water at an affordable price has been delivered, as reliability and affordability are ranked in first and second place respectively in both years. As seen above, in the recent PR24 work (*SSC – NERA Willingness to Pay for Water Services at PR24 (2022)*), no positive WTP was attached to this attribute.

Despite having not WTP values for FBPs due to the limited sample size (91) of each region, the raw data and the WTP for the combined regions (*Table 14.7*) suggest low water pressure is not an important attribute for FBPs and they are willing to forgo the current status quo level of service to reduce the impact on their bill and instead would like focus to be in other attributes and the WTP value is negative, which essentially means they are not WTP anything.

Table 14.7: FBP Main Model WTP per Unit Change from Status quo

Attribute	Unit	WTP per unit change from SQ (£)
A Customer Service	reduction in the percentage of costumers that wait more than 10 minutes	-0.36
B Risk of a temporary "do not drink" notice	reduction in number of properties that received "do not drink" notice	1.01
C Installing 'smart' water meters	increase in the percentage of properties having an operational "smart" meter by 2030	-0.25
D Hard water supply	increase in the number of properties that benefit from investment (thousands)	-0.01
E Lead pipes	reduction in the percentage of properties that have a lead supply pipe by 2030	-2.43
F Water lost to leakage from pipes	reduction in the percentage of water that is lost to leakage	0.83
G Issues with tap water colour, taste, or smell	reduction in the percentage of properties experiencing issues with tap water per year (tenth of a percentage)	-1.51
H Chance of property flooding from a burst pipe	reduction in the flooding incidents per year	0.88
I Low water pressure	reduction in the percentage of properties experiencing low pressure per year (tenth of a percentage)	-0.82
J Supporting nature and wildlife	increase in the number of acres protected and enhanced (tens)	0.10
K Unplanned short interruptions to water supply	reduction in the percentage of properties experiencing a short interruption per year (hundredth of a percentage)	-1.15
L Risk of temporary use ban, including hosepipes	reduction in the percentage chance of temporary use ban in a given year	-3.66

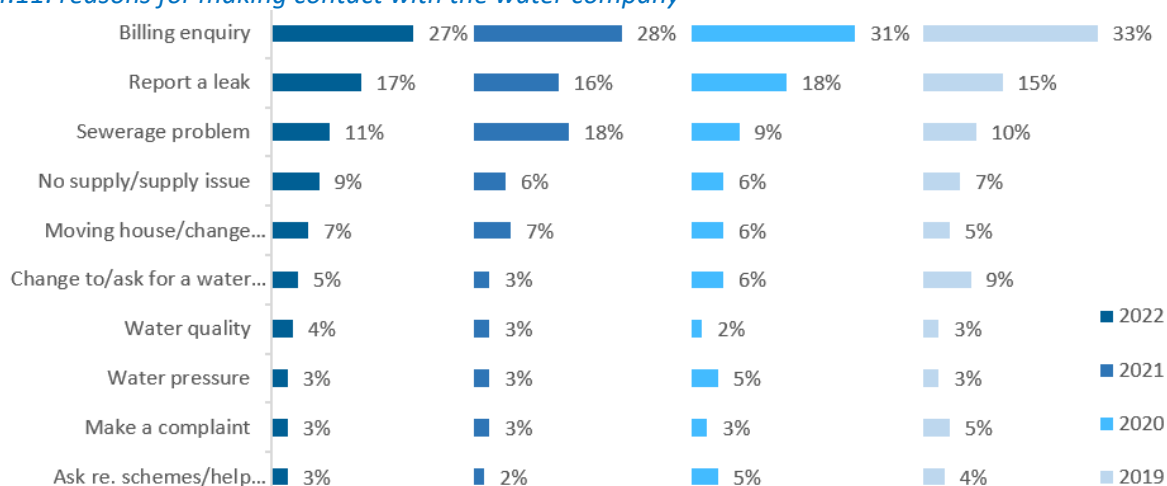
Source: NERA analysis of SSCW WTP survey

Unplanned short interruptions to water supply

Customer experience and satisfaction

Nationally, 9% of customers from the *CCW and Ofwat– Water Consumer Views (2023)*, covering both England and Wales, had contacted their water company due to no supply/ supply issues in the last 12 months. This was an increase compared to the years 2019-2021 (*Figure 14.11*).

Figure 14.11: reasons for making contact with the water company



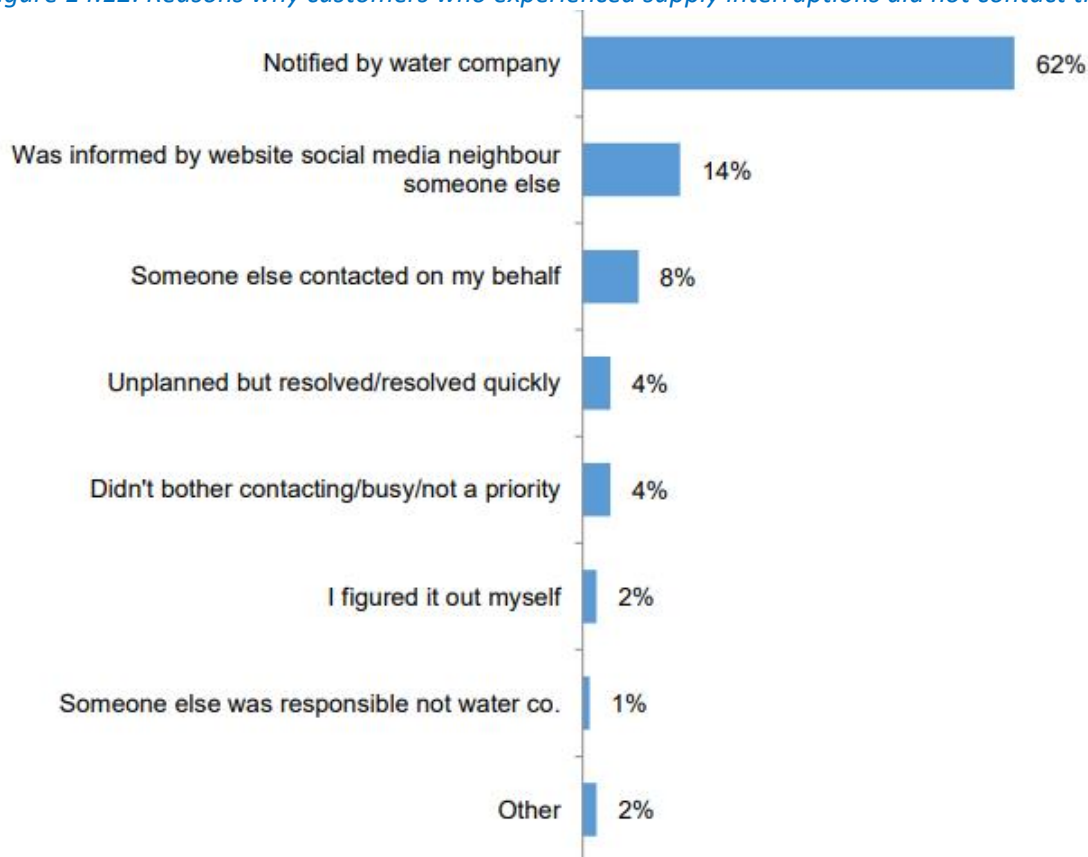
Footnote: Reasons for contact below 3% for 2021, are not shown.

Of those who did experience service interruptions (either planned or unplanned), 23% had reached out to their water company about it.

Looking specifically at the SSC customer, CAM customers (150) experienced more interruptions to their supply at 16% than SSW customers (150) at 16%. However, more CAM customers contacted the water company (18%), than SSW customers (13%).

Those who did not contact their water supply despite experiencing either planned or unplanned interruptions was because they were notified by the water company (62%) or had been informed by the website/ social media or their neighbours (Figure 14.12).

Figure 14.12: Reasons why customers who experienced supply interruptions did not contact their water company

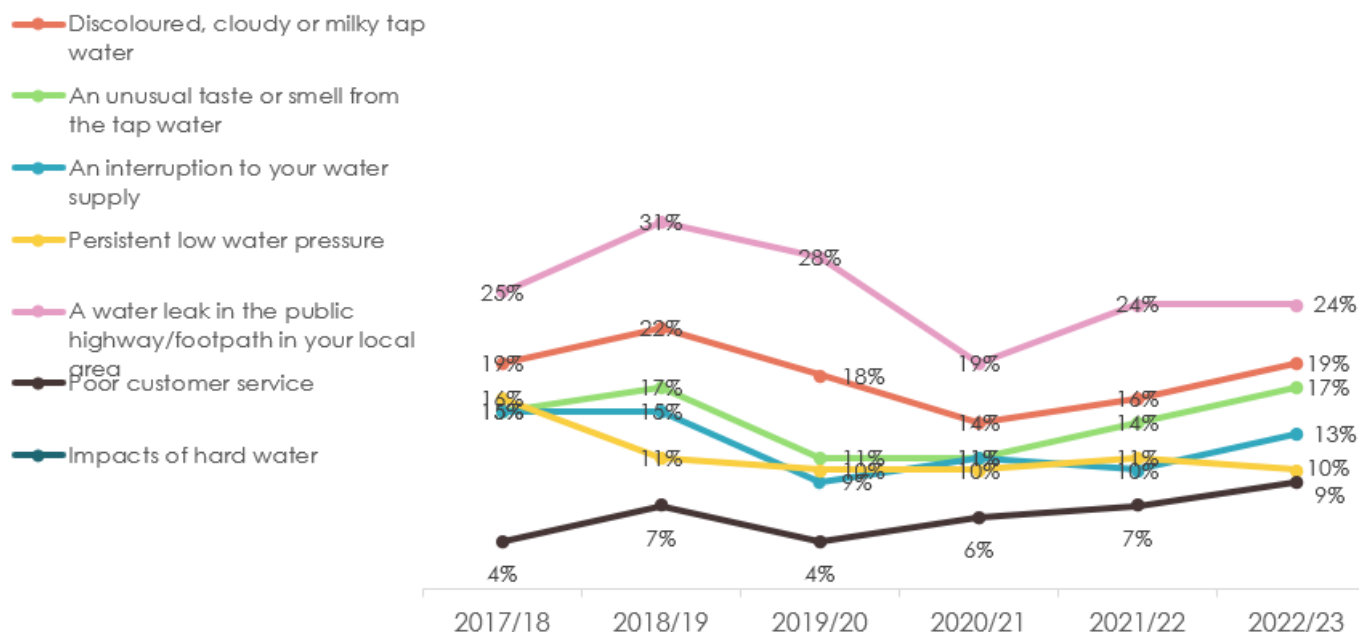


Base: All respondents experiencing service interruptions and not contacting their company about the issue (n=1099)

The SSC – Customer Priorities Research Tracker Quantitative Insights Year 3 (2023) (Accent) found 56% of customers had experienced some form of service issue over the previous two to three years, with 14% in total experiencing a temporary loss of water supply for more than an hour. Broken down by region, 15% of CAM customers and 14% of SSW customers had experienced a temporary loss of water supply.

The SSC – Customer Promises Tracker Annual Report (2023) (Turquoise), which monitors ongoing customer satisfaction and experiences, found that between 2017/18 and 2021/22, the percentage of customers experiencing an interruption to their water supply has increased from 10% to 13% (Figure 14.13).

Figure 14.13: Percentage of Customers who had experience of service issues in the last year (HH).



Reflecting the low rates of supply interruption experienced by customers, the *SSC – Customer Promises Tracker Annual Report (2023) (Turquoise)* also found 94% of SSC HH customers were satisfied with the reliability of their water. Regionally, CAM HH customers had slightly higher satisfaction with the reliability of supply (96%) compared with SSW (93%) (Table 14.8). For NHH customers overall, 98% of customers were satisfied.

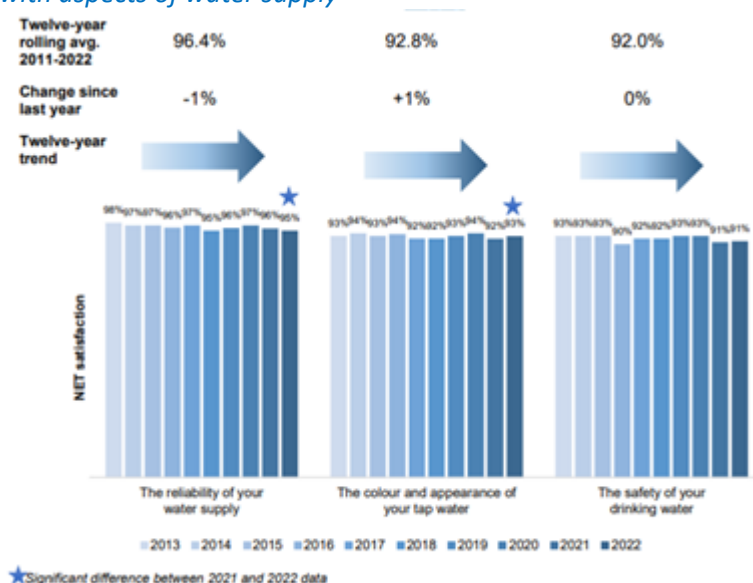
Table 14.8: Satisfaction of the reliability of water supply in both HH and NHH SSC customers.

Satisfaction (% very or fairly satisfied)	Overall HH	SSW HH	CAM HH	NHH
	94%	93%	96%	98%

Changes overtime – customer satisfaction and experience

The national satisfaction for reliability of water supply shows a general downward trend based on the data from the *CCW and Ofwat– Water Consumer Views (2023)*. In 2022, the satisfaction was at its lowest between 2022-2019 at 95%, lower than the 10-year rolling average of 96.4% (Figure 14.14). This level was also reached in 2018.

Figure 14.14: Satisfaction with aspects of water supply



However, when looking at the data just for SSC in this report, both SSW and CAM have higher satisfaction scores for the reliability of water supply than the industry satisfaction of 95% with SSW scoring 99% and CAM scoring 97% in 2022 (Table 14.9).

Table 14.9: Satisfaction with aspects of water supply 2022 – Water only Companies

Satisfaction with aspects of water supply (2020 data only)	The reliability of water supply	Colour and appearance of tap water	Safety of drinking water	Water pressure	Taste and smell of tap water	Hardness / softness of water
Industry (2022 base sample: 5502)	95%	93%	91%	88%	86%	65%
Total WoCs (2022 base sample: 1940)	96%	92%	90%	87%	85%	52%
Affinity Water (2022 base sample: 250)	96%	92%	89%	87%	84%	42%
Bristol Water (2022 base sample: 300)	97%	95%	94%	90%	88%	61%
Cambridge Water (2022 base sample: 150)	97%	95%	94%	92%	88%	49%
Essex & Suffolk Water (2022 base sample: 150)	98%	90%	86%	86%	84%	54%
Portsmouth Water (2022 base sample: 150)	96%	95%	93%	84%	88%	49%
South East Water (2022 base sample: 550)	92%	91%	89%	85%	84%	52%
South Staffs Water (2022 base sample: 150)	99%	89%	88%	87%	82%	63%
SES Water (2022 base sample: 151)	96%	94%	93%	84%	89%	58%

Footnote: Companies with the highest levels of perceived performance are highlighted in green text whilst lowest levels are highlighted in red.

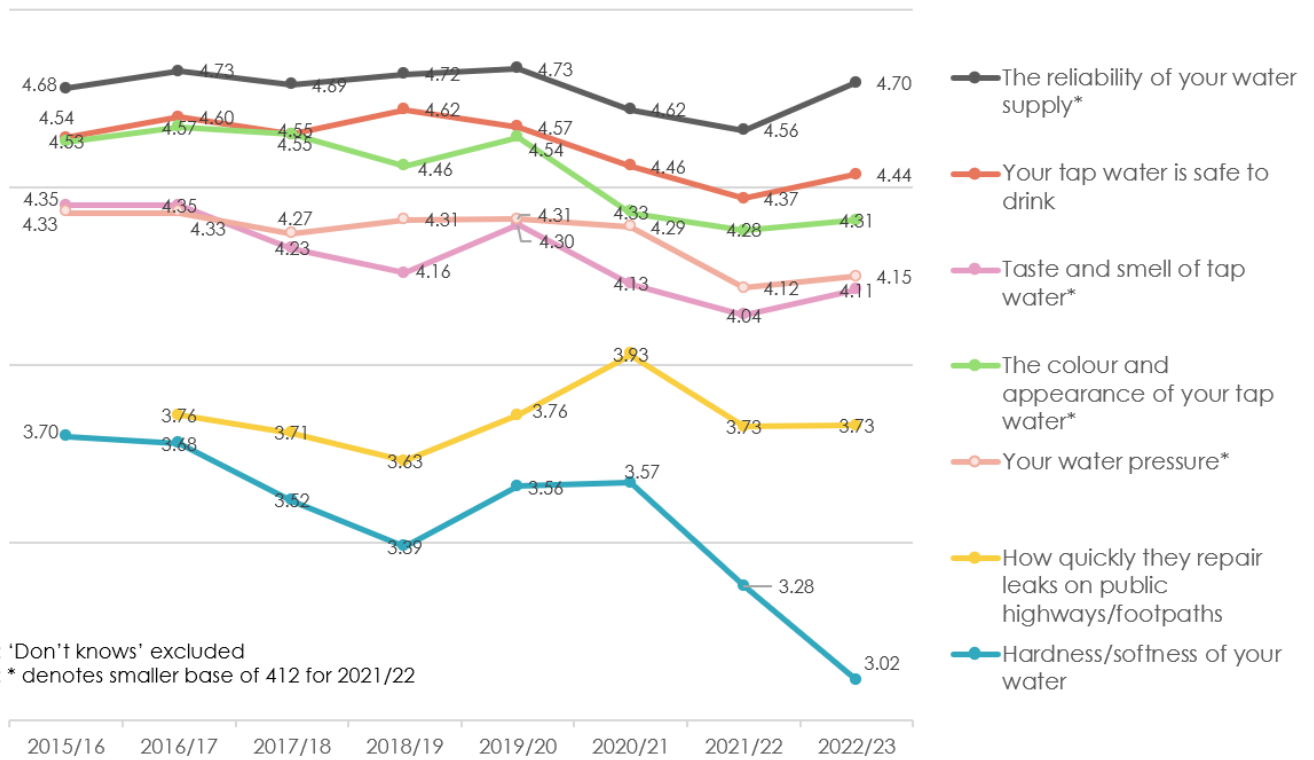
Over the 10 years, satisfaction with the reliability of water supply has remained stable for SSC, with CAM performing better at 97.5% and SSW at 96.3% (Table 14.10).

Table 14.10: Satisfaction with aspects of water supply – Water only Company trends (arrows) and 10-year rolling averages (figures).

Satisfaction with aspects of water supply (twelve-year trend)	The reliability of water supply	Colour and appearance of tap water	Safety of drinking water	Water pressure	Taste and smell of tap water	Hardness / softness of water
Industry (2022 base sample: 5502)	↔ 96.4%	↔ 92.8%	↔ 92.0%	↓ 88.3%	↔ 86.7%	↔ 67.9%
Total WoCs (2022 base sample: 1940)	↔ 96.6%	↑ 92.2%	↔ 91.3%	↔ 87.6%	↔ 85.8%	↓ 56.5%
Affinity Water (2022 base sample: 250)	↑ 96.1%	↑ 90.8%	↑ 89.1%	↔ 85.5%	↔ 82.7%	↔ 45.5%
Bristol Water (2022 base sample: 300)	↑ 97.2%	↑ 93.6%	↑ 92.6%	↔ 89.0%	↔ 87.7%	↓ 62.9%
Cambridge Water (2022 base sample: 150)	↔ 97.5%	↔ 94.8%	↔ 94.5%	↔ 91.0%	↔ 88.3%	↔ 52.2%
Essex & Suffolk Water (2022 base sample: 150)	↓ 97.2%	↔ 92.4%	↔ 91.1%	↓ 87.7%	↓ 87.5%	↓ 53.1%
Portsmouth Water (2022 base sample: 150)	↔ 97.4%	↔ 93.9%	↔ 92.9%	↓ 88.5%	↔ 88.4%	↓ 57.5%
South East Water (2022 base sample: 550)	↔ 95.7%	↔ 91.2%	↔ 90.7%	↓ 87.7%	↔ 83.1%	↓ 58.0%
South Staffs Water (2022 base sample: 150)	↔ 96.3%	↔ 92.0%	↓ 92.1%	↔ 88.5%	↔ 85.6%	↔ 70.6%
SES Water (2022 base sample: 151)	↔ 97.7%	↔ 94.8%	↔ 94.8%	↓ 88.3%	↔ 92.4%	↓ 66.4%

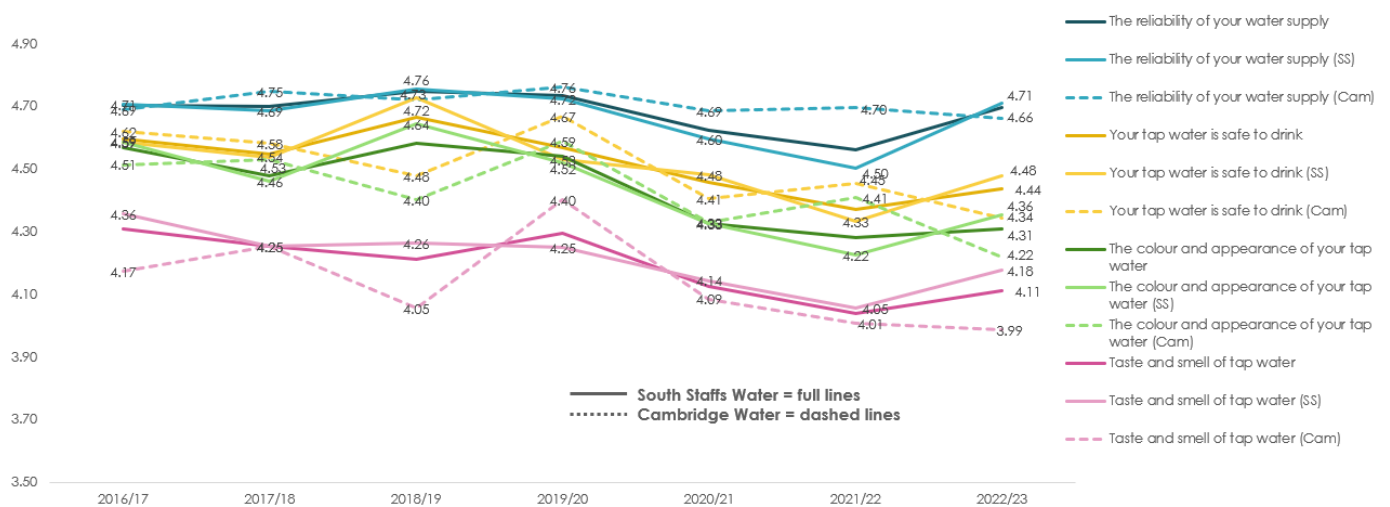
When assessing customer satisfaction with reliability of supply (on a five-point scale), the SSC – *Customer Promises Tracker Annual Report (2023) (Turquoise)* found that between 2015 and 2023 satisfaction scores ranged between 4.56-4.73 on average, indicating a relatively high level of satisfaction overall. Compared to 2021/22, in 2022/23, satisfaction score for supply reliability jumped from 4.56 to 4.70 (Figure 14.15). This is going against the downward trend suggested based on 2019-2022 data. This may be a response to the previous years' performance of 4.56 as it was the lowest level of satisfaction with water supply reliability recorded.

Figure 14.15: HH Satisfaction with the Service Areas Trends (Average scores)



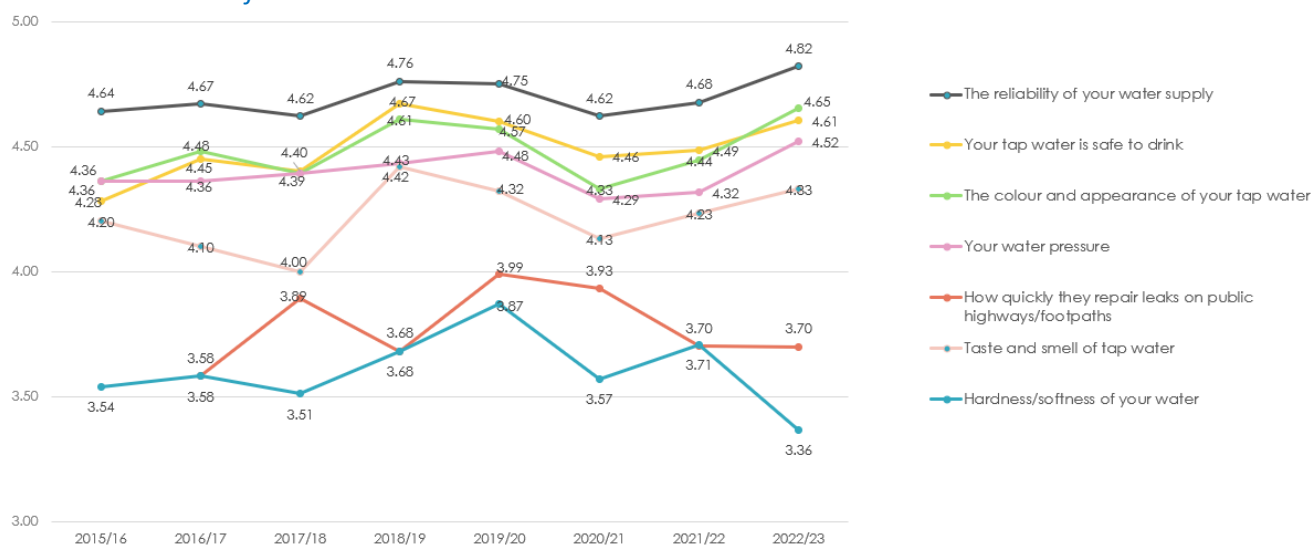
A further breakdown into the two regions found satisfaction with reliability of water supply was higher for SSW than CAM between 2021/22 and 2022/23. This is a change from the previous three years where CAM had higher satisfaction with reliability of water (Figure 14.16).

Figure 14.16: HH satisfaction with the service areas trends by region



Similarly, for NHH customer satisfaction with the reliability of water supply in 2022/23 was the highest scoring service area measure, with satisfaction ranging between 4.62- 4.82, with the highest score for supply reliability being 2022/23 at 4.82. This was a significant jump from the previous year of 4.68 (Figure 14.17).

Figure 14.17: NHH satisfaction with the service area trends

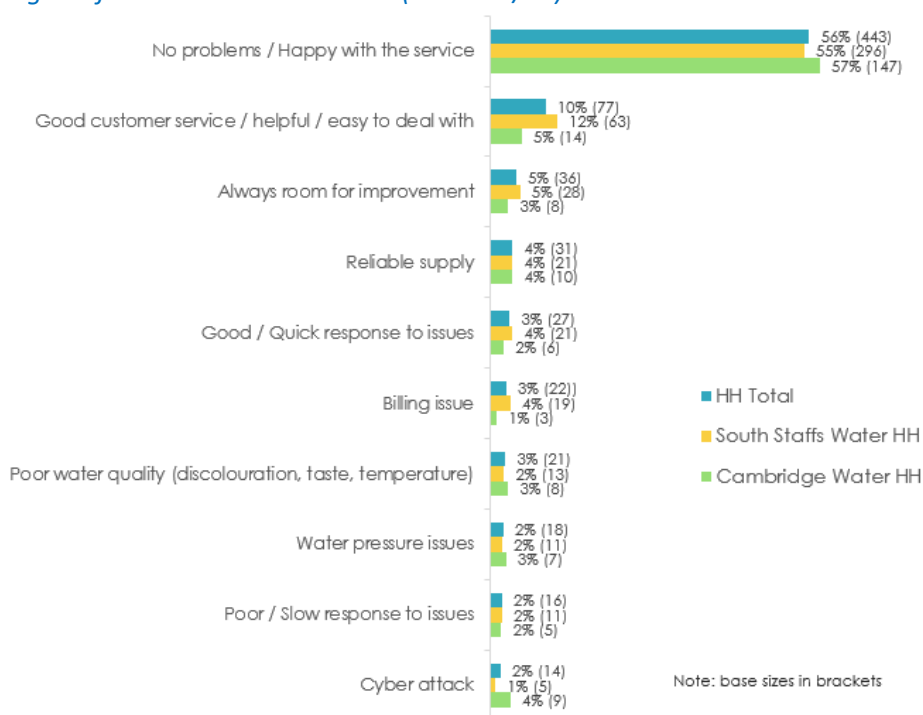


Satisfaction with reliability of supply seems to influence other satisfaction elements, such as overall service and value for money. In the SSC – Customer Promises Tracker Annual Report (2023) (Turquoise), 4% of HH customers said the reason they gave their overall service score was because of reliable supply.

“Once again fresh clean and water reliably supplied to the property always to standard.” SSW HH Customer.
 “Because the service has been reliable and communication has been good. I have not experienced any issues as a customer.” CAM HH Customer from the SSC – Customer Promises Tracker Annual Report (2023) (Turquoise).
 “Believe they carry out a good service – we have always had a constant supply and never any reason to call them.” SSW NHH Customer from the SSC – Customer Promises Tracker Annual Report (2023) (Turquoise).

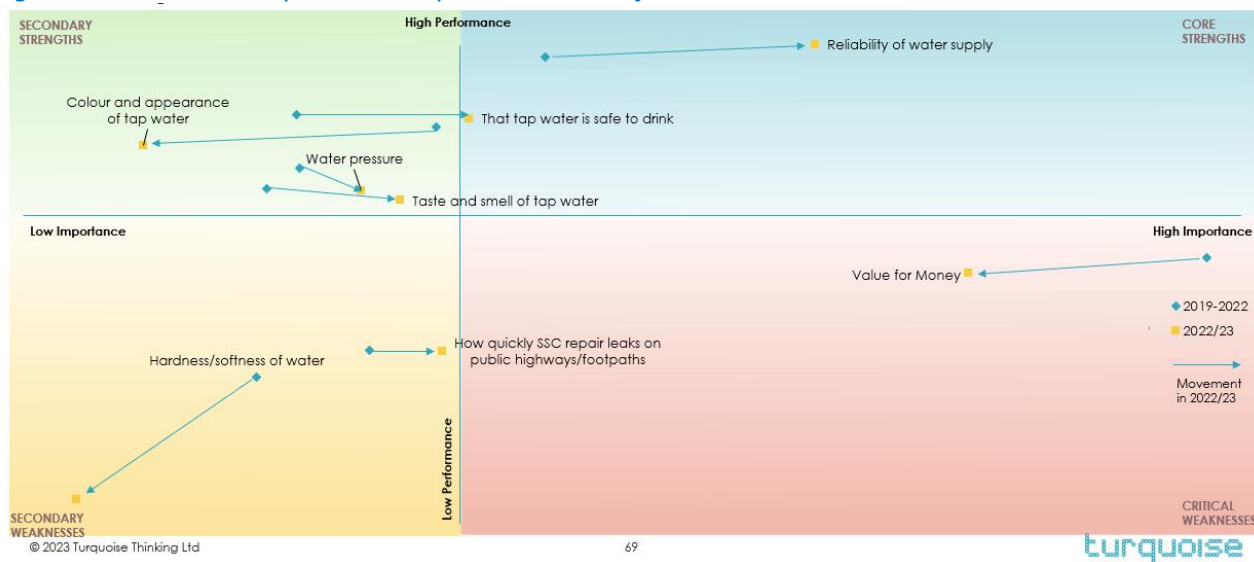
Regionally, 4% of customers from each region also said the reason for their overall service score was due to reliable supply of water (Figure 14.18).

Figure 14.18: Reasons given for Overall Service Scores (HH 2022/23)



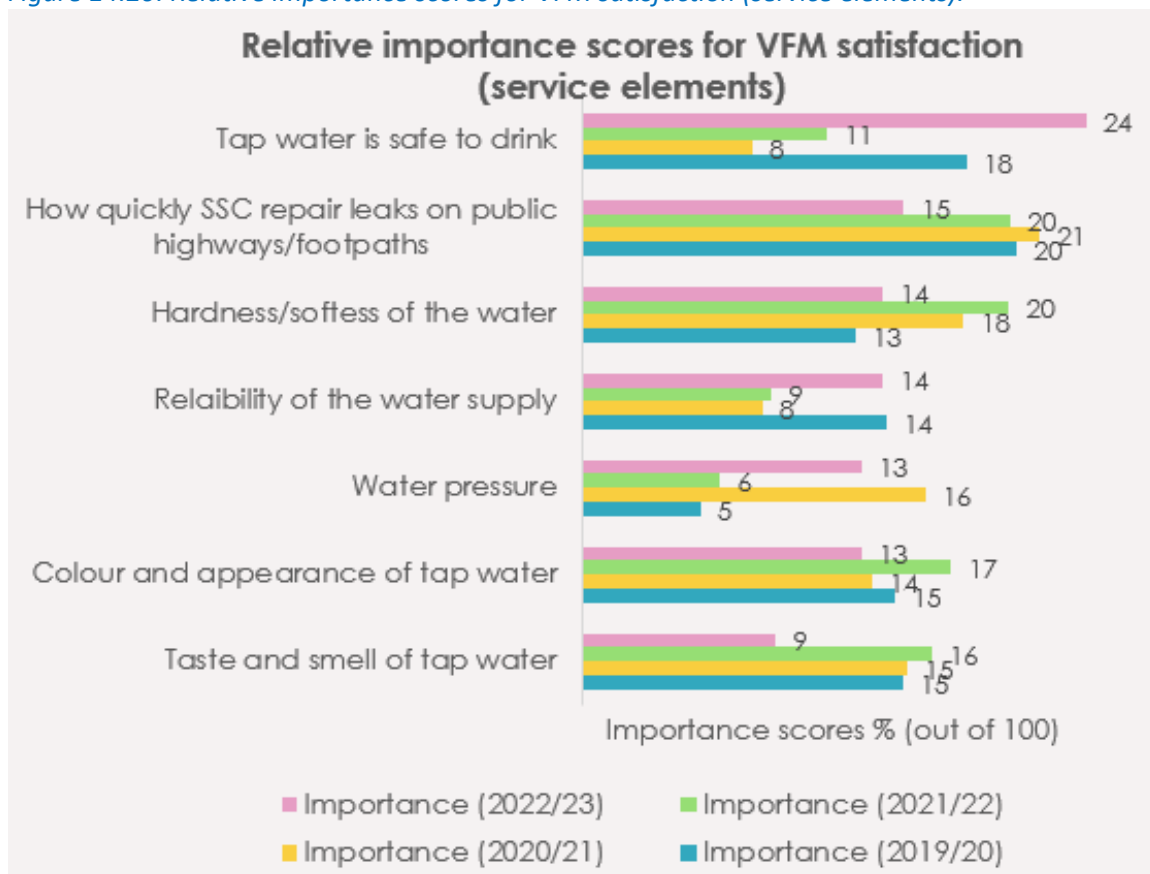
Evidence from derived importance map supports this. From 2019/22 to 2022/23, reliability of water remained in the top right quadrant but moved more towards the centre became more of a core strength. This suggests it is one of the most influential service elements on overall satisfaction score, out of 8 others analysed, with the greatest positive effect where if satisfaction with supply reliability increase, it would also increase overall service satisfaction (Figure 14.19).

Figure 14.19: Derived importance Map on overall satisfaction and individual water attributes 2019-22 – 2022/23



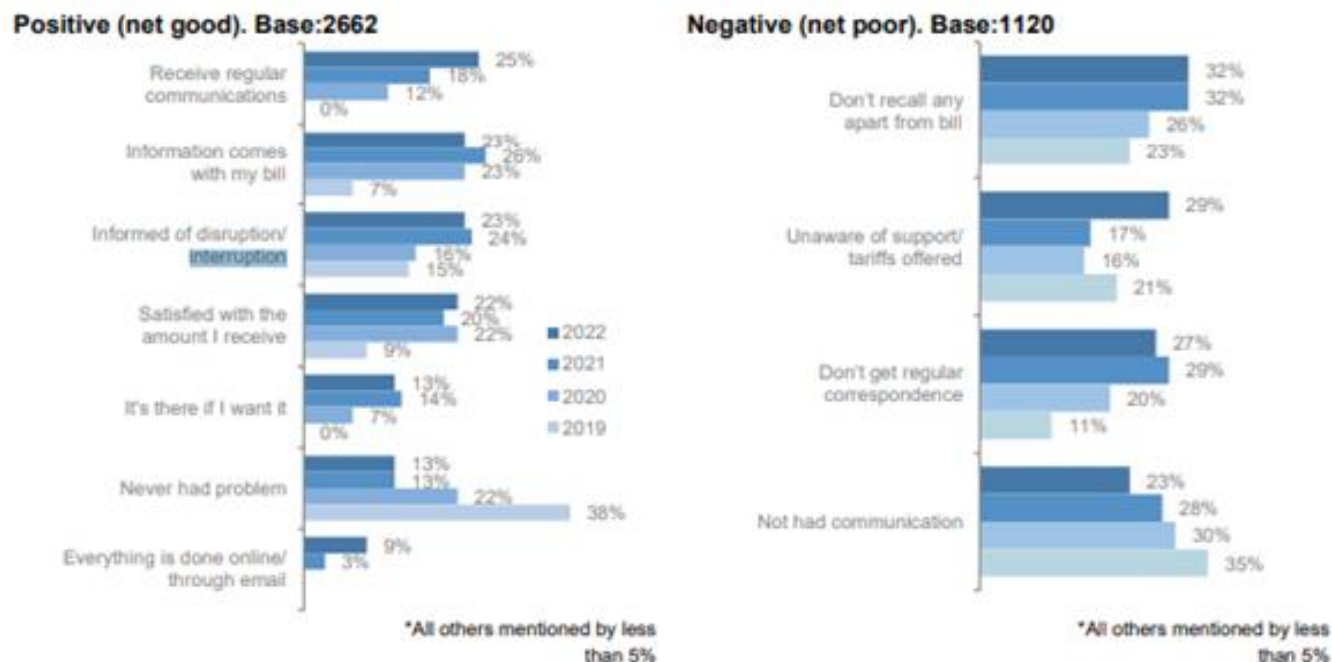
In terms of impact on value for money (VFM), reliability of water supply was 4th out of 7 other service elements in terms of important for predicting VFM satisfaction in 2022-23 at 14% (Figure 14.20).

Figure 14.20: Relative importance scores for VFM satisfaction (service elements).



Furthermore, in the *CCW and Ofwat – Water Consumer Views (2023)*, customers were asked to rate water companies on their services and plans and, for the 23% of respondents who said they had had a positive experience, the reason given was due to having been kept informed about disruptions/ interruptions in 2022 (Figure 14.21). This is an increase from the previous years (2019-2021) suggesting that being informed about any interruptions to their supply is becoming increasingly important for customers and that it is affecting customer’s perceptions of communication on service and plans.

Figure 14.21: Reasons for rating how well water companies communicate on services and plans.



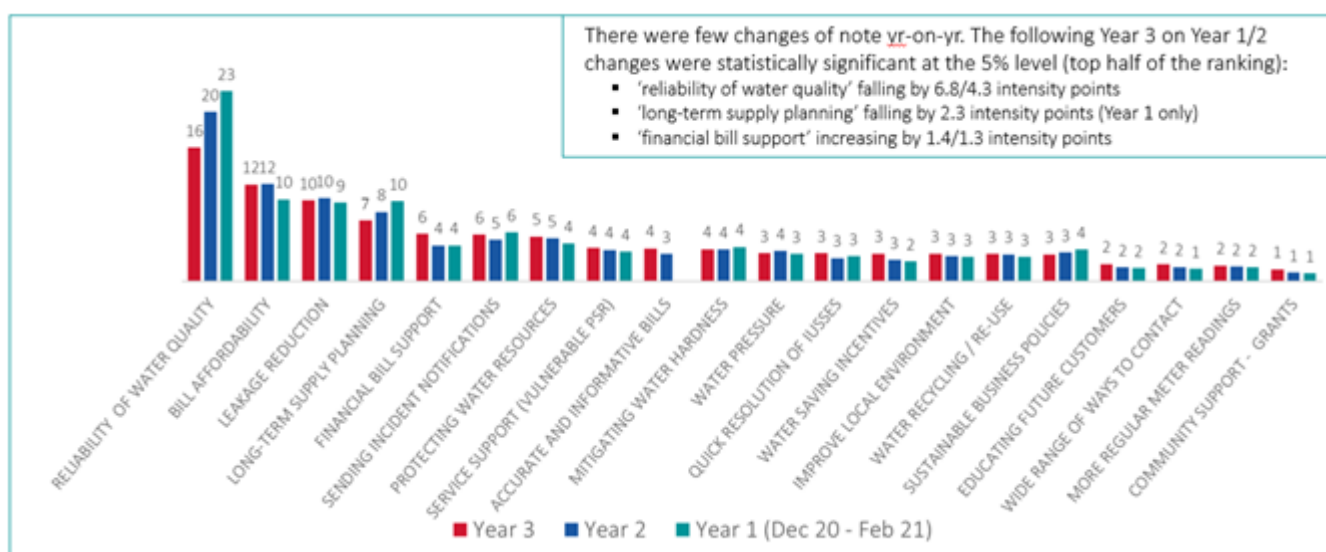
Customer priorities and expectations

The *SSC – Customer Priorities Tracker Qual Year 1 (2020) (Accent)* found when customers were asked to generate a spontaneous priority, ‘continuity of supply, ensuring 24/7 supply of water’, was ranked second, after quality of water.

Building on this information, the *SSC – Customer Priorities Tracker Quant Year 2 (2022) (Accent)* report also found customers think SSC should focus on reliability of supply. When asked to spontaneously share what customers think SSC should focus on, reliability of supply was ranked third of the 22 other areas tested, after water quality and lower bills. This was also the case for previous years.

This theme continues in the results from the Max Diff choice exercise from the *SSC – Customer Priorities Research Tracker Quantitative Insights Year 3 (2023) (Accent)*, where reliability of water quality, making sure households received water supplies that are high quality and always safe to drink, was the number one priority, as in previous years (Figure 14.22). Customers believed water to be an essential human right that nobody should ever be without.

Figure 14.22: Max Diff - Informed SSC customer priorities measured on a 0-100 scale across 2021/2022/2023 from Customer Priorities Tracker Year 2 (2023)



Additionally, long-term supply planning, ensuring “they [SSW] have detailed plans to make sure drinking water always comes out of your taps – today, tomorrow and long into the future”, was fourth. Sending incident notifications where water companies “always tell you [customers] if your water supply is to be cut off temporarily and/ or if there is an issue with the quality of your water” was fifth place although with not much difference in scores between Long-term supply planning and Sending incident notifications.

The results from the Max Diff study suggests customers expect a reliable source of water without unexpected supply interruptions today, or in the future. However, if such interruptions or incidents were to occur, timely communication would also be expected.

In the third year of the tracking research, the SSC – Customer Priorities Research Qual and Quant Year 3 (2022) (Accent) report also found that having 24/7 supply was second in priority after the single attribute ‘quality of water/ hardness’ for both HH and NHH when asked about spontaneous priorities. This was driven by businesses wanting to ensure they can effectively and efficiently maintain convenient service. A similar picture is also found when considering the wider community as customers seem to be aware of the need to manage supply for increasing population (Figure 14.23).

Figure 14.23: Short term spontaneous priorities – qualitative hierarchy



In terms of WTP, the SSC – NERA Willingness to Pay for Water Services at PR24 (2022) found both HH and NHH customers in both regions were not willing to pay to reduce the percentage of properties experiencing a short interruption per year as the model used to calculate the values did not return positive values (Table 14.11). Like low water pressure, one suggestion for this value may be because unplanned short interruptions to water supply lasting 3-6 hours is not seen as a major inconvenience to the customers. In contrast, the PR24 ODI study (Accent/PJM Research 2022) indicated that both HH and NHH customers expected to be compensated of an interruption was experienced, more than twice as much as low water pressure and not far behind ‘water not safe to drink’.

Table 14.11: Main model WTP per Unit Change from Status Quo

Attribute	Unit	HH WTP (€)		NHH WTP (% of bill)	
		SST	CAM	SST	CAM
A Customer service	reduction in the percentage of costumers that wait more than 10 minutes	-0.07	0.00	N/A	N/A
B Risk of temporary "do not drink" notice	reduction in number of properties that received "do not drink" notice	0.74	0.97	0.013	0.015
C Installing "smart" water meters	increase in the percentage of properties having an operational "smart" meter by 2030	-0.21	-0.30	-0.004	-0.008
D Hard water supply	increase in the number of properties that benefit from investment (thousands)	0.00	0.03	-0.0002	-0.001
E Lead pipes	reduction in the percentage of properties that have a lead supply pipe by 2030	-0.86	-0.13	-0.017	-0.017
F Water lost to leakage from pipes	reduction in the percentage of water that is lost to leakage	0.61	1.40	0.001	0.010
G Issues with tap water colour, taste, or smell	reduction in the percentage of properties experiencing issues with tap water per year (tenth of a percentage)	-0.17	0.11	-0.001	-0.014
H Chance of property flooding from a burst pipe	reduction in the flooding incidents per year	0.16	1.03	0.002	0.005
I Low water pressure	reduction in the percentage of properties experiencing low pressure per year (tenth of a percentage)	-0.27	-0.12	-0.003	-0.001
J Supporting nature and wildlife	increase in the number of acres protected and enhanced (tens)	0.03	0.28	0.0002	0.003
K Unplanned short interruptions to water supply	reduction in the percentage of properties experiencing a short interruption per year (hundredth of a percentage)	-0.19	-0.01	-0.002	-0.002
L Risk of temporary use ban, including hosepipes	reduction in the percentage chance of temporary use ban in a given year	-5.99	-0.30	-0.089	-0.024

Note: NHH customers were not asked about attribute A (customer service).
Source: NERA analysis of SSCW WTP survey

More recently, in the *SSC – LTDS Report (2023) (Turquoise)*, the supply interruption ambition, to reduce the average time a property is without a water supply from 2:44 minutes (current) to under 1 minute by 2050, was ranked as a mid-tier priority (Figure 14.24). In the qualitative workshops, supply interruptions was ranked 4th out of 10 ambitions whilst in the quantitative survey was ranked 7th with the sentiment that it should be less of a priority due to the perception that SSC were currently performing well – ranked 4th out of 17 companies at the time and with most citing supply interruptions are rare.

Figure 14.24: Overall ranking of 10 ambitions from the LTDS research based on qualitative and quantitative research



Priorities within subgroups – region, SEG,

Despite the main model in the *SSC – NERA Willingness to Pay for Water Services at PR24 (2022)* report showing SSC customers are not WTP for reducing the occurrence of unplanned short interruptions to water supply in the main model, HH customers in the CAM region were WTP for improvements to reduce unplanned short interruptions to water supply, although this was not significant at the five percent significance level.

One sub-group included customers in the ABC1 socio-economic groups. Although it was predicted that individuals in the ABC1 group might have higher WTP values than individuals in the C2DE group, in the CAM region, positive WTP was seen in the CAM region compared to the SSW region with customers WTP £0.02 per unit reduction in the percentage of properties experiencing a short interruption per year (Table 14.12). However, again this result is only directional and not statistically significant.

Table 14.12: Household customer WTP per Unit change from Status quo – sub-groups for gender and SEG

Attribute	Unit	Men				Women				ABC1			
		SST WTP	p	CAM WTP	p	SST WTP	p	CAM WTP	p	SST WTP	p	CAM WTP	p
G Issues with tap water colour, taste, or smell	reduction in the percentage of properties experiencing issues with tap water per year (tenth of a percentage)	-0.28	0.18	0.28	0.06	-0.14	0.04	-0.05	0.82	0.01	0.86	0.28	0.02
H Chance of property flooding from a burst pipe	reduction in the flooding incidents per year	0.06	0.53	0.63	0.02	0.19	0.00	1.68	0.00	0.26	0.00	1.33	0.00
I Low water pressure	reduction in the percentage of properties experiencing low pressure per year (tenth of a percentage)	-0.33	0.02	-0.09	0.12	-0.23	0.00	-0.14	0.05	-0.21	0.00	-0.09	0.05
J Supporting nature and wildlife	increase in the number of acres protected and enhanced (tens)	0.03	0.00	0.24	0.00	0.02	0.00	0.35	0.00	0.03	0.00	0.29	0.00
K Unplanned short interruptions to water supply	reduction in the percentage of properties experiencing a short interruption per year (hundredth of a percentage)	-0.28	0.02	-0.01	0.84	-0.14	0.00	0.00	0.99	-0.10	0.01	0.02	0.50
L Risk of temporary use ban, including hosepipes	reduction in the percentage chance of temporary use ban in a given year	-10.1	0.02	-0.11	0.55	-3.89	0.00	-0.53	0.09	-4.48	0.00	-0.13	0.42

Source: NERA analysis of SSCW WTP survey

The SSC – NERA Willingness to Pay for Water Services at PR24 (2022) paper found Future Bill Payers (FBP) indicated no positive WTP for reducing the percentage of properties experiencing a short interruption per year (Table 14.13). Once again, it is important to bear in mind the size of the FBP customers (91). However, it does give an indication that FBP do not see water unplanned short interruptions as an area to prioritise for investment if it will increase bills.

Table 14.13: FBP Main Model WTP per Unit Change from Status quo

Attribute	Unit	WTP per unit change from SQ (£)
A Customer Service	reduction in the percentage of costumers that wait more than 10 minutes	-0.36
B Risk of a temporary "do not drink" notice	reduction in number of properties that received "do not drink" notice	1.01
C Installing "smart" water meters	increase in the percentage of properties having an operational "smart" meter by 2030	-0.25
D Hard water supply	increase in the number of properties that benefit from investment (thousands)	-0.01
E Lead pipes	reduction in the percentage of properties that have a lead supply pipe by 2030	-2.43
F Water lost to leakage from pipes	reduction in the percentage of water that is lost to leakage	0.83
G Issues with tap water colour, taste, or smell	reduction in the percentage of properties experiencing issues with tap water per year (tenth of a percentage)	-1.51
H Chance of property flooding from a burst pipe	reduction in the flooding incidents per year	0.88
I Low water pressure	reduction in the percentage of properties experiencing low pressure per year (tenth of a percentage)	-0.82
J Supporting nature and wildlife	increase in the number of acres protected and enhanced (tens)	0.10
K Unplanned short interruptions to water supply	reduction in the percentage of properties experiencing a short interruption per year (hundredth of a percentage)	-1.15
L Risk of temporary use ban, including hosepipes	reduction in the percentage chance of temporary use ban in a given year	-3.66

Source: NERA analysis of SSCW WTP survey

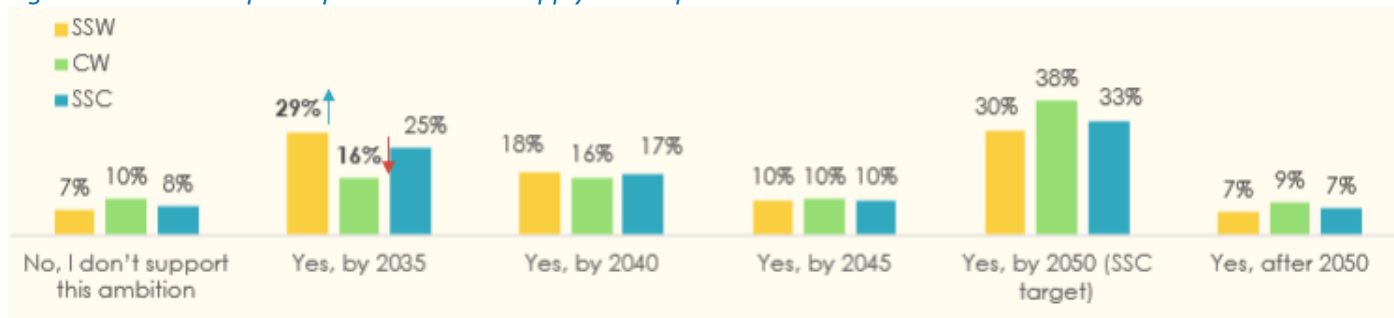
In the SSC – LTDS Report (2023) (Turquoise), like HH customer, NHH customers also felt the supply interruption ambition to reduce the average time a property is without a water supply from 2:44 minutes (current) to under 1 minute by 2050 was less important as SSC are already performing well in this area. However, NHH did rank supply

interruptions higher in the quantitative survey as the second highest priority – often citing their organisation’s reliance on water.

Additionally, over half of NHH (69%) and future customers (72%) would like to see the supply interruption ambition being achieved before the company target of 2050 compared to 52% of HH customers.

Regionally, a significantly higher proportion of SSW HH customers would like the supply interruption ambition of reducing supply interruption from 2:44 min to 1 minute by 2050 to be achieved at the earliest possible date (Figure 14.25) and felt this was possible due to the technology now available, such as smart network that identifies bursts before they happen.

Figure 14.25: When participants want the Supply Interruption ambition to be achieved in the LTDS research.



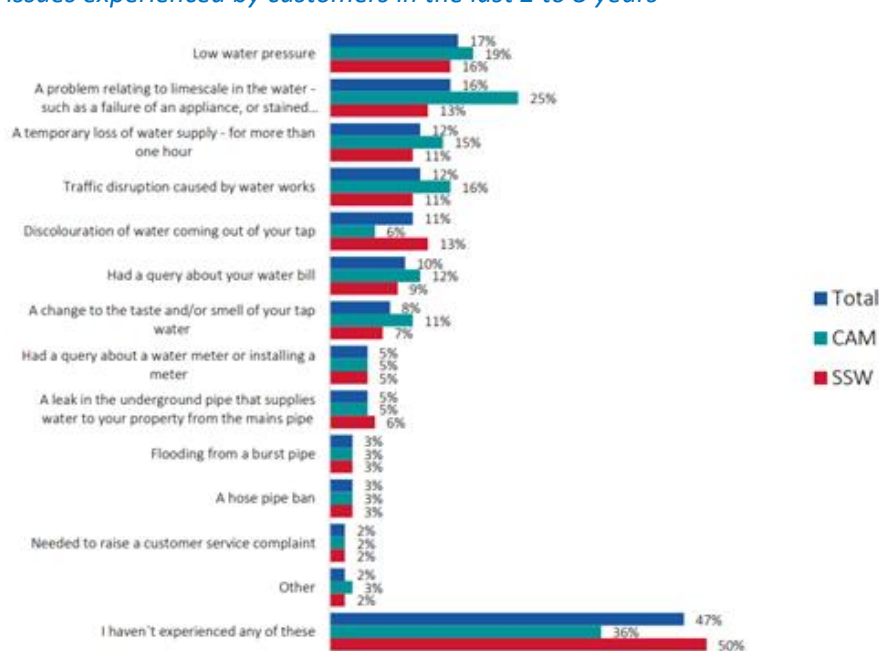
Chance of property flooding from a burst pipe

Customer experience

The SSC – NERA Willingness to Pay for Water Services at PR24 (2022) paper reported that the current levels of flooding incidents per year due to a burst pipe was, on average, 12 per year in the SSC region and 51 in the CAM region.

The SSC – Customer Priorities Tracker Quant Year 2 (2022) (Accent) reported 3% of customers had experienced flooding from a burst pipe, although there is a possibility from a customer perspective that may cover bursts that are a lot smaller than those would get picked up in official reporting and/or be thinking of internal flooding from pipe they owned on their property. This was the same in each of the SSW and CAM regions (Figure 14.26).

Figure 14.26: Service issues experienced by customers in the last 2 to 3 years



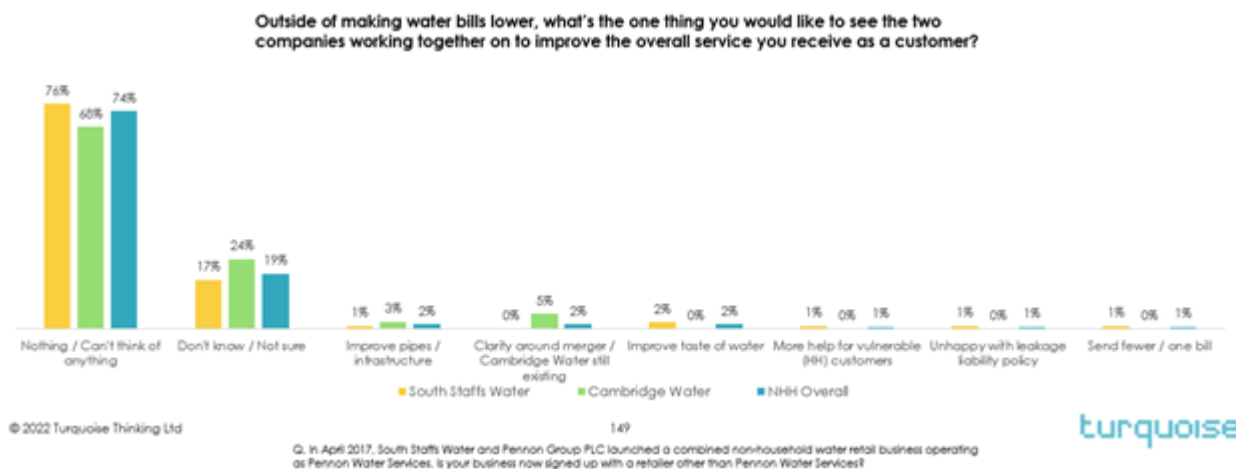
Customer priorities and expectations

Customers expected innovation in infrastructure and operations, including the use of more resilient materials for pipes in the *SSC – PR19 Foundation Research June (2017) (Accent)*.

More recently, in the *SSC – Customer Priorities Infographic (2022)*, customers also expected ongoing innovation in improving and maintaining infrastructure such as pipes and looking further into the future. Customers also expected the use of technology to predict problems and quickly fix pipes (e.g., use of artificial intelligence) as an essential service. If any issues were to arise, customers expected good communication during incidents.

When asked to think about potential improvements to the overall service in the *SSC – Customer Promises Tracker Annual Report (2023) (Turquoise)*, 2% of NHH customers overall mentioned they would want to see improvements in pipes/ infrastructure. Breaking down into the two regions, 3% of CAM NHH customers mentioned wanting to see this, compared to 1% of SSW NHH customer (*Figure 14.27*).

Figure 14.27: NHH Desired Improvements



The *SSC – NERA Willingness to Pay for Water Services at PR24 (2022)* found that HH and NHH customers across both regions were WTP for improvements to reduce the chance of property flooding from a burst pipe across most of the models estimated (*Table 14.14*). SSW HH customers are willing to pay £0.16 per unit reduction in the flooding incidents per year. WTP values were higher for HH CAM at £1.03 which may be reflecting the higher incidents of property flooding in CAM than SSW. Similarly, NHH customers were WTP 0.002% more of their current bill in SSW and 0.005% in CAM to reduce the chance of property being flooded due to a burst pipe. This positive WTP is suggested to be because service failures such as property flooding would have particularly unpleasant consequences.

Table 14.14: Main model WTP per Unit Change from Status Quo

Attribute	Unit	HH WTP (£)		NHH WTP (% of bill)	
		SST	CAM	SST	CAM
A Customer service	reduction in the percentage of costumers that wait more than 10 minutes	-0.07	0.00	N/A	N/A
B Risk of temporary "do not drink" notice	reduction in number of properties that received "do not drink" notice	0.74	0.97	0.013	0.015
C Installing "smart" water meters	increase in the percentage of properties having an operational "smart" meter by 2030	-0.21	-0.30	-0.004	-0.008
D Hard water supply	increase in the number of properties that benefit from investment (thousands)	0.00	0.03	-0.0002	-0.001
E Lead pipes	reduction in the percentage of properties that have a lead supply pipe by 2030	-0.86	-0.13	-0.017	-0.017
F Water lost to leakage from pipes	reduction in the percentage of water that is lost to leakage	0.61	1.40	0.001	0.010
G Issues with tap water colour, taste, or smell	reduction in the percentage of properties experiencing issues with tap water per year (tenth of a percentage)	-0.17	0.11	-0.001	-0.014
H Chance of property flooding from a burst pipe	reduction in the flooding incidents per year	0.16	1.03	0.002	0.005
I Low water pressure	reduction in the percentage of properties experiencing low pressure per year (tenth of a percentage)	-0.27	-0.12	-0.003	-0.001
J Supporting nature and wildlife	increase in the number of acres protected and enhanced (tens)	0.03	0.28	0.0002	0.003
K Unplanned short interruptions to water supply	reduction in the percentage of properties experiencing a short interruption per year (hundredth of a percentage)	-0.19	-0.01	-0.002	-0.002
L Risk of temporary use ban, including hosepipes	reduction in the percentage chance of temporary use ban in a given year	-5.99	-0.30	-0.089	-0.024

Note: NHH customers were not asked about attribute A (customer service).
Source: NERA analysis of SSCW WTP survey

Priorities within subgroups – region, SEG and vulnerability

In the SSC – NERA Willingness to Pay for Water Services at PR24 (2022), some sub-groups of HH customers were not willing to pay for reducing the chances of property flooding from a burst pipe. These included those who are particularly financially vulnerable customers and customers in the C2DE socioeconomic group. Women were observed to have higher WTP than men for reducing the chance of property flooding from a burst pipe (Table 14.15).

Table 14.15: Household customer WTP per Unit change from Status Quo – sub-groups for gender and SEG.

Attribute	Unit	Men				Women				ABC1				
		SST WTP	p	CAM WTP	p	SST WTP	p	CAM WTP	p	SST WTP	p	CAM WTP	p	
G	Issues with tap water colour, taste, or smell	reduction in the percentage of properties experiencing issues with tap water per year (tenth of a percentage)	-0.28	0.18	0.28	0.06	-0.14	0.04	-0.05	0.82	0.01	0.86	0.28	0.02
H	Chance of property flooding from a burst pipe	reduction in the flooding incidents per year	0.06	0.53	0.63	0.02	0.19	0.00	1.68	0.00	0.26	0.00	1.33	0.00
I	Low water pressure	reduction in the percentage of properties experiencing low pressure per year (tenth of a percentage)	-0.33	0.02	-0.09	0.12	-0.23	0.00	-0.14	0.05	-0.21	0.00	-0.09	0.05
J	Supporting nature and wildlife	increase in the number of acres protected and enhanced (tens)	0.03	0.00	0.24	0.00	0.02	0.00	0.35	0.00	0.03	0.00	0.29	0.00
K	Unplanned short interruptions to water supply	reduction in the percentage of properties experiencing a short interruption per year (hundredth of a percentage)	-0.28	0.02	-0.01	0.84	-0.14	0.00	0.00	0.99	-0.10	0.01	0.02	0.50
L	Risk of temporary use ban, including hosepipes	reduction in the percentage chance of temporary use ban in a given year	-10.1	0.02	-0.11	0.55	-3.89	0.00	-0.53	0.09	-4.48	0.00	-0.13	0.42

Source: NERA analysis of SSCW WTP survey

C2DE customers in the SSW region were not WTP for reducing the chance of property flooding from a burst pipe whilst in the CAM region C2DE customers were WTP (Table 14.16). However, it is important to note this difference is not statistically significant at the five percent level.

Table 14.16: Household Customer WTP per unit change from status quo – sub-group for SEG and metering

Attribute	Unit	C2DE				Metered – yes				Metered – no				
		SST WTP	p	CAM WTP	p	SST WTP	p	CAM WTP	p	SST WTP	p	CAM WTP	p	
G	Issues with tap water colour, taste, or smell	reduction in the percentage of properties experiencing issues with tap water per year (tenth of a percentage)	-0.52	0.02	-0.63	0.23	-0.09	0.23	0.18	0.21	-0.62	0.07	-0.01	0.98
H	Chance of property flooding from a burst pipe	reduction in the flooding incidents per year	-0.03	0.71	0.09	0.86	0.19	0.00	1.20	0.00	0.00	0.97	1.14	0.00
I	Low water pressure	reduction in the percentage of properties experiencing low pressure per year (tenth of a percentage)	-0.34	0.01	-0.24	0.13	-0.19	0.00	-0.12	0.04	-0.57	0.02	-0.12	0.23
J	Supporting nature and wildlife	increase in the number of acres protected and enhanced (tens)	0.01	0.02	0.27	0.01	0.03	0.00	0.34	0.00	0.02	0.04	0.19	0.00
K	Unplanned short interruptions to water supply	reduction in the percentage of properties experiencing a short interruption per year (hundredth of a percentage)	-0.32	0.00	-0.14	0.25	-0.12	0.00	0.00	0.93	-0.41	0.02	-0.01	0.94
L	Risk of temporary use ban, including hosepipes	reduction in the percentage chance of temporary use ban in a given year	-7.28	0.01	-1.15	0.09	-4.61	0.00	-0.39	0.08	-10.4	0.04	-0.10	0.75

Source: NERA analysis of SSCW WTP survey

For financially vulnerable customers, their results were like C2DE customers where they did not exhibit a positive WTP value for reducing the change of property of flooding from a burst pipe. On the other hand, those who were socially vulnerable, defined as having serious illness, a disability and on the PSR, in both regions, there were higher WTP than HH customers overall for reducing the change of property flooding from a burst pipe (Table 14.17). This highlights the importance of this areas of the service to these vulnerable customers.

Table 14.17: Household customer WTP per Unit change from status quo – sub-groups for vulnerability

Attribute	Unit	Financially vulnerable				Socially vulnerable				Vulnerable (combined)				
		SST WTP	p	CAM WTP	p	SST WTP	p	CAM WTP	p	SST WTP	p	CAM WTP	p	
G	Issues with tap water colour, taste, or smell	reduction in the percentage of properties experiencing issues with tap water per year (tenth of a percentage)	-0.57	0.04	-1.27	0.17	-0.25	0.05	-0.09	0.69	-0.40	0.01	-0.14	0.51
H	Chance of property flooding from a burst pipe	reduction in the flooding incidents per year	-0.04	0.65	-0.12	0.88	0.20	0.00	1.21	0.00	0.13	0.03	1.02	0.00
I	Low water pressure	reduction in the percentage of properties experiencing low pressure per year (tenth of a percentage)	-0.37	0.02	-0.48	0.12	-0.20	0.01	-0.09	0.19	-0.30	0.00	-0.11	0.10
J	Supporting nature and wildlife	increase in the number of acres protected and enhanced (tens)	0.02	0.02	0.21	0.08	0.03	0.00	0.29	0.00	0.02	0.00	0.26	0.00
K	Unplanned short interruptions to water supply	reduction in the percentage of properties experiencing a short interruption per year (hundredth of a percentage)	-0.29	0.02	-0.46	0.11	-0.14	0.02	-0.03	0.54	-0.21	0.00	-0.06	0.26
L	Risk of temporary use ban, including hosepipes	reduction in the percentage chance of temporary use ban in a given year	-6.72	0.03	-2.38	0.09	-4.86	0.00	-0.48	0.11	-6.01	0.00	-0.52	0.07

Source: NERA analysis of SSCW WTP survey

Future Bill Payers (FBP) are willing to pay for reducing the chance of property flooding from a burst pipe. Table 14.18 shows FBP from both regions are WTP £0.88 per unit reduction in the flooding incidents per year. This is the second highest valuation achieved after the attributed focused on WTP to reduce the risk of a “do not drink notice”.

Table 14.18: FBP Main Model WTP per Unit Change from Status quo

Attribute	Unit	WTP per unit change from SQ (£)	
A	Customer Service	reduction in the percentage of costumers that wait more than 10 minutes	-0.36
B	Risk of a temporary "do not drink" notice	reduction in number of properties that received "do not drink" notice	1.01
C	Installing 'smart' water meters	increase in the percentage of properties having an operational "smart" meter by 2030	-0.25
D	Hard water supply	increase in the number of properties that benefit from investment (thousands)	-0.01
E	Lead pipes	reduction in the percentage of properties that have a lead supply pipe by 2030	-2.43
F	Water lost to leakage from pipes	reduction in the percentage of water that is lost to leakage	0.83
G	Issues with tap water colour, taste, or smell	reduction in the percentage of properties experiencing issues with tap water per year (tenth of a percentage)	-1.51
H	Chance of property flooding from a burst pipe	reduction in the flooding incidents per year	0.88
I	Low water pressure	reduction in the percentage of properties experiencing low pressure per year (tenth of a percentage)	-0.82
J	Supporting nature and wildlife	increase in the number of acres protected and enhanced (tens)	0.10
K	Unplanned short interruptions to water supply	reduction in the percentage of properties experiencing a short interruption per year (hundredth of a percentage)	-1.15
L	Risk of temporary use ban, including hosepipes	reduction in the percentage chance of temporary use ban in a given year	-3.66

Source: NERA analysis of SSCW WTP survey

Golden Threads: Supply Reliability

Golden Threads	The need for customer information and engagement	Customers value a reliable source of water with good pressure. Hence, if there are any interruptions to the supply or changes to pressure, customers expect clear communication in a timely manner about how long they could expect interruption or issue will last so they can prepare and look at alternatives.
	Call for collective responsibility and fairness	Having water coming out of the tap is a basic service expected by customers. Consequently, satisfaction with this can influence both satisfaction with overall service and value for money.
	Concern for the environment	Customers were aware of the future challenges around supply security with the growing population and the increased impact it may have on infrastructure. There is also some awareness of how climate change is causing extreme weather and temperatures. Consequently, customers wanted SSC to prioritise investing in infrastructure and technology innovation to ensure long-term supply security.
	Protection for vulnerable customers	There were no specific points relating to vulnerable customers, but it is important to maintain a reliable support of water for all customers so daily activities are not impacted.

Demographic Splits: Supplier reliability

The table below provides a brief summary comparison of each of the key demographic groups, related to supplier reliability. Please see the appendix for detailed tables of each split.

Demographic group(s)	Key findings/ comparisons
SSW vs CAM	Appendix A.13.1 summarises SSW and CAM preferences in relation to supply reliability. On average, there were very few differences between regions in this area. Despite this, CAM customers often showed a stronger concern for pipe leakages and repairs compared to SSW customers.
HH vs NHH	Appendix A.13.2 summarises HH vs NHH preferences in relation to supply reliability. Both HHs and NHHs have been seen to be satisfied with the reliability of their water, with NHHs displaying a higher satisfaction rate than HHs. HH and NHH customers tend to be aligned on supply reliability attributes, however NHHs are more in favour of SSC achieving their supply interruption ambition before 2050.
FBP vs current bill payers	Appendix A.13.3 summarises future customer preferences in relation to water quality. Future billpayers emphasise supply reliability, along with excellent customer service, as a top priority. Future billpayers exhibit a high level of tech-savviness and a demand for proactive service. They heavily rely on technology for accessing accounts, making payments, and receiving real-time information about water services, including updates on interruptions or changes in water pressure. Future billpayers also recognise the importance of investing in infrastructure to prevent future supply disruptions and associated cost increases due to climate change impacts. Reducing the 'chance of a property flooding from a burst pipe' is one of four areas future billpayers would like SSC to focus investment on. Conversely, 'unplanned short interruptions to the water supply' is one of three areas

	<p>for which they would accept some deterioration in service (of which the other two are unrelated to supply reliability). SSC's target of reducing the average time without water supply is supported by future billpayers, with a preference for achieving this ambition before 2050.</p>
Vulnerable vs other customers	<p>Appendix A.13.4 summarises vulnerable customers' preferences in relation to supply reliability. Financially vulnerable customers were not willing to pay for <i>reducing the chances of property flooding from a burst pipe</i> compared to non-vulnerable customers. However, there may be variation in need and priority between different vulnerability groups as socially vulnerable customers, defined as having serious illness, a disability and on the PSR. These customers had a higher WTP than HH customers overall on this measure.</p>

17. COMMUNITIES

Report	Published Date	Participants	Sample Size	Project Objectives
CCW – Public Views on the Water Environment (2021) (Community Research)	July 2021	HH and future customers	Total: 62	The Consumer Council for Water (CCW) wished to conduct research into how people value and understand the water environment, their preferences for how it should be managed, and their views on current policy directions, taking account of the difference in policies between England and Wales.
ONS – How has lockdown changed our relationship with nature? (2021)	April 2021	n/a	n/a	Aimed at studying the effects of the COVID-19 pandemic on the populations' interactions with their natural environment. Specifically, our perceptions of nature as a wellbeing space both during and after the pandemic.
Southern Water – Affordability Concern and Diverse Culture Research (2021)	April 2021	HH customers (Southern Water)	Qualitative: 20 low-income customers with long-term affordability concerns, 12 customers with recent concerns of a mix of circumstances, 18 diverse cultural background customers Quantitative: 200 low-income households aged over 18 in charge/jointly in charge of water bills	Aimed at understanding the needs, wants and views of those in financial hardships and those from diverse cultural backgrounds. Specifically aimed at delivering a voice to key audiences, understanding the long-term affordability concerns for water and other HH bills from COVID-19, and explore how to best engage these audiences.
SSC – Customer Priorities Research Tracker Quantitative Insights Year 3 (2023) (Accent)	May 2023	HH customers	2021: 511 HH 2022: 1,054 HH 2023: 1,072 HH - 745 SSW and 372 CAM	Provide a benchmark against which customers' priorities will be tracked for both wholesale and retail services. Explore any differences between uninformed/informed priorities and qualitative/quantitative insights. Understand the customer impact of the cost-of-living crisis (2023).
SSC – Customer Priorities Research Qual Year 3 (2022) (Accent)	May 2022	HH, NHH customers and future customers	32 HH, 12 NHH	Explore what matters to customers now and in the future to root SSW/CAM plans in the customers' world. Understand what customers want and expect SSW/CAM to focus on in the short term and long term to 2050. Track and measure any changes

				in short- and long-term priorities and what is driving these changes.
SSC – Customer Promises Tracker Annual Report (2023) (Turquoise)	March 2023	HH and NHH customers	Total: 1,134 HHs: 837 CAM 269 SSW 569 NHHs: 297 CAM 93 SSW 204	To monitor ongoing customer satisfaction, deliver on-going customer sentiment tracking, probe awareness and usage of key services and track changes in the way customers wish to interact with SSC.
SSC H2Online – Monthly Report (August 2022) (Explain)	August 2022	HH customers	For the poll reported on (about schemes they support), there were 38 SSW voters and 23 CAM.	To build a truly engaged community of customers, and raise the profile of the SSC brand among the customer base. To gain insights more quickly to allow the customer voice to be built into more day-to-day decision-making within the business.
SSC H2Online – Monthly Report (February 2023) (Explain)	February 2023	HH customers	For the poll reported on (about charity donations), there were 45 SSW voters and 19 CAM.	To build a truly engaged community of customers, and raise the profile of the SSC brand among the customer base. To gain insights more quickly to allow the customer voice to be built into more day-to-day decision-making within the business.
SSC H2Online – Monthly Report (June 2023) (Explain)	June 2023	HH customers	For the poll reported on (about Young Innovators' Panel), there were 22 SSW voters.	To build a truly engaged community of customers, and raise the profile of the SSC brand among the customer base. To gain insights more quickly to allow the customer voice to be built into more day-to-day decision-making within the business.
SSC H2Online – Monthly Report (October 2022) (Explain)	October 2022	HH customers	For the discussion reported on (about topics of interest), there were 13 SSW comments and 8 CAM comments.	To build a truly engaged community of customers, and raise the profile of the SSC brand among the customer base. To gain insights more quickly to allow the customer voice to be built into more day-to-day decision-making within the business.
SSC – Social Tariffs Research (2023)	September 2023	HH and Stakeholders	SHs 6 HHs 52 Quant: Total: 1238	To engage with consumers about the future development of the Assure tariff, and establish customer views towards a possible new affordability tariff aimed at those struggling to pay

			HHs Panel: 130 Vulnerable HHs: 99 On PSR: 23 H2Online: 21	their water bills, but who don't qualify for Assure due to their HH income being too high.
SSC – WRMP24 - WRAP Theme 1 Research Findings (2021)	August 2021	HH, NHH and future customers	Total: 47 HHs: 28 NHHs: 10 Future customers: 9	To explore household, future and SME businesses customer preferences in terms of; environmental ambition, levels of service/resilience ambition, water efficiency ambition, and best value planning criteria. To ensure a “golden thread” of customer preferences in these strategic areas, which sets the context for the remainder of the engagement programme.
SSC – WRMP MCDA Quantitative Insights (2022) (Accent)	July 2022	HH and NHH customers	Total: 1,015 CAM: 445 SSW: 570 HH: 887 NHH: 128	Explore customers’ attitudes and views regarding the natural environment and SSC’s approach to planning.
SSC – Young Innovators Panel (2023)	August 2023 (Unpublished)	Future customers	2-day panel with 25 attendees representing 18 state schools: - 14 female - 11 male - 13 BAME - 12 White Schools survey of sixth formers (43 replies at time of report)	Aim: Develop a teaching resource for SSC’s water efficiency education tools for schools across the region. Hearing future customers’ views in the 16-18 range as part of their PR24 evidence. Including general attitudes, environmental beliefs, acceptability of business plan proposals, high-level response to investment phasing and intergenerational fairness.
SSC - Customer Experience Slide for Community Engagement – July (2023)	July 2023	n/a	n/a	Gives stakeholder feedback on attendance at Tipton Muslim Centre requesting flexibility in language for customer online forms.
SSC - Customer Experience Slide for Community Engagement – June (2023)	June 2023	n/a	n/a	Gives stakeholder feedback on attendance at Walsall Welfare Reform group on creating a working group for social tariff.
University of York – Households’ Water Conservation Behaviour in UK and Egypt	n/a	n/a	n/a	A selection of slides from a presentation concerning the comparison of UK and Egyptian water behaviours, specifically looking at the water behaviours of faith groups and how to promote better water consumption habits with religious framing.

Water Efficiency in Faith and Diverse Communities (2023)	July 2023	Representatives from a range of water suppliers, faith groups and universities	n/a	Aimed at understanding the differences in, and the needs of various faith groups in respect to their water supplier.
WRW - Updated Regional Plan (2023)	March 2023	n/a	Triangulation of 120 pieces of research	To ensure the customer input in the regional plan is up-to-date by including the latest knowledge (by conducting a triangulation of the most recent customer and stakeholder research).

Communities introduction

Supporting local and national communities is an important aspect of any company's business plan and is important to their customers. SSC is no different in this respect. This sections reviews whether customers and stakeholders want SSC to go above and beyond delivering a reliable, resilient, safe, and good quality water supply, to also deliver wider social and wider environmental value in the communities it serves.

Overall, it was found that SSC's involvement with the community is important for customers who support improvements in; support for vulnerable customers and their awareness around the support available such as the PSR and the social tariff (despite high levels of awareness this year compared to previous years), the consideration of the various water needs of ethnic minority and religious group and the preservation of green spaces due to its benefits to mental well-being. SSC customers also wanted to see greater community involvement through more education for the general public and younger generations to help them save water and manage bills. Finally, supporting charity was seen as less of a priority than other areas.

Temperature check for SSC involvement with the community

Involvement and support for the community appear to be important for customers with room for improvement for SSC. In the *SSC H2Online – Monthly Report (October 2022) (Explain)*, 'working with local communities' was cited as one of the main topics of interest for 2023 from SSC customers (note that this research contained a small base size) highlighting the need to put more focus on community involvement from SSC on the radar.

"My only thoughts for topics would be about how CAM can keep working with and for the local community in a variety of ways." Quote from CAM member from the *SSC H2Online – Monthly Report (October 2022) (Explain)*.

On SSC's involvement with the community, only 25% of HH customers in the *SSC – Customer Promises Tracker Annual Report (2023) (Turquoise)* overall perceived that SSC is doing a good job at playing an active role in the community. Examples of good practice include sponsoring local projects or visiting schools to teach pupils the value of using water wisely. Furthermore, 39% of HH customers and 17% of NHH customers felt SSC is a company that puts its customers' needs first over its shareholders and actively works to support the local community it serves. On the other hand, it is evident more could be done either in terms of raising awareness of the activities by SSC or the number of activities themselves as 20% of HHs overall took the opposite view in the same study, believing SSC puts its own needs and those of its shareholders above those of the local community and customers it serves.

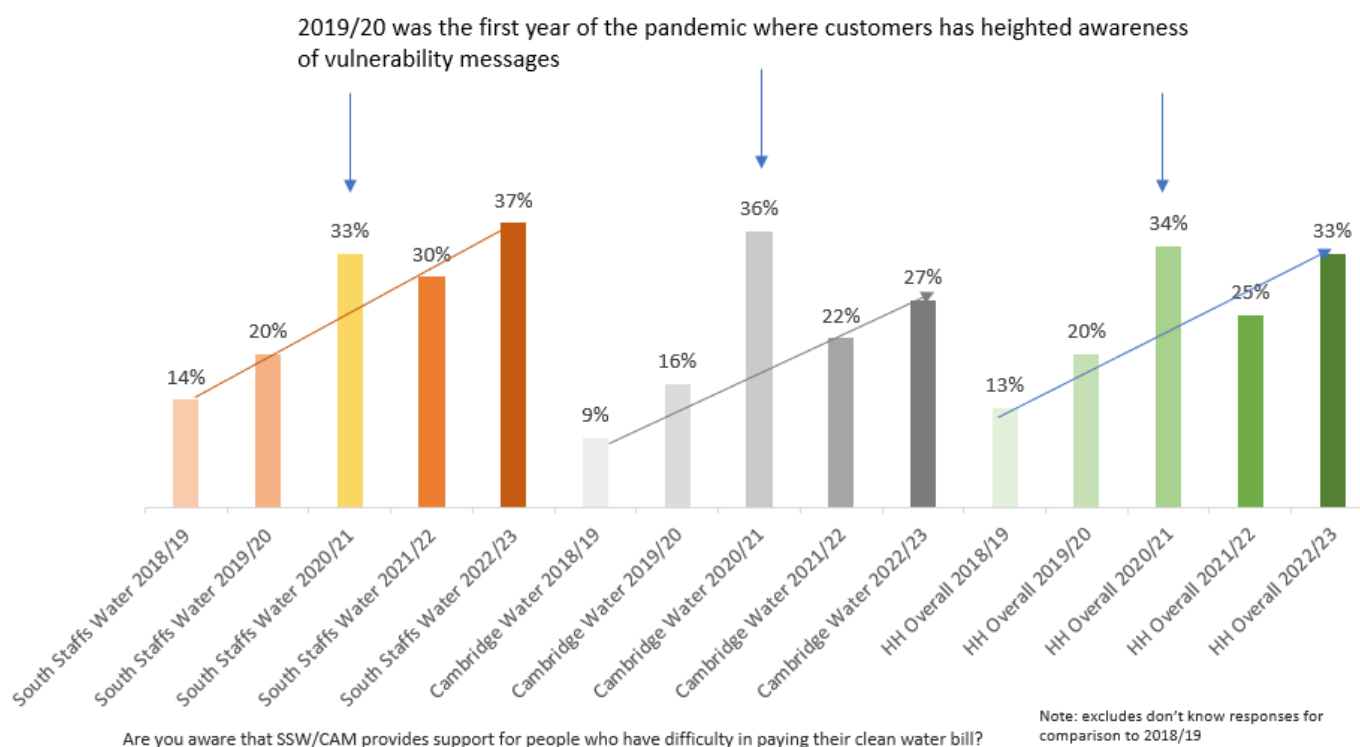
Supporting vulnerable customers

Supporting vulnerable customers has been shown to be important to SSC customers. The *SSC – Customer Priorities Research Tracker Quantitative Insights Year 3 (2023) (Accent)* asked customers to rank certain SSC initiatives in order of priority. "Service support related to vulnerable customers and the Priority Services Register" (for example, delivering bottled water if the water is cut off or braille bills) was ranked 8th out of 20 initiatives. This initiative has been seen to grow in importance over the last few years and has continuously increased in its ranking position over the past 3 years.

Additionally, the *SSC – Customer Promises Tracker Annual Report (2023) (Turquoise)*, shows that over time there has been a significant increase in awareness that SSC offers financial support. For example, in the *SSC - Customer Experience Slide for Community Engagement – June (2023)*, the Walsall Welfare Reform group invited SSC for social tariff input and were impressed with the work SSC is doing in the community and in the community hub. Through this discussion, Walsall Welfare Reform group is now looking for further collaborations.

However, there remains room for improvement in terms of raising awareness of the support available for vulnerable customers. Specifically, in the *SSC – Customer Promises Tracker Annual Report (2023) (Turquoise)*, awareness of SSC’s Assure Tariff, for those on a low income or struggling to pay their water charges, was up in both regions in 2022/23 albeit at 33% for HH overall (*Figure 15.1*). This was a similar level of awareness to 2019/20 which was the first year of the pandemic, suggesting the increase in awareness in 2022/23 may be fuelled by the struggles brought by the current cost-of-living increases.

Figure 15.1: Awareness of SSC’s Assure Tariff (HH)



The *SSC – Social Tariffs Research (2023)* investigated customers attitudes towards the Assure tariff. The HH focus groups identified that customers support the principle of contributing through their bill to help others who are struggling with their bills, despite low awareness of the existence of cross-subsidy. Customers also recognise and accept that increasing costs means that existing contribution levels won’t allow SSC to help the same number of customers through Assure as they currently do, and hence an increase is required. The findings show that an increase in the contribution level to £7 is acceptable (61%), which represents an increase of £2 a year from the current level of £5.

HH customers wanted to ensure more customers are supported through this tariff, so are happy to pay more. They were also asked if a contribution level of £8 was acceptable, and this was found to be acceptable for 58% of SSC customers. CAM customers have higher levels of acceptance for each level of cross-subsidy tested in the survey compared with SSW customers. At the £7 contribution level, 58% of SSW and 71% of CAM respondents found this acceptable. A similar story is seen at the £8 level, where 55% of SSW customers and 68% of CAM find this acceptable. Although some customers were willing to pay more in theory, their current financial circumstances can limit their ability to do so.

Further, the *SSC – Social Tariffs Research (2023)* asked participants what improvements they would like to see SSC make to the Assure tariff. Customers were largely happy with the Assure scheme as it is, although some questioned if the eligibility threshold (under £19,050) was high enough due to the rising cost of living and in the increase in September 2023

‘working poor’ households. CAM customers specifically pointed to the fact that the cost of living is higher in their region when thinking about those on lower household incomes.

In the co-development workshops, which were attended by customers who would be eligible for Assure, or could be, community gatekeepers were seen as a particularly effective way of reaching the Assure target audience. There is already a lot of good work here which received positive feedback from customers and stakeholders, and customers suggested focusing on partnerships with organisations that encounter the highest number of eligible, vulnerable customers.

The SSC – Customer Promises Tracker Annual Report (2023) (Turquoise) shows that awareness of the Priority Services Register also showed a positive upward trend over the longer term at 32% overall in 2022/23 with the proportion of HH customers signed up to the PSR in 2022/23 being 7%, up by 1pp from the previous year (Figure 15.2 and 15.3). This increased awareness could be, in part, a response to increased messaging around vulnerabilities, and specifically health-related vulnerabilities, that arose during the COVID-19 pandemic. Further, increased awareness of the PSR in general coincides with increased PSR sign-ups. A higher portion of HH customers in the SSW region indicated that a household member was registered on the PSR than in the CAM region (8% vs. 5% respectively – with a small drop in registrants recorded in CAM compared with 2021/22).

Figure 15.2: Awareness of SSC’s Priority Services Register (HH)

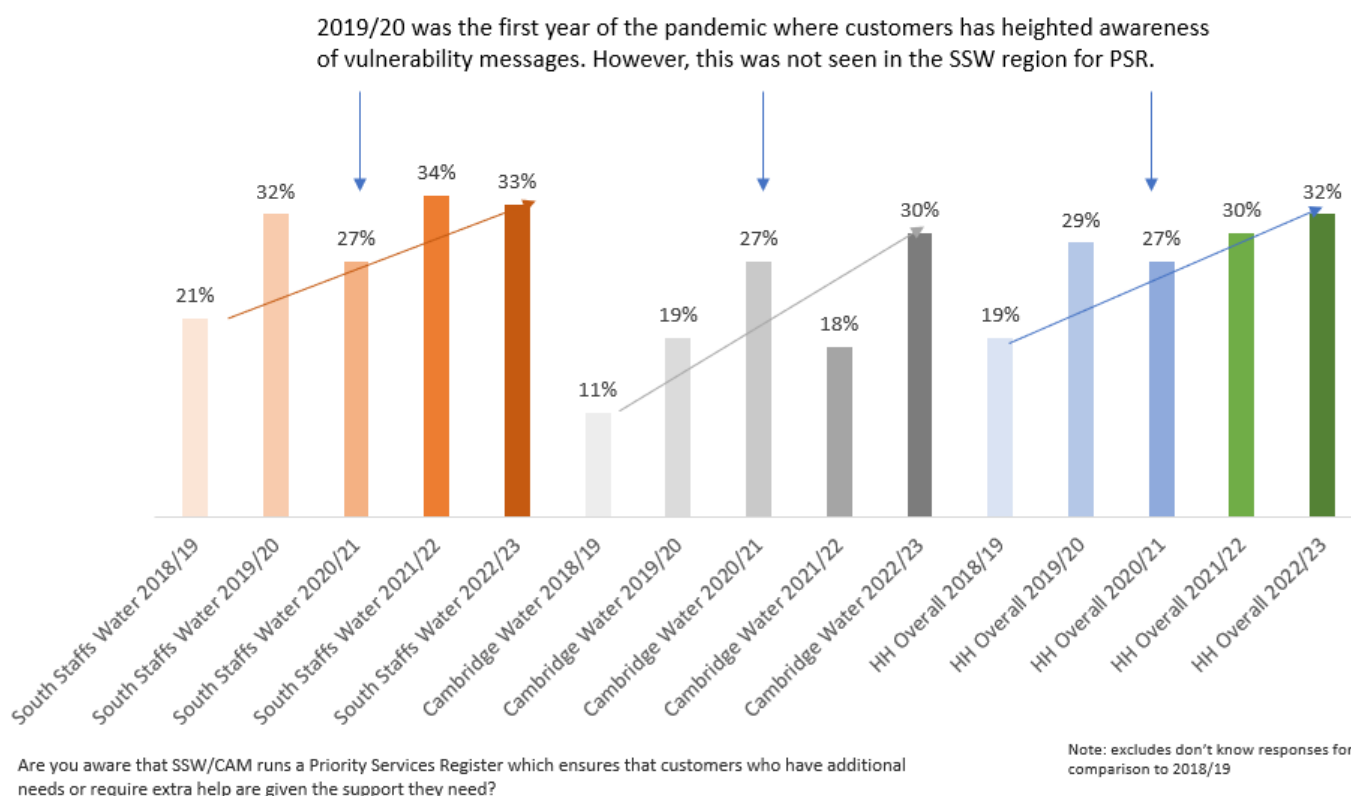
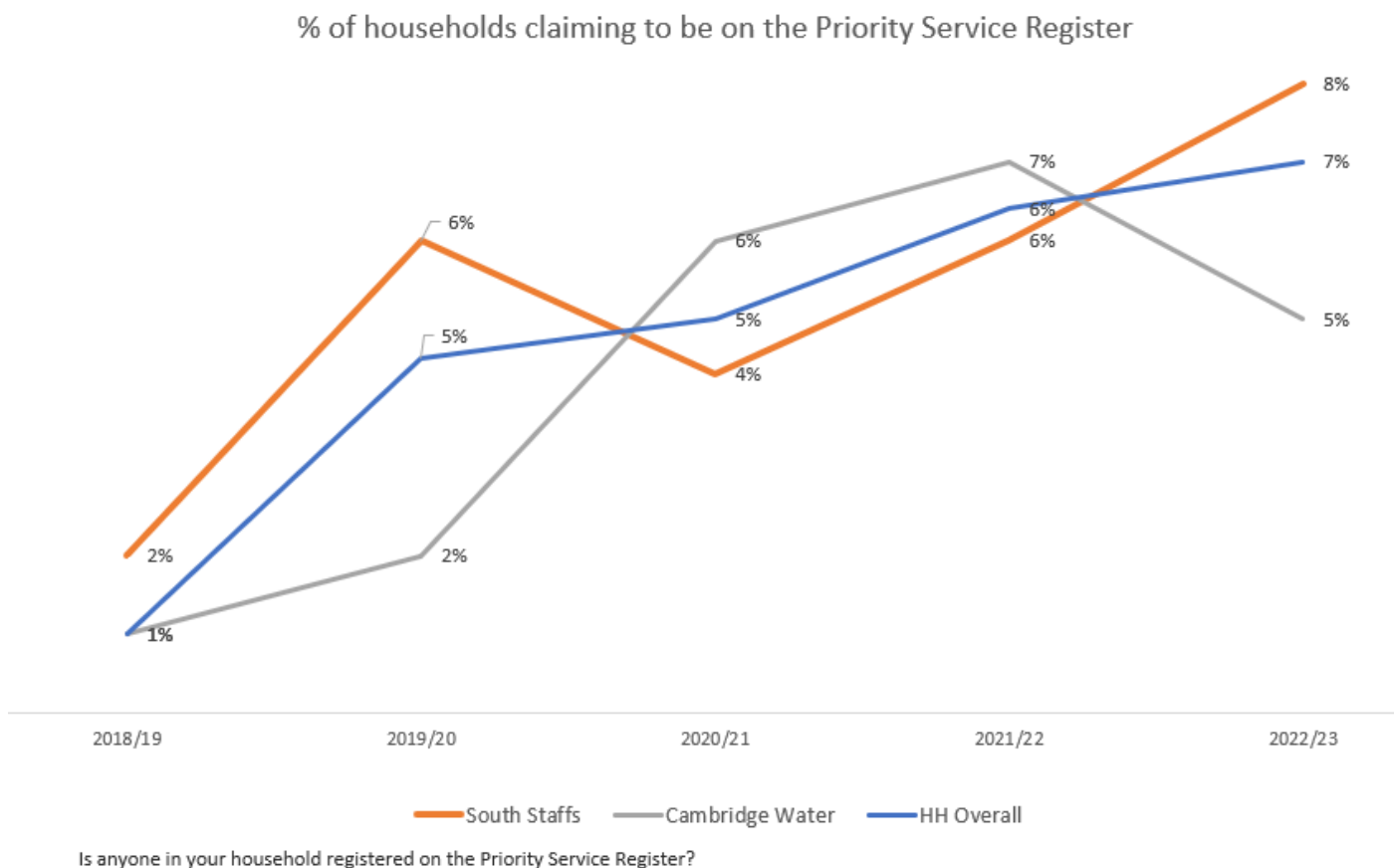


Figure 15.3: Proportion of Households on the Priority Services Register (HH)



Supporting ethnic minority groups

The thoughts of customers can vary greatly depending on their community and it is highly important that the views and needs of these communities are not ignored. This is specifically important for ethnic minority and religious faith groups, whose specific needs may have often been overlooked in the past. Concern for each specific community is also highlighted as an effective means of ensuring the successful implementation of water conservation schemes. Indeed, some religious practices and festivals can lead to higher levels of water consumption, but at the same time, faith communities can also be effectively partnered with as a way of engaging with communities on the importance of conserving water.

Reporting on ethnic minority communities often carries the risk of assuming homogeneity between groups of people with vastly different worldviews and cultural backgrounds; however, there are often common factors that influence life circumstances, attitudes, and expectations of water suppliers in these groups that can be looked at in unison. The *Southern Water – Affordability Concern and Diverse Culture Research (2021)* documents this and highlights four key themes that emerge in commonality between ethnic minority groups that impact their needs from water suppliers, these include:

- Being more likely to practice more traditional gender roles at home, often resulting in women being less experienced in dealing with bills and communicating with suppliers, resulting in a knowledge gap and lower overall confidence in this area. This is reported to be more prevalent in South Asian and East European HHs.
- Less experience managing and paying bills overall, due to a history of partners or landlords communicating with suppliers and paying bills. These customers are less likely to be knowledgeable about devices such as prepayment meters.
- Less secure employment, being more likely to hold jobs in industries with zero-hour contracts, with less reliable income. This is reported to be more prevalent in Eastern European HHs.

- Past and current experiences with racism and xenophobia, leading to concerns about being treated fairly or needs not being met, especially by larger organisations. This often leads to looking for support within communities rather than reaching out to organisations. This is experienced by all ethnic minority groups and means more effort is required by suppliers to build a rapport and provide support to those in these communities. *Water Efficiency in Faith and Diverse Communities (2023)* notes a previously unsuccessful campaign from Affinity Water aimed at promoting a water efficiency programme in faith communities which faced many challenges including low engagement (with only 5 out of 23 participants attending focus groups), with the reason for the failure being partially attributed to a lack of rapport between supplier and community. This highlights the need to build trust ahead of the launching of such campaigns.

Additionally, the multiple effects of these key themes are exaggerated by the disproportionate impacts of the COVID-19 pandemic. Many of those in ethnic minority groups are more likely to have been furloughed or made redundant due to factors such as location and nature of employment, experience a disproportional amount of negative outcomes on health leading to an inability to work, a higher overall rate of financial difficulty due to less income and potential higher expenditure on funerals, mental health scarring, closure of support organisations (both professional and communal) and a loss of support network.

The Southern Water – Affordability Concern and Diverse Culture Research (2021) notes several dimensions of support required by members of ethnic minority groups from their suppliers, highlighting which individuals hold specific needs and which have more mainstream needs. These can be seen in *Figure 15.4*.

Figure 15.4: Factors that determine whether customers hold more specific needs from suppliers, from the Southern Water – Affordability Concern and Diverse Culture Research (2021)

Dimension	Those who have specific needs	Those who have mainstream needs
Length of time in the UK	Those who have arrived more recently in the UK	Those who were born in the UK or have lived here for multiple years
Language proficiency	Non-native English speakers with lower levels of English proficiency	Native speakers or those highly proficient in English
Experience paying household bills	Less personal past experience in paying bills (including rent)	More personal past experience in paying bills (including rent)
Confidence in managing bills and suppliers	Low confidence in managing bills and suppliers	High confidence in managing bills and suppliers
Support network in the UK	A smaller network of support and contacts in the UK	Larger networks of support within the UK

Relating to specific water suppliers, *Water Efficiency in Faith and Diverse Communities (2023)* highlights the difference in water usage between faith communities, especially around specific times of year, e.g., during Ramadan water companies often see an increase in night water usage in comparison to the rest of the year, noting that suppliers need to be aware of this communal difference.

Multiple papers discuss the importance of cultural consideration when communicating with ethnic minority and faith communities concerning water usage. *University of York – Households’ Water Conservation Behaviour in the UK and Egypt* claims that pro-environmental behaviour is motivated by two core values: an egocentric motivation to ‘save money’ and a biospheric motivation to ‘save the environment’. However, it also claims that these have limited effectiveness in influencing water conservation behaviour. This paper then goes on to suggest that because religion often acts to shape our worldview, values and morals, communicating the value of water and giving a deeper meaning to the conservation of water through a religious framing in religious communities may provide more success in water conservation.

Finally, *Water Efficiency in Faith and Diverse Communities (2023)* discusses both potential barriers and opportunities when working with ethnic minority groups concerning water. For example, in the *SSC - Customer Experience Slide for Community Engagement – July (2023)*, the Tipton Muslim Centre suggested how much easier it would be for

customers to be able to complete an online form and have a choice of language, to improve their customer journey. Other barriers and opportunities include:

- Barriers:
- A lack of awareness of water availability and perception of water being cheap and easy to obtain
 - Difficulty starting a rapport with groups
 - There are many diverse cultures within the UK, and therefore it is difficult to know where to start
 - A lack of previous data on ethnic minorities’ water usage
 - A lack of access to engage with these communities
 - Potentially sensitive issues around water, the potential to cause offence, or interfere with the sacredness of water in other cultures
 - A lack of trust in water companies
 - A lack of access to smartphones, computers or emails
 - A lack of a support system in this country
 - Language or cultural barriers
 - Varying identification, religiosity, and devoutness within groups means that groups cannot be treated as one singular unit within surveys and fieldwork

- Opportunities
- Providing alternatives to avoid telling people what to do
 - Launching campaigns related to events from a range of cultures
 - Education around water-saving
 - National voice/collective action
 - Learning narratives/case studies and different people’s connections to water
 - Innovation tariffs
 - Promote water recycling/water butts to people who grow their own products
 - Be there to support communities rather than tell them what to do
 - Trusted community champions who customers are more likely to be honest with

Importance of green spaces in SSC’s community

Throughout SSC’s research, there have been mentions of green spaces and how these can influence health and wellbeing.

For example, the *SSC H2Online – Monthly Report (August 2022) (Explain)* asked HH customers which schemes, out of a predetermined list, they would like to see SSC support. It is of note that these questions were answered by 38 SSW customers and 23 CAM customers, which is broadly in line with engagement rates in the community. While the exact wording of the three schemes differs by each region, there is overlap in the general themes. *Figure 15.5* shows the descriptions and results of each scheme in both regions.

Figure 15.5: The descriptions and results of the three environmental schemes asked about in the August 2022 edition of H2Online, split between SSW and CAM.

	Overall theme	Description used in SSW	Description used in CAM	% in SSW	% in CAM
Scheme 1	Wetlands/river habitats	to expand an existing community garden by creating a wetland area	to improve river habitats and the surrounding riverbanks at a Country Wildlife site	19%	52%

Scheme 2	Garden space for community/people use	to create a diverse garden space to benefit the health and wellbeing of people using its facilities	to restore a neglected area of overgrown grassland and turn it into a community garden	53%	17%
Scheme 3	Wildlife habitats	to create a 'pollinator paradise' and 'wildlife wilderness' by establishing a wide range of habitats	to restore part of a playing field to a wildflower meadow and orchard, by providing better habitats to support wildlife	24%	26%

Firstly, the most popular response for SSW customers, with 53%, was wanting SSW to help create a diverse garden space to benefit the health and well-being of people using the facilities (Scheme 2). Alternatively, the majority of CAM residents preferred Scheme 1, with 52% wanting CAM to improve river habitats and riverbanks. In CAM, 17% picked Phase 2, whilst in SSW, 19% picked phase 1. The schemes in each area have different descriptions and do target slightly different things, but it appears that SSW customers are more in favour of their water company investing in community spaces to benefit local communities than CAM customers might be. A few members explained that their reasons for choosing scheme 2 (garden space) included benefits to the wider community, such as mental and physical well-being and environmental benefits.

"I chose scheme 2 because it will not only benefit the environment, but also the mental and physical well-being of members of the local community." Quote from SSW member from the SSC H2Online – Monthly Report (August 2022) (Explain).

However, many noted that all three schemes were important and would prefer SSC to support all of the aforementioned schemes. There were some members who prioritised scheme 3 (restoring or creating a wildlife habitat: 26% in CAM and 25% in SSW), and this was somewhat due to the educational aspect for young people. When presented alongside other types of initiatives, support for this type of scheme was seen to waver slightly. The SSC – Customer Priorities Research Tracker Quantitative Insights Year 3 (2023) (Accent) asked customers to rank certain SSC initiatives in priority order.

Out of 20 attributes which are important to customers, improving the local environment by offering grants to support local projects that improve natural habitats attracted a lower relative weighting, ranking 14th. In the SSC – WRMP24 - WRAP Theme 1 Research Findings (2021) out of 22 SSW panellists, 20 ranked environmental protection as important or very important, and 11 stated that they had visited natural blue spaces (rivers, lakes, etc.) within the previous month, similarly in Cambridge 24 out of 25 participants ranked environmental protection as important or very important, and 17 stated that they had visited natural blue spaces within the previous month. Participants in the SSC – WRMP MCDA Quantitative Insights (2022) (Accent) report tended to show a relatively high degree of care towards the environment, with 60% of SSC participants overall stating they had visited rivers, lakes or reservoirs within the last year. This was more likely among CAM customers (65%) compared with SSW (58%). Similarly, 64% of SSC H2Online community members (63% SSW, 70% CAM) stated that protecting lakes, reservoirs, fish, and other aquatic plants and wildlife was really important.

One factor of note is the rise in appreciation for green spaces coinciding with the COVID-19 pandemic and subsequent lockdowns. CCW – Public Views on the Water Environment (2021) noted the high value placed on visiting natural spaces by most participants during the pandemic, something that appears more broadly in national samples. The paper reports these spaces' calming nature, connection with natural beauty, and the opportunity to engage in outdoor activities (some of which are water-specific activities). Most participants noted the water environments' purpose for a variety of functions for the natural world: human well-being, agriculture, and a water supply for households. In the month before taking part in the research, just over half of the participants reported having visited water environments such as rivers, streams, lakes, reservoirs, or canals. This demonstrates the importance of local

water environments, especially during the COVID-19 pandemic, with some participants going as far as to note spontaneous worry concerning deterioration in these areas.

To further support this, the *ONS – How has lockdown changed our relationship with nature? (2021)* paper reports that in May of 2020, 36% of people were spending more time outside during the pandemic than they were before, rising to 46% in July of the same year. This increase in outdoor activity has been heavily attributed to a need for well-being support during lockdowns, with well-being scores during lockdown periods and throughout the pandemic being reported as significantly lower when compared with previous years. In a separate study by Natural England in May 2020 (reported in *ONS – How has lockdown changed our relationship with nature? (2021)*), 9 out of 10 people surveyed agreed that natural spaces were important for mental health and well-being, with 40% noticing that nature, wildlife and visiting local green spaces have been even more important to their wellbeing since COVID-19 restrictions began.

Value of water and demand for SSC educating communities

How water is valued varied between customers and future bill payers. Nonetheless, most customers say they want to be educated on how the water industry works, how to efficiently use water and the challenges faced by the water for both current and future customers to ensure supply of water in the future, protect the environment and save costs. However, it is not the highest priority for customers.

In the *SSC – WRMP MCDA Quantitative Insights (2022) (Accent)* report, 18% of the online panel's 503 participants said they do not think much about saving water and instead take it for granted (the respective figures for CAM and SSW were 17% and 20%). Additionally, the *WRW - Updated Regional Plan (2023)*, shows that since 2021, there haven't been any significant changes overall around customer's views on water efficiency, with HH customers in 2023 stating that there is little compelling people to save water, and NHH customers stating that all but the highest consumers are complacent about their water usage. This suggests water is not actually valued greatly by customers. However, when looking at future customers, in the *SSC – Young Innovators Panel (2023)*, the students who took part claim to have become slightly more careful with water usage since 2018. For example, compared to 2018 where 58% were very likely to turn off the tap whilst brushing their teeth, in 2023 this figure had increased to 72%. This suggests there may be a generational difference emerging over time in terms of the value placed on water, but the main driver for reducing water usage appears to be related to the cost-of-living context, rather than driven by environmental factors.

Regardless of the driver for wanting to save water usage, there is demand from some customers to be educated by their water company. In the *WRW - Updated Regional Plan (2023)*, 35% of customers reported wanting to learn more about how they can save water, showing demand for greater education for customers. Furthermore, in the *SSC – Young Innovators Panel (2023)*, for SSC to be responsible actors in society, students suggested that SSC should be educating people about the risk of drought and the need to reduce consumption. The students felt education programmes are the best way to engage their age group of 16-18 years old, the future customers. Current teaching on environmental issues and the water industry was seen as insufficient.

"If you tell adults and they tell their kids, the kids don't always listen. If you tell the kids, they will, and they might tell the adults too." Quote from the *SSC – Young Innovators Panel (2023)*.

"I don't think I've ever seen a campaign for saving water in schools." Quote from the *SSC – Young Innovators Panel (2023)*.

In the *SSC H2Online – Monthly Report (June 2023) (Explain)*, members from SSW were asked what they think about SSW's Young Innovators' Panel. Following being provided with a high level of information about the initiative, members were asked how they felt about it and if they felt SSW should be running it. The majority of members (55%) felt that it was a great initiative, but they think it should be run every year. 36% thought it was a great initiative and running it once every two years sounds good.

"This sounds like a very good idea, and introducing students at this stage in their education to important matters that will affect their future, is brilliant." Quote from SSW member from the *SSC H2Online – Monthly Report (June 2023) (Explain)*.

In terms of priority research, the *SSC H2Online – Monthly Report (August 2022) (Explain)* as aforementioned, asked HH customers which schemes, out of a predetermined list, they would like to see SSC support. Around a quarter of the sample (26% in CAM and 25% in SSW) prioritised scheme 3, which was about establishing a wide range of habitats and restoring local wildlife areas. Those that supported this did so due to the educational aspect for young people.

“All three projects have their merits but [scheme] 3 gets youngsters involved in a very positive way.” Quote from CAM member from the *SSC H2Online – Monthly Report (August 2022) (Explain)*.

When presented alongside other types of initiatives, support for education related schemes did not seem so strong. The *SSC – Customer Priorities Research Tracker Quantitative Insights Year 3 (2023) (Accent)* project asked customers to rank certain SSC initiatives in priority order. Educating future customers where they would work closely with primary, secondary schools and higher education bodies to educate young people about the value of conserving and re-using water was ranked 17th out of 20 initiatives. Nonetheless, education on water usage was a short-term spontaneous priority for both HH/NHH customers and also when looking from a wider community perspective. Customers expressed that it is a basic service they expected SSC to be prioritising mainly to help customers manage and control bill spend in the *SSC – Customer Priorities Research Qual Year 3 (2022) (Accent)*.

Charity support

Out of a suite of other initiatives, the *SSC – Customer Priorities Research Tracker Quantitative Insights Year 3 (2023) (Accent)* report shows that providing financial grants and / or sponsorship and SSC employees spending time volunteering to support local community schemes in the areas they supply was ranked 20th out of 20 initiatives. Whilst all the areas tracked by SSC in this study are viewed by customers as being important, compared to other initiatives, this was not a strong customer priority for SSC customers.

In the *SSC H2Online – Monthly Report (February 2023) (Explain)* customers were asked to either choose or suggest a charity that they thought would be worthy of the community spring donation. CAM members suggested Emmaus who focus on housing and opportunities for those in Emmaus communities, and Cambridge Women’s Aid, whilst SSW chose Acorns Children Hospice. However, many other members said that these causes were all worthwhile and hence they did not mind which charity SSC supports.

Golden Threads

Golden Threads	Protection for vulnerable customers	Extra consideration should be taken for customers in all manners of vulnerable circumstances to ensure that their needs are supported. Additionally, many customers in ethnic minority groups are vulnerable due to being non-native English speakers or due to the lack of a support network within the UK. Due to this, extra care is needed to ensure that these customers are supported by their suppliers.
Golden Threads	The need for customer information and engagement	The needs of smaller communities and ethnic minorities are historically overlooked by larger companies, due to this there is an increased need for engagement now in order to fully understand the needs of these customers.
Emerging thread	Cost of living	Customers in ethnic minority groups are disproportionately affected by the cost-of-living crisis due to a higher proportion of these customers having less secure income and the impacts of the COVID-19 pandemic.

Demographic Splits: Communities

The table below provides a brief summary comparison of each of the key demographic groups, related to communities. Please see the appendix for detailed tables of each split.

Demographic group(s)	Key findings/ comparisons
SSW vs CAM	Appendix A.14.1 summarises SSW and CAM preferences in relation to SSC's involvement in the community. Overall, SSW and CAM differed on a number of community-related areas. More SSW customers were registered with the PSR, while CAM customers were more environmentally focused in comparison, with greater care over water usage and greater support for natural green and blue spaces.
HH vs NHH	Appendix A.14.2 summarises HH vs NHH preferences in relation to SSC's involvement in the community. A lot of work related to communities only captured HH views, but from the evidence we do have available, it appears that HH customers are more likely to think that SSC works to support the local community, compared to NHHs.
FBP vs current bill payers	Appendix A.14.3 summarises future customer preferences in relation to SSC's involvement in the community. The information on future billpayers within this topic was relatively sparse, however, in a similar fashion to previous topics, finance and the cost-of-living crisis was a top-of-mind priority for future billpayers, ranking even higher than environmental issues related to local green spaces. Future billpayers saw education programmes as the best way to engage with their own age group concerning water saving.
Vulnerable vs other customers	Appendix A.14.4 summarises vulnerable customers' preferences in relation to Communities. Several areas are identified as increasing the vulnerability of ethnic minorities, such as a knowledge gap on bills and services (many rent and do not have direct interaction with suppliers), being in less secure employment, having previously experienced racism or xenophobia or traditional gender role pushback.

18. NET ZERO

Net Zero Bibliography

Evidence	Actual Report Name	Fieldwork Date / Insights gathered	Participants	Sample Size	Project Objectives
SSC – Customer Promises Tracker Annual Report (2023) (Turquoise)	Turquoise Customer Tracking Research Annual Report 2022/23	March 2023	HH and NHH customers	Total: 1,134 HHs: 837 CAM 269 SSW 569 NHHs: 297 CAM 93 SSW 204	To monitor ongoing customer satisfaction, deliver on-going customer sentiment tracking, probe awareness and usage of key services and track changes in the way customers wish to interact with SSC.
SSC – Customer Priorities Research Tracker Quantitative Insights Year 3 (2023) (Accent)	Accent Priorities Research Quantitative Insights – Year 3	May 2023	HH customers	2021: 511 HH 2022: 1,054 HH 2023: 1,072 HH - 745 SSW and 372 CAM	Provide a benchmark against which customers' priorities will be tracked for both wholesale and retail services. Explore any differences between uninformed/informed priorities and qualitative/quantitative insights. Understand the customer impact of the cost-of-living crisis (2023).
SSC – LTDS Report (2023) (Turquoise)	Turquoise SSC PR24 LTDS Research Presentation July 2023	July 2023	HH, NHHs and future customers	Qualitative: 34 HHs, 12 NHHs, 6 FBPs Quantitative: 980 HHs (including 82 FBPs), and 100 NHHs	To understand customers' attitudes and perceptions towards SSC's long-term vision to 2050 and their spontaneous preferences in terms of long-term delivery. Also, exploring SSC's performance and future targets in 10 key ambition areas, and to understand the main reasons that drive customer preferences, and to explore the issue of intergenerational fairness.
SSC – WRMP Themes 1 and 3 Quantitative Insights (2022) (Accent)	SSC WRMP Themes 1 & 3: Managing Droughts, Leakage Ambition, Universal Metering,	April 2022	HH and NHH customers	Total: 1180 CAM:427 SSW: 753 HHs: 1028 NHHs: 152	Core purpose of this study was to provide evidence of customer response and support for: managing droughts, universal metering, leakage, environmental ambition, supply options over the

	Environmental Ambition – Quantitative Insights (Accent) – April 2022				next 25 years, as well as WRMP options for WRW MCDA decision metrics.
SSC – WRMP MCDA Quantitative Insights (2022) (Accent)	SSC WRMP: MCDA – Quantitative Insights (Accent) – July 2022	July 2022	HH and NHH customers	Total: 1,015 CAM: 445 SSW: 570 HH: 887 NHH: 128	Explore customers’ attitudes and views regarding the natural environment and SSC’s approach to planning.
SSC H2Online Community web review – Carbon Net Zero Customer Insights (2020)	Carbon Net Zero 2030 roadmap – webpage review H2Online Community Activity Feedback	April 2020	HH customers	Total: 37 SSW: 23 CAM: 14	To review the dedicated webpage set-up to communicate the company’s path to NZ 2030.
Communicating with the Public about Climate Change (2021) (Blue Marble)	Blue Marble – Communicating with the public about climate change – cold facts and hot air	2021	HH consumers (UK Public)	Focus groups: 20-25 Survey: 2,000	Webinar deck discussing a survey on UK-wide views on climate change including Net Zero, including awareness and actions currently being taken against climate change.
SSC H2Online Community – Carbon Net Zero Customer Insights (2020) (Explain)	Carbon Net Zero 2030 roadmap – H2Online Community Activity Feedback (Part of the Next Zero carbon customer insights)	April 2020	HH customers	Total = 61 SSW = 39 CAM = 22	To find out what customers think of Water UK’s Net Zero by 2030 target.
Carbon Next Zero Customer Insights (2023)	Carbon Next Zero Customer Insights	January 2023	N/A	N/A	Takes insights from a number of SSC and external sources relating to Net Zero
Net Zero - A Greener Future (2021) (Explain)	Explain - Net Zero – A Greener Future	2021	HH consumers (UK Public)	158	Aimed to understand customers' awareness and attitudes towards Net Zero
SSC – Young Innovators Panel (2023)	Young Innovators’ Panel Interim Report (unpublished)	August 2023 (Unpublished)	Future customers	2-day panel with 25 attendees representing 18 state schools: - 14 female - 11 male - 13 BAME - 12 White Schools survey of sixth	Aim: Develop a teaching resource for SSC’s water efficiency education tools for schools across the region. Hearing future customers’ views in the 16-18 range as part of their PR24 evidence.

				formers (43 replies at time of report)	Including general attitudes, environmental beliefs, acceptability of business plan proposals, high-level response to investment phasing and intergenerational fairness.
Net Zero Citizen Jury (2023) (Explain)	Explain's South Staffs Water and Cambridge Water Net Zero Citizen Jury	June 2023	HH and NHH customers	CAM: 20 SSW: 20	Citizens' Jury to understand customer preferences relating to their plans to reduce carbon emissions. This paper specifically aimed to look at what SSCs Net Zero ambitions should be, when should these be achieved, and how customers should be involved in helping this
WRE – Club Customer Engagement report (2021) (Blue Marble)	WRE: Club Customer Engagement Final Report: Combined (Blue Marble) – September 2021	September 2021	HH and NHH customers, and stakeholders	HH: 20 (CAM 5, Essex & Suffolk 5: Anglian 10). NHH: 14 (Anglian 8, Essex & Suffolk 3, CAM 3) Stakeholders: 20 organisations across the 3 companies	To understand consumer context (general environmental priorities, current awareness of long-term challenges and implications for water suppliers, perception of water suppliers). To explore expectations and priorities re environmental planning. To explore response to the 'best value' plan objectives. To explore options preferences (ranking of preferences and what drives importance). To explore intergenerational economics (response to affordability options to understand generational expectations).

Net Zero introduction

Multiple reports show that most consumers seem to care a great deal about the environment and see the importance of working towards reaching net zero emissions. However, participants often appear to be unaware of key information relating to the environment and environmental goals and it is sometimes unclear how far individuals are actually willing to go to change their behaviour in order to help reduce their emissions.

Views on the environment, climate change, and net zero targets

When considering future action, 37% of participants in the *Communicating with the Public about Climate Change (2021) (Blue Marble)* stated that they were optimistic about the future regarding climate change, while 54% stated

September 2023

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that they were worried. Those who were optimistic about the future tended to be those with children, those who were less involved with environmental action, and those who didn't know what causes climate change.

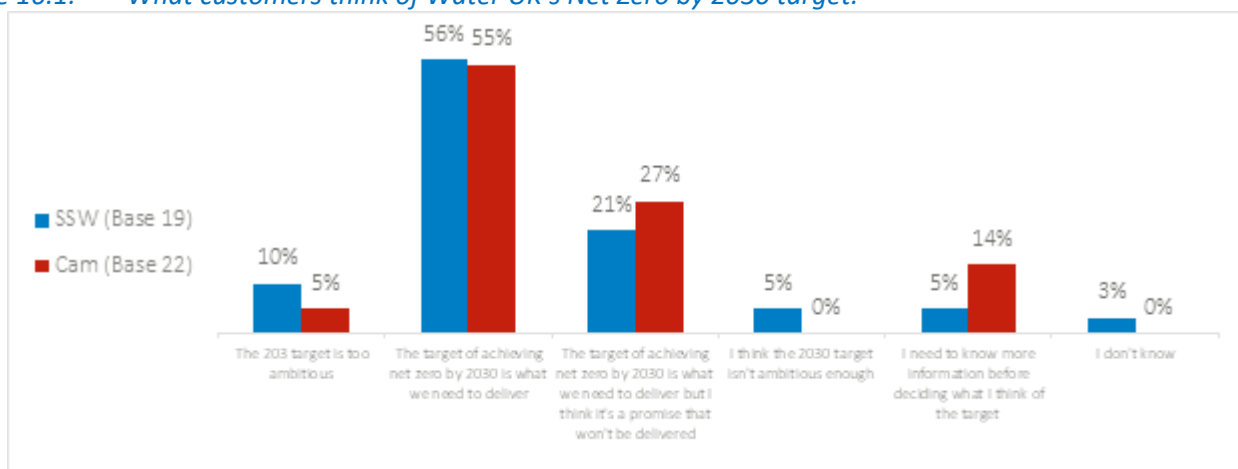
The belief that we will see the impacts of climate change in the UK was also much smaller in this group in comparison to other participants. In contrast to this, 82% of the total sample believed that climate change will have a noticeable effect on the UK, with 57% of these participants believing that these changes have already occurred. The biggest concern relating to this was due to extreme weather (such as heat waves, cold waves, and storms). This is likely due to increased media coverage of weather in comparison to other factors.

Care for the environment seems to be relatively high amongst SSC customers, as the *SSC – Customer Priorities Research Tracker Quantitative Insights Year 3 (2023) (Accent)* found that 69% of SSC customers agreed that (scored 9 or 10 out of 10) they are “conscious of the world around me and think we all need to look after it for future generations”. Additionally, *WRAP customer forums* stated that the carbon emissions of large supply-side options greatly impact customers’ preferences for those options, most notably water transfers.

“My view hasn’t changed much. I think it’s a great idea for when certain areas are struggling but I definitely still agree that it should but a last resort as I’ve found out that transferring water is likely to produce higher level of carbon emissions.” A future SSC customer discussing water transfers during the *Carbon Next Zero Customer Insights (2023)*.

The SSC H2Online Community – Carbon Net Zero Customer Insights (2020) (Explain) found customers were supportive of Water UK’s net zero by 2030 target with 56% feeling that net zero by 2030 is what is needed by customers in SSW and 55% of CAM customers (Figure 16.1). However, one in four remained sceptical, with reasons such as needing more information and not believing that it is a promise that will be delivered. These results are only indicative as the community is self-selecting and not a full representation of the customer base.

Figure 16.1: What customers think of Water UK’s Net Zero by 2030 target.



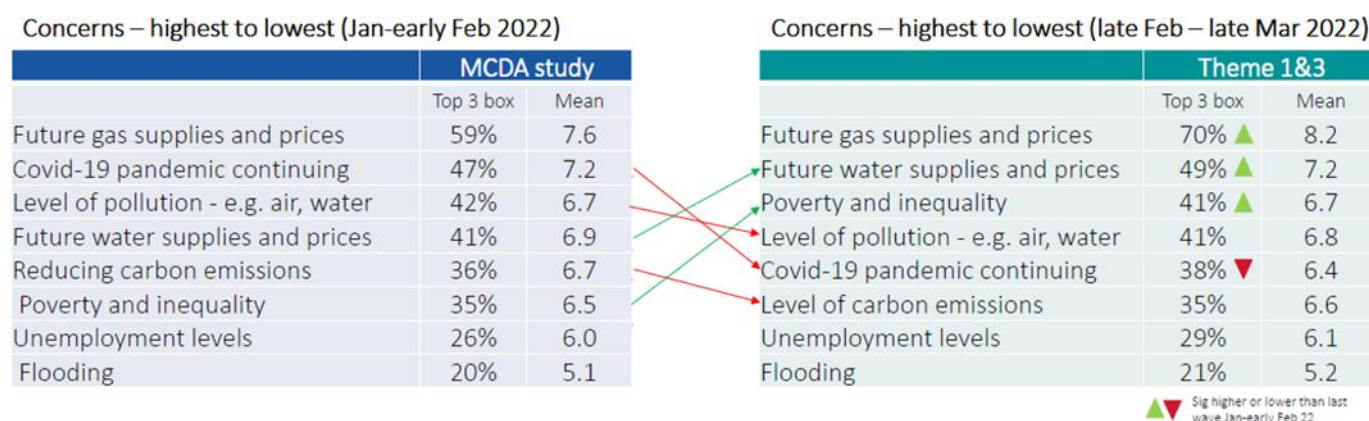
Furthermore, the *SSC – WRMP MCDA Quantitative Insights (2022) (Accent)* surveyed SSC customers on their general opinions about the environment. This study found that customers are engaged with and concerned about the environment/climate change, but they are also concerned about the impact of the cost-of-living crisis. The survey explored some more specific views regarding these points. For example, 51% of SSC customers claim to be actively involved in some type of environmental activity, mainly encouraging others to be more environmentally conscious (45%).

Just over half (52%) of the sample said they were concerned about the impact of climate change on the natural environment in their area. The mean score for this was significantly higher in CAM (7.8) than in SSW (7.1), which is consistent with previous studies that show CAM residents are more engaged as a population with the environment than SSW. However, more of the sample was concerned about energy costs/security (59%) and Covid-19 (47%) than pollution (42%) and carbon emissions (36%). That being said, concerns about carbon emissions were higher than concerns about unemployment (26%) and flooding (20%).

Participants (aged 16 to 17) on the SSC – *Young Innovators Panel (2023)* shared this view. Many also stated that their efforts to reduce water usage were mainly driven by an effort to save money within the cost-of-living crisis rather than due to environmental factors.

When asked if they favoured “Doing more to reduce the company’s ‘carbon footprint’ - even if it costs customers more” or “Keeping customer bills as low as possible”, on average, views were balanced. There was no significant difference between SSW and CAM customers in this regard. This is further emphasised in *SSC – WRMP Themes 1 and 3 Quantitative Insights (2022) (Accent)*, where concern for future gas and water supplies increased greatly over the period of early 2022, while concern over carbon emissions remained comparatively low, demonstrating the effect of the change in cost-of-living (*Figure 16.2*).

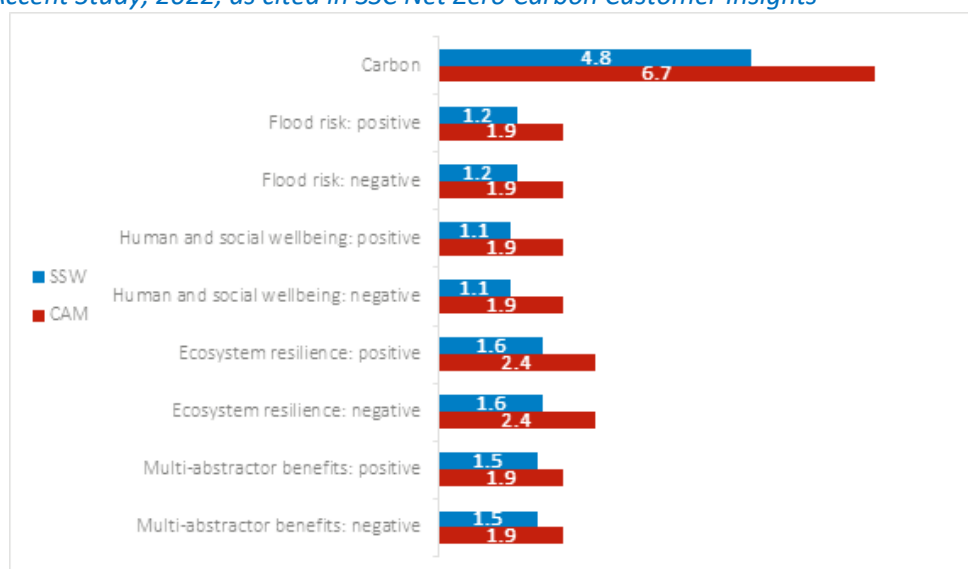
Figure 16.2: Changes in concerns between early 2022 and late March 2022 from SSC WRMP Themes 1 and 3 Study



Higher concern for environmental/sustainability issues in CAM when compared to the SSW region is present in WRAP (2021), with CAM customers consistently rating these issues as higher priority in comparison to SSW (this was not, however, a significant difference).

Likewise, in the *SSC – WRMP MCDA Quantitative Insights (2022) (Accent)*, water resources options aimed at reducing carbon emissions often attracted notably the highest WTP valuations from customers, especially in the CAM region (*Figure 16.3*). The basis for these WTP values was a pairwise discrete choice exercise in which customers considered two alternative futures at a time over eight screens, defined in terms of five environmental features (Carbon, Flood risk, Human and social well-being, Eco-system resilience, and Abstraction) traded against different bill amounts. Each feature varied in levels, ranging from receiving a major negative impact to a major positive impact, with contextual material provided to explain the features and give examples of negative and positive impacts.

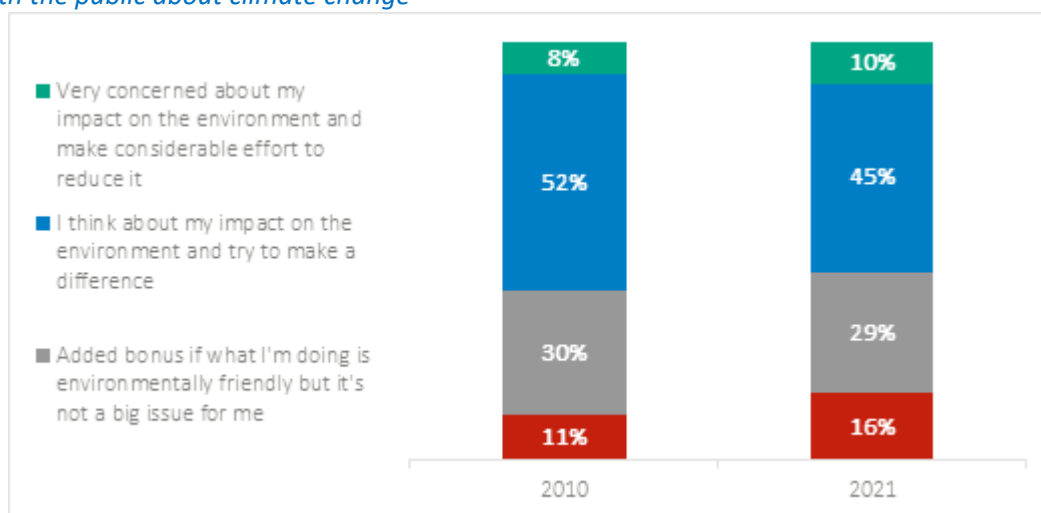
Figure 16.3: Valuation scores for various schemes aimed at reducing carbon emissions (£m per unit of score) from PJM Accent Study, 2022, as cited in SSC Net Zero Carbon Customer Insights



Personal commitment to reducing climate change

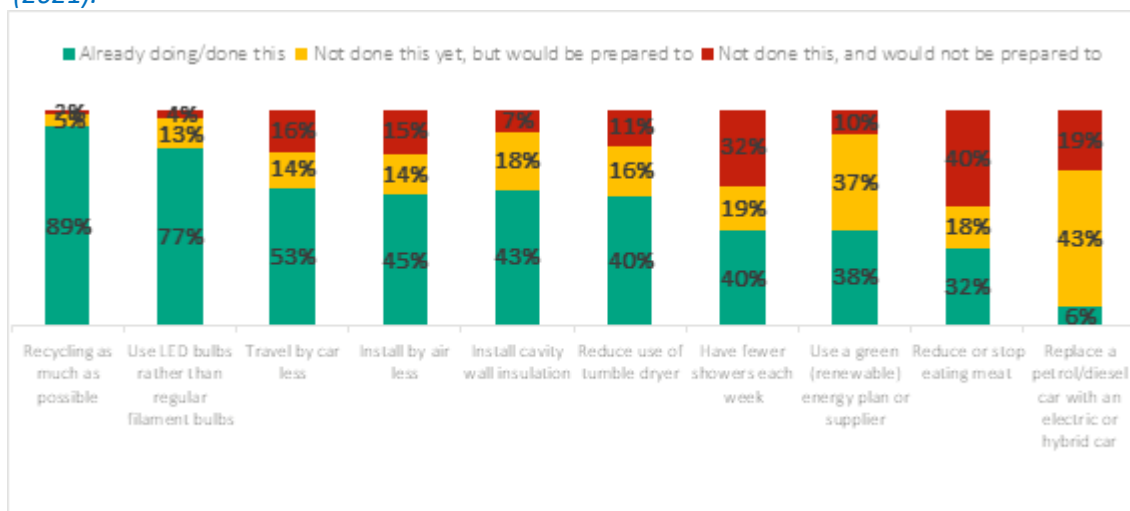
The *Communicating with the Public about Climate Change (2021)* (Blue Marble) paper suggests that across the period 2010-2021, the environmental involvement of UK participants has changed very little, with only 10% of the sample stating that they are very concerned about their environmental impact and actively make an effort to reduce it (8% in 2010) (for further insight see *Figure 16.4*). Despite this, there were positive changes between 2010 and 2021, namely an increase in agreement with the statement “I want to change my behaviour to help reduce climate change” up from 51% in 2010 to 63% in 2021, and increased disagreement with the idea that an individual cannot do much to reduce climate change by themselves (up from 42% in 2010 to 50% in 2021).

Figure 16.4: Participant’s environmental involvement between 2010 and 2021 from Blue Marble Communicating with the public about climate change



During the *Communicating with the Public about Climate Change (2021)* (Blue Marble) recycling was cited as the most common action consumers are already taking to help stop climate change (89% of consumers stated that they do this), with use of LED bulbs (77%) also common. The least likely action listed was using an EV (6%). Participants were most resistant to reducing/stopping their meat consumption (40%) and taking fewer showers per week (32%). For more information see *Figure 16.5*.

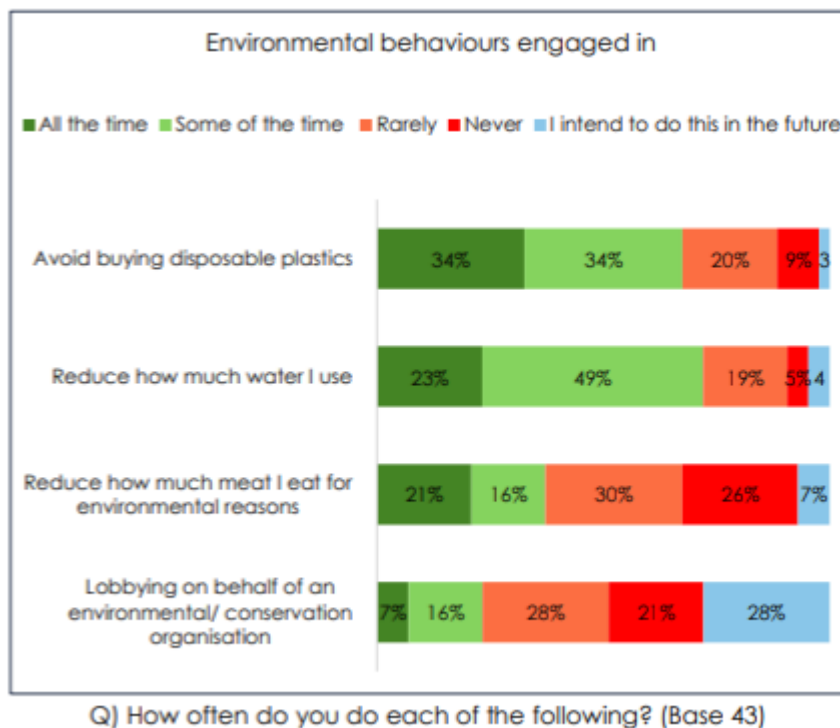
Figure 16.5: Actions consumers are already doing, would be prepared to do, or would not be prepared to take to help stop climate change: Blue Marble - Communicating with the public about climate change study (2021).



Similar findings were found during *SSC’s – Young Innovators Panel (2023)* where 68% of those aged 16-17 who took part in the schools survey across the SSW region stated that they avoided buying disposable plastics at least some of the time, and 72% stated the same for reducing their water usage. However other behaviours, such as reducing meat

consumption (37%) and lobbying for environmental or conservation organisations (23%), were far less popular (Figure 16.6).

Figure 16.6: Self-report of how often 16–17-year-olds perform a list of environmental behaviours.

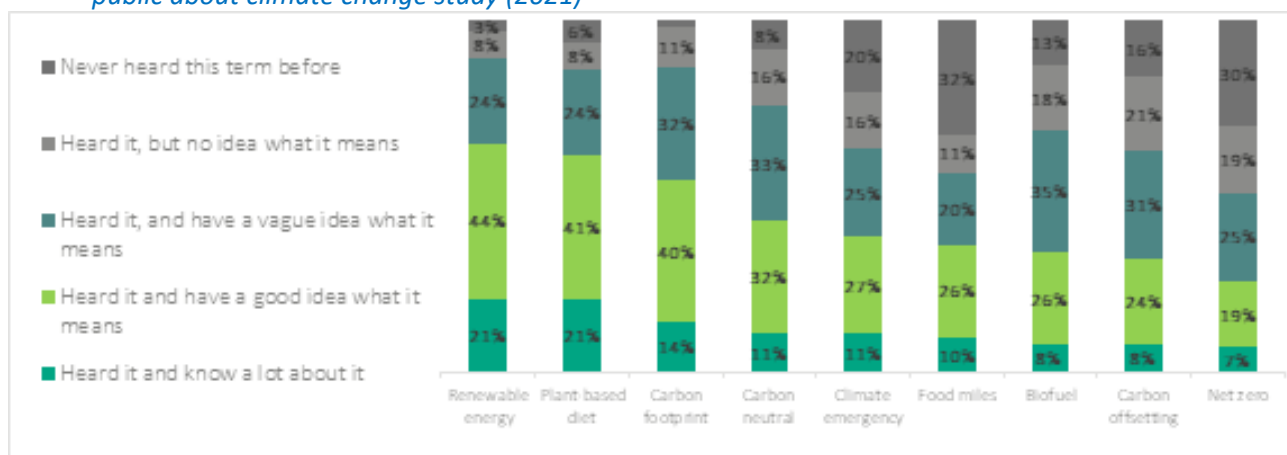


A lack of detailed understanding

General knowledge of climate change seems to be relatively high amongst consumers and higher than awareness and knowledge of climate change-related language and topics.

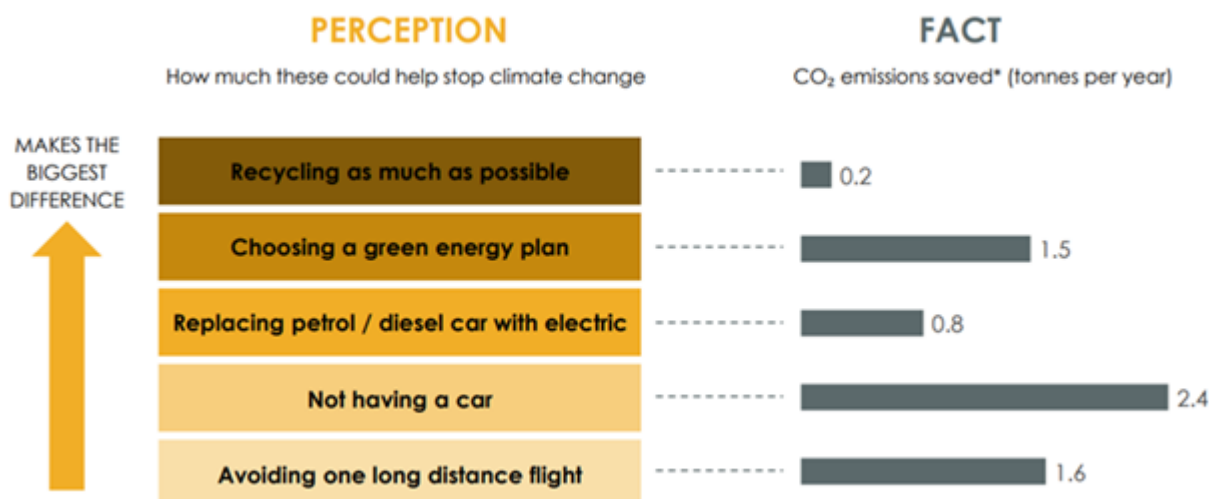
Familiarity with climate change terms was generally poor during the *Communicating with the Public about Climate Change (2021)* (Blue Marble). “Net Zero” was one of the least recognised terms listed, with 30% of the sample (2,090 UK adults) stating that they had never heard of it, and only 26% stating that they had heard of it and had at least a good idea as to what it means (For more information see Figure 16.6). Furthermore, many participants struggled to explain the causes of climate change and how potential key actions that could be taken will affect it, and key scientific concepts relating to climate change were often misunderstood by customers.

Figure 16.6: Familiarity and understanding of climate change terms from Blue Marble - Communicating with the public about climate change study (2021)



Furthermore, perceptions on which environmentally friendly actions have the largest impact on climate change were often highly inaccurate, with many participants believing the best thing they could do was recycling as much as possible (an action that has relatively low genuine environmental impact), while air travel and car ownership was believed to have a relatively low impact, when in reality these were the most impactful factors listed (for more information see *Figure 16.7*). This highlights the need for education for many customers around making the best decisions in their everyday lives to reduce their carbon footprint.

Figure 16.7: Customer perceptions on actions that could help stop climate change vs CO₂ emissions saved 9tonnes per year) from Blue Marble - Communicating with the public about climate change study (2021)



In contrast, in the *Net Zero - A Greener Future (2021) (Explain)* report, 72% of participants were aware of Government targets relating to climate change, with over half (58%) stating that they had heard of Net Zero before. Of those previously aware of Net Zero, 64% were comfortable they understood what it meant. However, among all participants, 48% felt uninformed on what lifestyle changes could lead to Net Zero. This highlights differences in knowledge levels amongst the population.

The qualitative workshop phase of the *SSC – LTDS Report (2023) (Turquoise)* showed that SSC should prioritise reducing operational carbon by 2030 before addressing embodied carbon. However, most participants did not feel equipped to give an informed answer. This was a key reason why SSC then held an in-depth Citizens’ Jury with customers on this topic.

The lack of awareness around climate change and Net Zero also featured in *SSC’s – Young Innovators Panel (2023)*, where participants were highly concerned about climate change and environmental issues, but were often unsure what their role should be, what they could do to prevent climate change, and whether their actions could have a positive impact, or whether they should “give in to fatalism”.

Responsibility

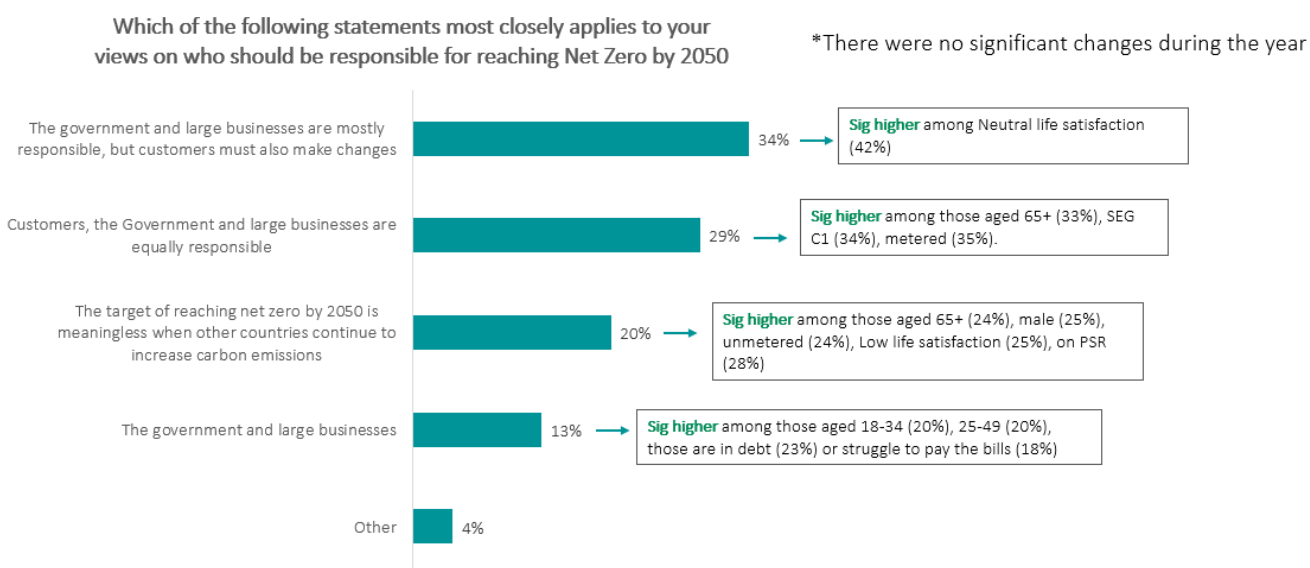
Consumers sometimes disagreed on who they think should be responsible for Net Zero actions, whether that be governments, large businesses, or consumers themselves.

When asked who should be responsible for reaching Net Zero by 2050, the *SSC – Customer Priorities Research Tracker Quantitative Insights Year 3 (2023) (Accent)* report found more than one-third of household customers, including future customers, (34%) agreed this should mostly be the government and large businesses. A further 29% believed that everyone is equally responsible (*Figure 16.8*). Younger customers and those in debt were significantly more likely to want the Government to take responsibility.

Figure 16.8: Responses to who should be responsible for reaching Net Zero by 2050.

Who should be responsible for reaching Net Zero by 2050

More than one third of customers agreed that the responsibility for reaching Net Zero by 2050 should be taken mostly by the government and large businesses, but customers must also make changes.



Q49b. Which of the following statements most closely applies to your views on who should be responsible for reaching Net Zero by 2050:

The *Net Zero Citizen Jury (2023) (Explain)* results showed not all customers think tackling net zero is necessarily SSC's responsibility, as it is part of a much wider global issue that should be addressed in other spheres, not just the water industry.

In the *Net Zero - A Greener Future (2021) (Explain)* report, 49% of the sample felt that the Government had the greatest responsibility for ensuring that Net Zero targets are met, while 20% thought it was the general public. These two groups, alongside big businesses, were seen as having the most responsibility for meeting targets.

Level of ambition towards SSC's Net Zero target

Priority level of achieving net zero

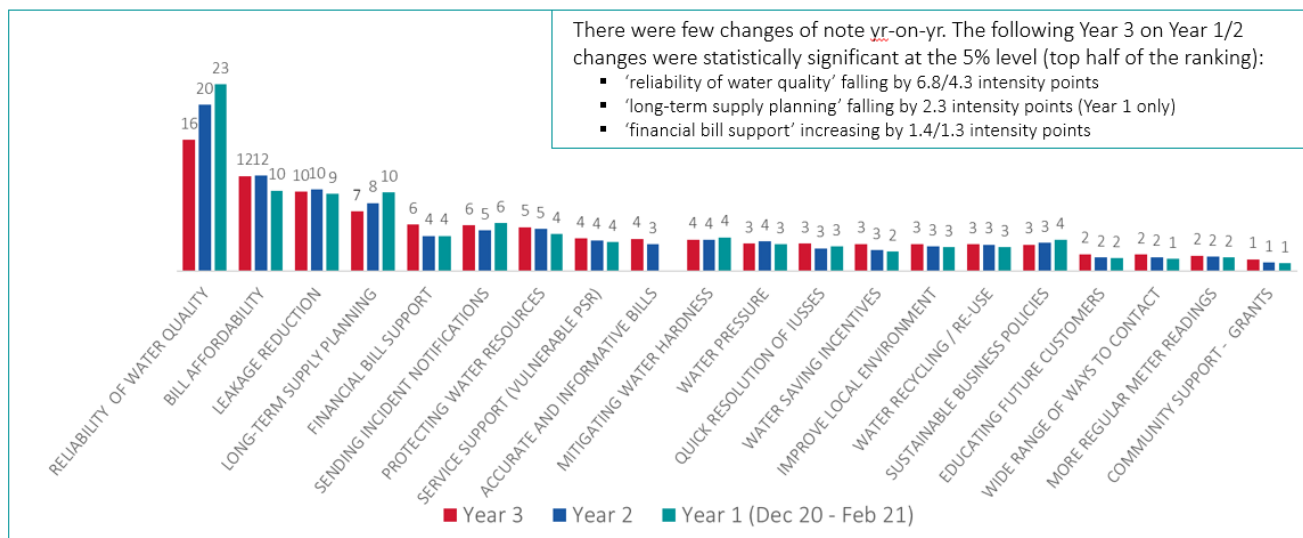
The *SSC – LTDS Report (2023) (Turquoise)* indicates that achieving net zero was a lower priority for SSC customers relative to the other 9 ambitions tested in the study. This insight spanned both the qualitative and quantitative results. HH customers were asked to rank 10 ambitions in order of priority, and 'Achieving net zero carbon' was ranked 9th in the qualitative workshops, and 10th in the online survey. Customers did support net zero, but seemed to rank it as a lower priority because it was seen as more of a generic target imposed on SSC by the Government. In contrast, future customers and NHHs ranked achieving net zero carbon higher in the survey, when compared to HH customers. In particular, NHH customers ranked 'Achieving net zero carbon' as their third highest priority in the survey, whilst HHs ranked it 10th as previously mentioned. This is likely linked to the fact many businesses have or are embarking on their own Net Zero journeys.

The *Net Zero Citizen Jury (2023) (Explain)* also show that investment directly linked to reducing carbon emissions is a lower priority for customers across the SSC regions when compared to carbon reduction strategies linked to customer education and reducing leakage (which are very important to customers for a range of reasons and which also have a notable impact on helping to drive down emissions as less water needs to be treated and pumped due to reduced wastage of water).

Likewise, in the *SSC – Customer Priorities Research Tracker Quantitative Insights Year 3 (2023) (Accent)*, Sustainable business policies, where SSC focuses on 'becoming a sustainable business that reduces the environmental impact of its operations, such as reducing carbon emissions, waste that goes to landfill and single-use plastics', was ranked 16th

out of 20 initiatives. This was calculated using the Max-Diff approach where participants are shown a set of options and asked to pick which is most and least important to them. The ranking position has remained relatively stable for Sustainable business policies compared with the previous two years the tracker was run (Figure 16.9) suggesting it hasn't been a higher priority for the past few years. It is important to note that these 20 areas were all important to HH and NHH customers in the qualitative research component of the Customer Priorities Tracker, but the Max-Diff approach delivered their relative importance to household customers in the quantitative survey.

Figure 16.9: Year 3 and Year 1 & 2 comparison of priority scores of 20 initiatives, HH customers only.

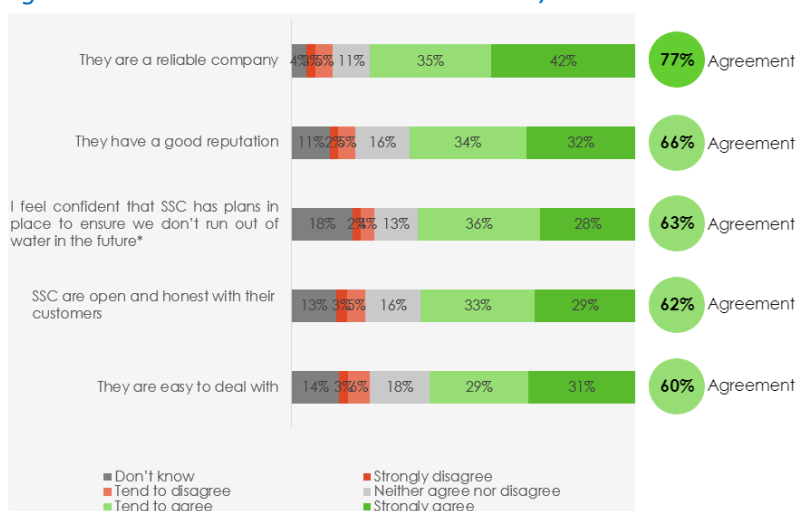


* Priority scores are a measure of preference intensity on a 0-100 scale.
 Informed priority scores shown for Years 1&2
 * 'Accurate and informative bills' included in Years 2&3 only*

On the other hand, during a WRE – Club Customer Engagement report (2021) (Blue Marble), ambitious targets for carbon reduction scored as the 4th highest rated objective in a customer panel on a list of potential developments (49% voting this as the top option for investment), behind affordability, reducing leakage, and encouragement for customers to use less water.

The SSC – Customer Priorities Research Tracker Quantitative Insights Year 3 (2023) (Accent) covers some of SSC's brand statements, some of which relate to the environment. For example, 44% of HH customers agree that SSC is "environmentally focused and do a good job at helping to protect the environment in the areas they take water from" (Figure 16.10). This was slightly higher amongst NHH customers at 51% (Figure 16.11). The same proportion of HH customers (44%) agreed that SSC is "an environmentally sustainable business", which a very similar proportion of NHHs agreed with (43%). These differences were not significant between SSW and CAM regions.

Figure 16.10: Household agreement level with brand statements 2022/23.



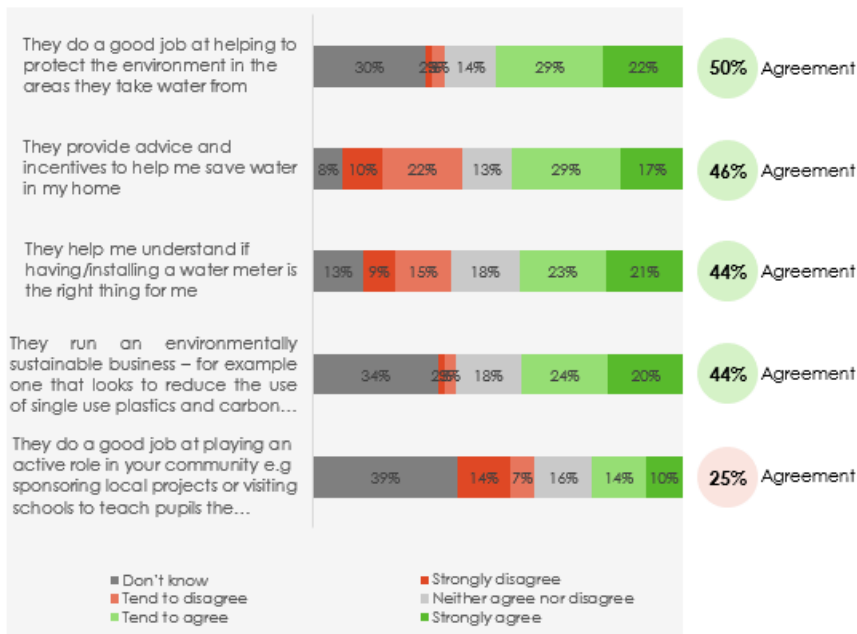
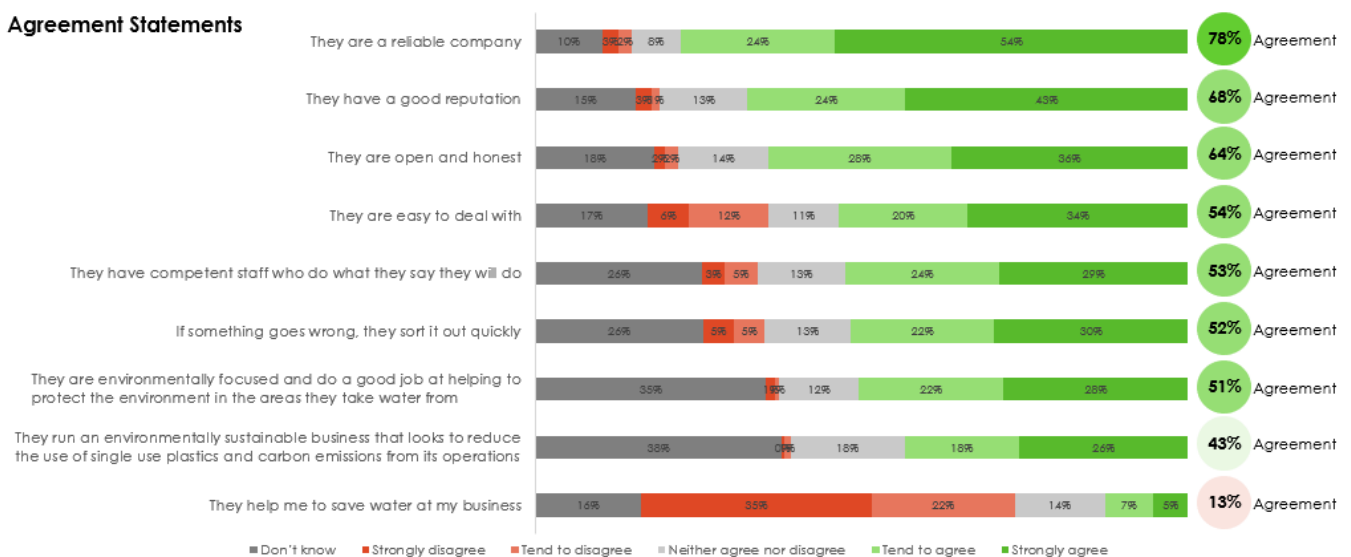


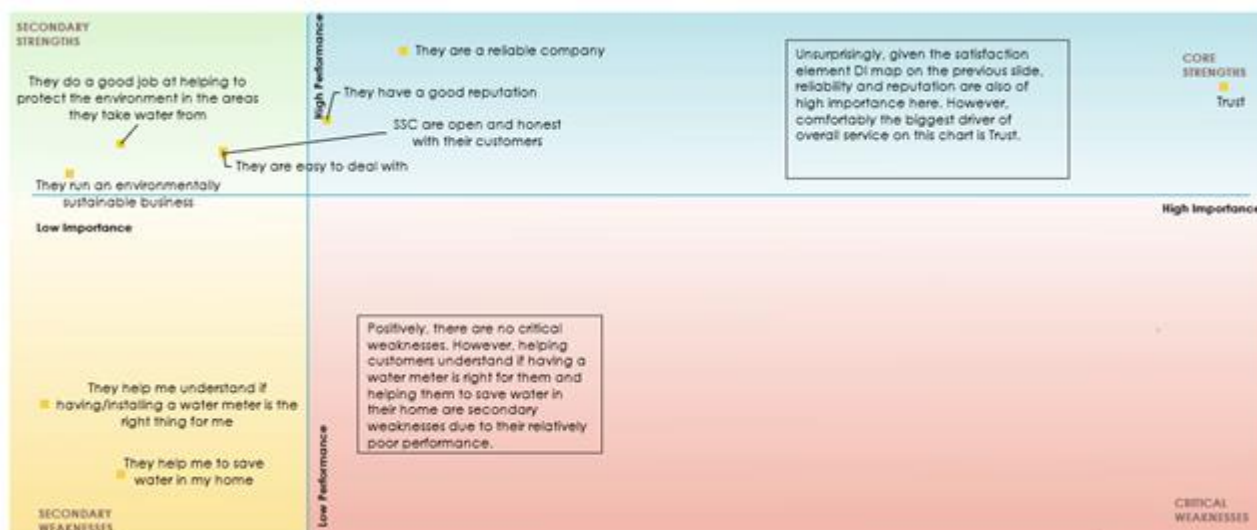
Figure 16.11: Non-household agreement level with brand statements 2022/23.



The SSC – Customer Promises Tracker Annual Report (2023) (Turquoise) includes a derived importance map based on statistical correlation to understand the relationship between overall satisfaction and individual attributes. The higher the score, the more significant role in overall satisfaction the individual attribute has.

This analysis found when relative importance of the brand statements was considered, both environmental statements can be considered as “secondary strengths”, meaning that relative to other attributes, they are perceived by customers to be less important in terms of their impact on the overall satisfaction score given, but ones in which customers perceive SSC is performing as relatively well at. (Figure 16.12).

Figure 16.12: Derived importance Map on overall service and agreement statements (including trust) - 2022-23



Views on SSC’s Net Zero target

When SSC first started its engagement with customers on this topic in more depth, the *H2Online Community Feedback (2020)* noted that most participants supported the goal of reaching Net Zero by 2030 (SSW:56%, CAM:55%), however, there was a high level of scepticism as to whether these targets could be reached in time, with around a quarter of participants stating this opinion (SSW:21%, CAM: 27%).

In the *SSC – LTDS Report (2023) (Turquoise)*, the specific ambition tested was to help the UK achieve its national target of net zero by 2050, whereby SSC aim to reach net zero carbon emissions from the company’s operations by 2030, and achieve net zero greenhouse gas emissions across all the company’s and supplier’s operations by 2050. Although reaching net zero was a low priority for customers, in the workshops, 89% of SSC customers supported the ambition to reach carbon emission targets, and 95% supported the greenhouse gas emissions ambition. SSC customers recognised the target to be ambitious, yet necessary given the current climate crisis. The key reasons given in the survey for viewing this ambition as most important were: ‘climate change/global warming’, ‘save the planet/environment’, and ‘it’s most important/ affects other areas’.

However, in the quantitative survey, the support was lower. Only 27% of HH customers, 20% of future customers, and 20% of NHH customers supported SSC’s target to have net zero carbon emissions from company operations by 2030. This was in part driven by the customers in the qualitative workshop having time to discuss each ambition in greater detail and come to a decision on their views based on a more informed group discussion.

In the *Net Zero Citizen Jury (2023) (Explain)* in-depth, participants completed a trade-off task where they rated which option they preferred on a scale of 1 to 5, with 1 being one option and 5 being the alternative. When asked whether they wanted SSC to not attempt to meet the Net Zero 2030 target, which would mean no increase in their clean water bill, or do everything that is necessary to hit the 2030 Net Zero target, which would be an increase in clean water bills (*Figure 16.13*), there was a tendency to take a ‘middle of the road approach’ with emphasis on transparent communication regarding bill increases (*Figure 16.14*).

“There has got to be a balance, especially now with rising bills everywhere, and cost of living crisis at the forefront of people’s minds. But to counter that, I think South Staffs, the investment has to be there from the customer as well” – South Staffs Water Juror (NHH)”

“It’s down to communication. And if Cambridge Water get it right, and explain why their price is going up nominally, but explain all the benefits to people in the right communication across all channels - because everybody learns in a different way - that would soften the blow, certainly, and make people understand” – Cambridge Water Juror (NHH)”

Figure 16.13: Trade-off task stimuli – affordability

Trade-offs: affordability

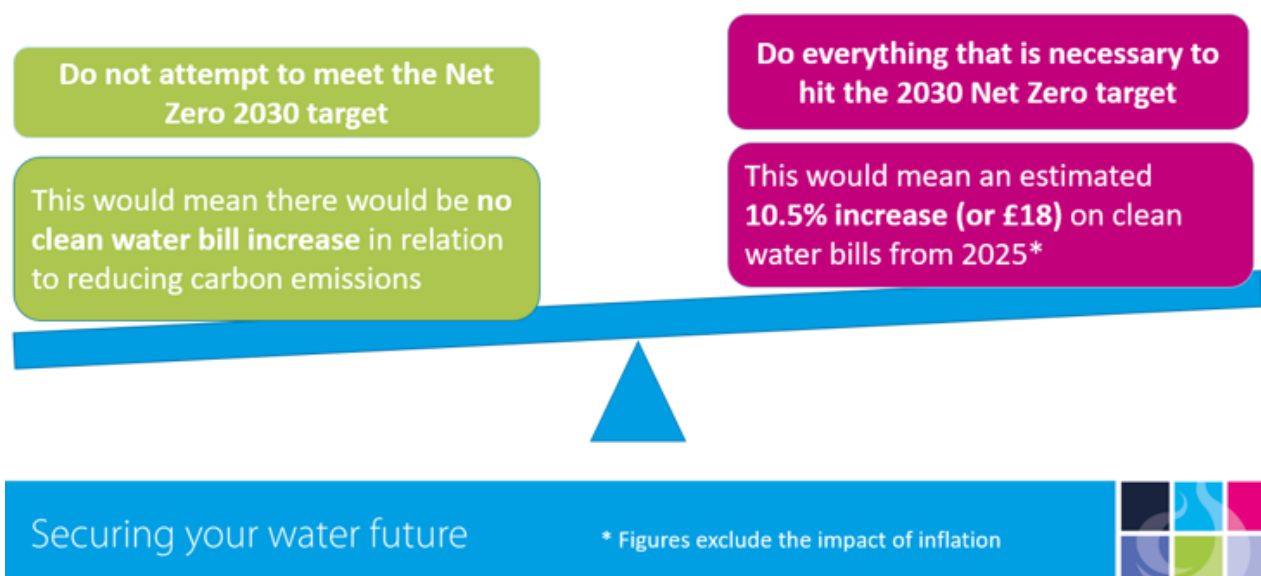


Figure 16.14: Affordability trade-off task rating on a scale of 1-5.

	Keeping bills as low as possible		Increasing bills as much as is needed		
	1	2	3	4	5
CAM ONLINE (average 3.5)	0	6	1	4	5
SSW ONLINE (average 2.7)	3	4	7	3	1
CAM F2F (average 3.3)	0	0	2	4	1
SSW F2F (average 4.6)	0	0	1	1	5

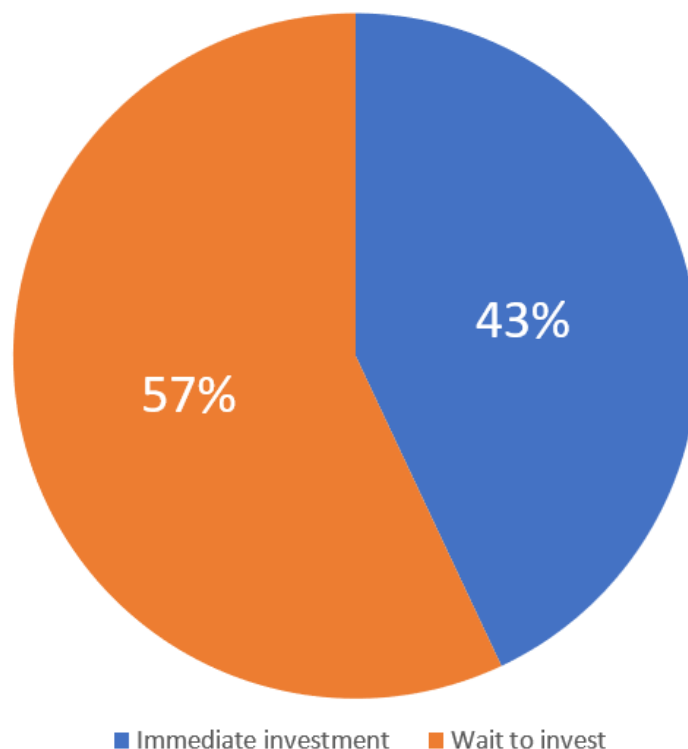
Timing of SSC’s Net Zero target

In the *SSC – LTDS Report (2023) (Turquoise)*, the survey found there was an appetite for the target ‘Net zero carbon emissions from company operations by 2030’, to be achieved later. Specifically, 34% of HH customers wanted this ambition to be achieved between 2035 and 2045, as did 40% of future customers and 20% of NHH customers.

The *SSC – LTDS Report (2023) (Turquoise)*, also asked participants when they wanted net zero greenhouse gas emissions across all operations to be achieved by (SSC’s target is 2050). 45% of HH customers wanted SSC to achieve this ambition before 2050, whilst a similar proportion (43%), wanted SSC to achieve this ambition on target by 2050. Future customers were most in favour of achieving this target earlier, with 80% of FBPs voting for SSC to achieve this before 2050, whilst the remaining 20% voted by 2050. Further, NHHs were less ambitious in terms of timings, with 30% of NHHs wanting SSC to achieve this ambition before 2050, and 60% in 2050.

Customers in the *SSC – LTDS Report (2023) (Turquoise)* had mixed views on whether SSC should invest more in current renewable energy or wait a few years. 43% were in favour of immediate investment, whilst over half (57%) preferred waiting (*Figure 16.15*). The reason given was the belief that technology is rapidly changing, and waiting could lead to more advanced, cost-effective and efficient technology being available.

Figure 16.15: Customer’s views on whether SSC should invest more in current renewable energy or wait a few years.



Additionally, Jurors in the *Net Zero Citizen Jury (2023) (Explain)* in-depth were also asked if SSC should either invest everything now in current technologies, or wait and see if new technologies are developed and then invest (*Figure 16.16*). Online jurors had a slight inclination to wait for better solutions whereas the face-to-face jurors thought that SSC should progress with current technologies (*Figure 16.17*). As such, a cautious approach should be taken for innovation, balancing between waiting for new technology and acting now, with current technology.

Figure 16.16: Trade-off task stimuli – approach to innovation

Trade-offs: approach to innovation

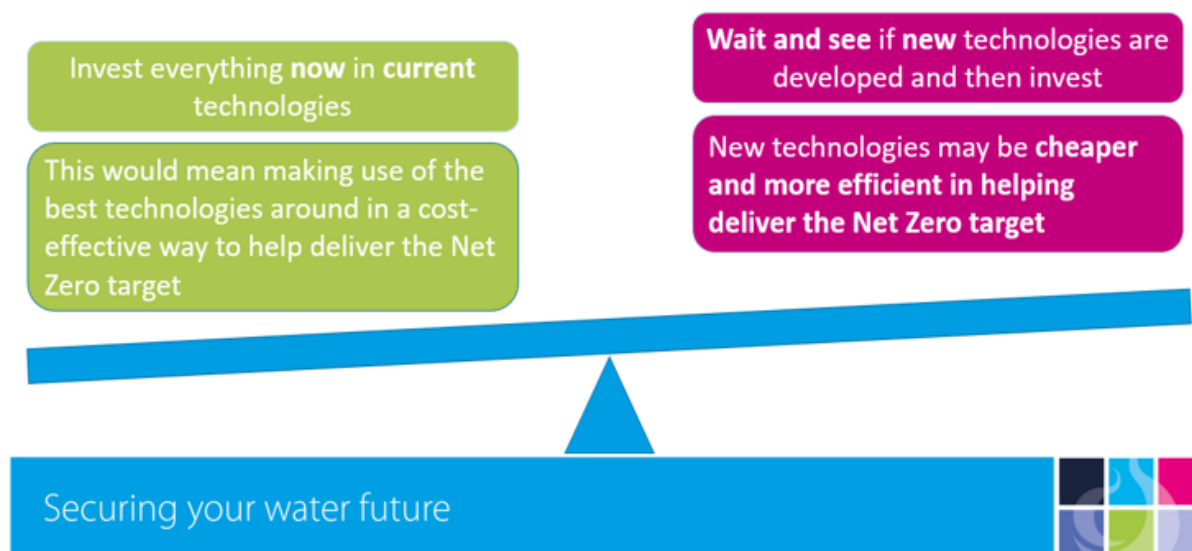


Figure 16.17: Approach to innovation trade-off task rating on a scale of 1-5

	Investing more now in current technologies				Waiting for better solutions
	1	2	3	4	5
CAM Online (average 3.4)	0	1	9	5	1
SSW Online (average 3.2)	1	1	10	6	0
CAM F2F* (average 2.2)	2	1	3	0	0
SSW F2F (average 1.3)	6	0	1	0	0

*one juror within this group felt they were unable to vote, preferring a 'don't know' option.

"I'm not saying that you shouldn't invest anything now... a change has to start immediately in order to see effects in the future, but I feel like it's important to just leave financial options open for newer technology that can come" – South Staffs Water Juror (HH)

"I'm just going to make one point. You said that we can hang on five or ten years and something else might be better, but when we get to that point, five or ten years hence, you'll say now hang on, in ten years' time, there might be something better. So, I think you've got to take what you've got now and work with it." Cambridge Water F2F Juror

Intergenerational fairness

Besides affordability and innovation, Jurors in the *Net Zero Citizen Jury (2023) (Explain)* research were also asked to complete the trade-off task on the goal of reaching Net Zero carbon by 2050 (Figure 16.18). This resulted in discussion around fairness, both in terms of affordability and caring for future generations. Instead of current bill payers paying more from 2025, there was a preference for a more even pattern of distribution i.e., to spread the cost over time, although some stressed the importance of investing now, as they felt it imperative to ensure action on climate change sooner rather than later (Figure 16.19).

Figure 16.18: Trade-off task stimuli – when should goals be met?

Trade-offs: when should goals be met?

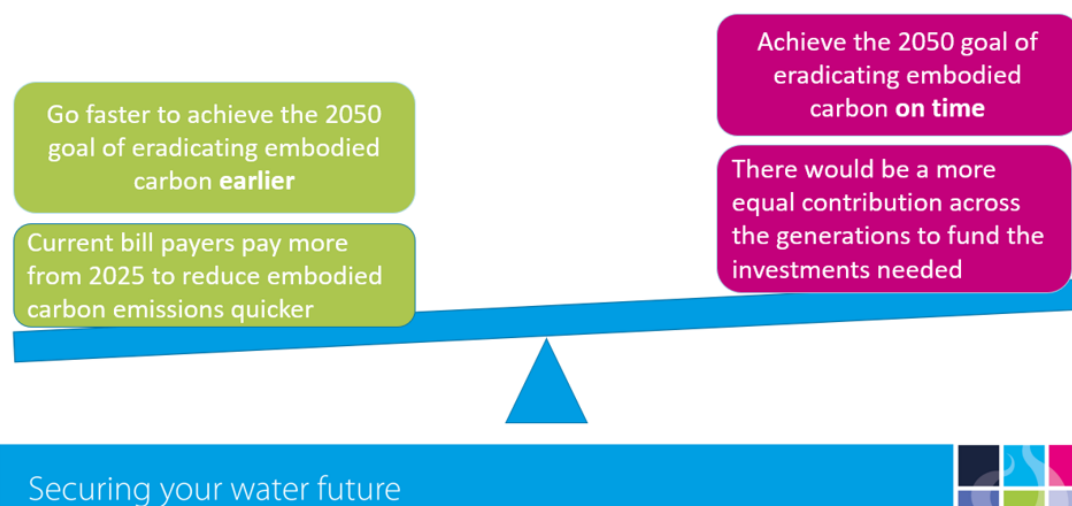


Figure 16.19: When should goals be met? trade-off task rating on a scale of 1-5

	Investing more now				Even pattern of distribution
	1	2	3	4	5
CAM Online (average 3.7)	1	0	5	5	4
SSW Online (average 2.6)	5	4	4	4	1
CAM F2F (average 2.1)	1	2	3	1	0
SSW F2F (average 4.0)	1	0	1	1	4

“I think the fairest way is to do an even pattern over the twenty-seven years we’ve got left, rather than lump it all onto the future generation” – Cambridge Water Juror (NHH)

Specific Net Zero related activities

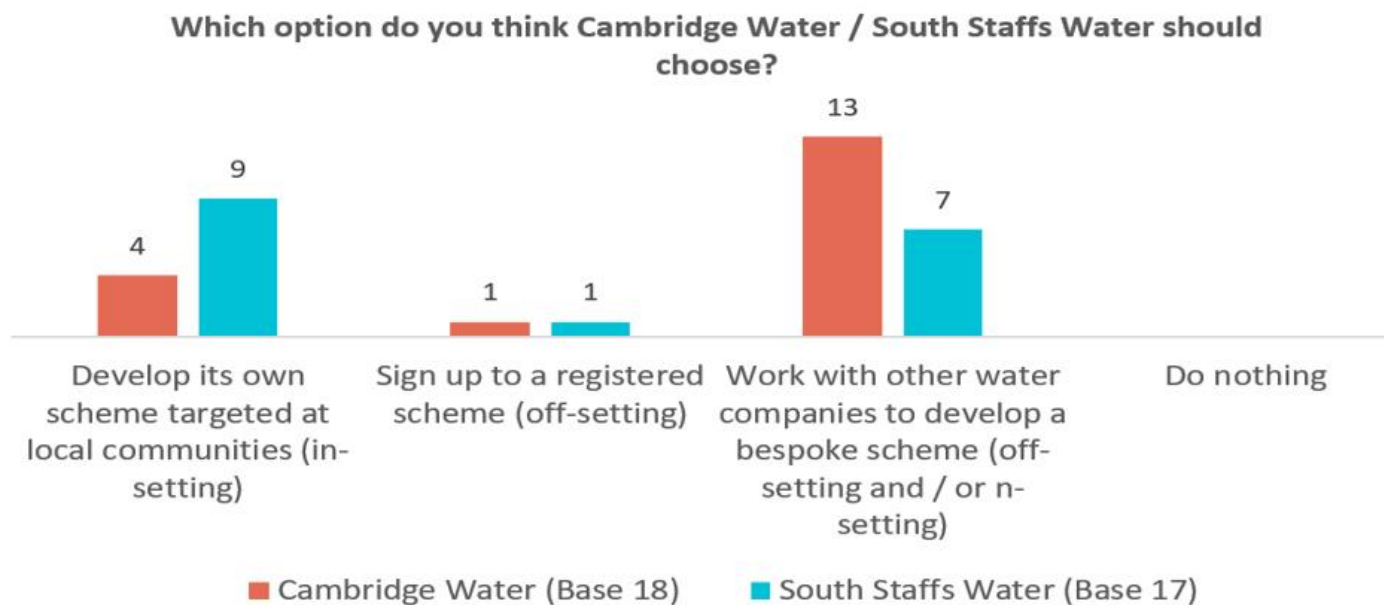
Some sources discussed various potential net zero related activities that SSC could partake in. For example, in the Net Zero Citizen Jury (2023) (Explain) research, customers were shown 5 key actions as part of their net zero plan. These actions were; renewable energy generation, leakage reduction, education and making better use of water, moving away from fossil fuels and identifying opportunities to become more energy efficient (Figure 16.20). Across both regions, ‘reducing leakage’ and ‘education and making better uses of resources’ were considered the top priorities of the five key investment areas. This is consistent with findings in the ‘Demand side options’ thematic review, where leakage was consistently a top priority for customers across the board. Moving further, the Net Zero Citizen Jury (2023) (Explain) results show there are mixed opinions regarding renewable energy generation and moving away from fossil fuels. Some jurors thought these were important, due to their high impact in terms of reducing carbon. However, others viewed these as much larger, global priorities and therefore not ones that SSC should necessarily focus on as an urgent priority.

Figure 16.20: The 5 key actions as part of SSC’s Net Zero plan.

Action in Net Zero plan	Contribution to 2030 carbon targets*	Estimated impact on annual bill from 2025 **	Achievable by 2030?
➤ Renewable energy generation	69%	£3.30 or 2%	?
➤ Leakage reduction	11%	£6.60 or 4%	?
➤ Education and making better use of water	9%	£1.50 or less than 1%	✓
➤ Moving away from fossil fuels	7%	£3.30 or 2%	?
➤ Identifying opportunities to become more energy efficient	3%	£3.30 or 2%	✓

The *Net Zero Citizen Jury (2023) (Explain)* project also held some discussions around in-setting and off-setting of carbon. Jurors from the SSW region tended to prefer the idea of SSC developing its own scheme targeted at local communities (in-setting), whilst CAM jurors preferred the idea of SSC working with other water companies to develop a bespoke scheme (offsetting and/or in-setting). Another idea presented was the idea of signing up to a registered off-setting scheme but this was not popular at all. Finally, there were no jurors who felt SSC should be doing nothing in this area (Figure 16.21).

Figure 16.21: Customer’s carbon offsetting/ insetting choices.



Communications around Net Zero

Some sources explored preferred communications strategies regarding net zero. From the emerging insights it appears there is an appetite for an online webpage that is engaging and contains key information about SSC’s net zero target, and what SSC is planning on doing to achieve it.

The *Net Zero Citizen Jury (2023) (Explain)* asked customers their broad opinions around communication of net zero-related activities. Jurors held a wide range of preferred formats of communication, mainly digital and paper versions, but not in person. They wanted communications to be engaging and to contain a mixture of text and more graphical representations of content. They did not want to be overwhelmed by frequent net zero updates, and did not want to hear more often than quarterly updates. Further, the level of detail was discussed.

Customers had an appetite for high-level communication updates, and it is vital that these contain comparisons. However, a level of detail needed to be made available for those who wanted to find out more. Transparency was important to help build trust with customers that the strategy was working to hit targets, and if falling behind, what was being done to catch up.

In the *SSC H2Online Community web review – Carbon Net Zero Customer Insights (2020)*, members on the Community were asked to review the dedicated webpage set-up to communicate the company’s path to Net Zero 2030 on during November 2022. Figure 16.22 shows a snippet of the online post and the webpage. Of the 37 members who engaged with the webpage and infographic, 70% from SSW and 71% from CAM thought it was good (Figure 16.23).

Figure 16.22: Snippet of the post on H2Online Community and the SSC webpage on Net Zero.

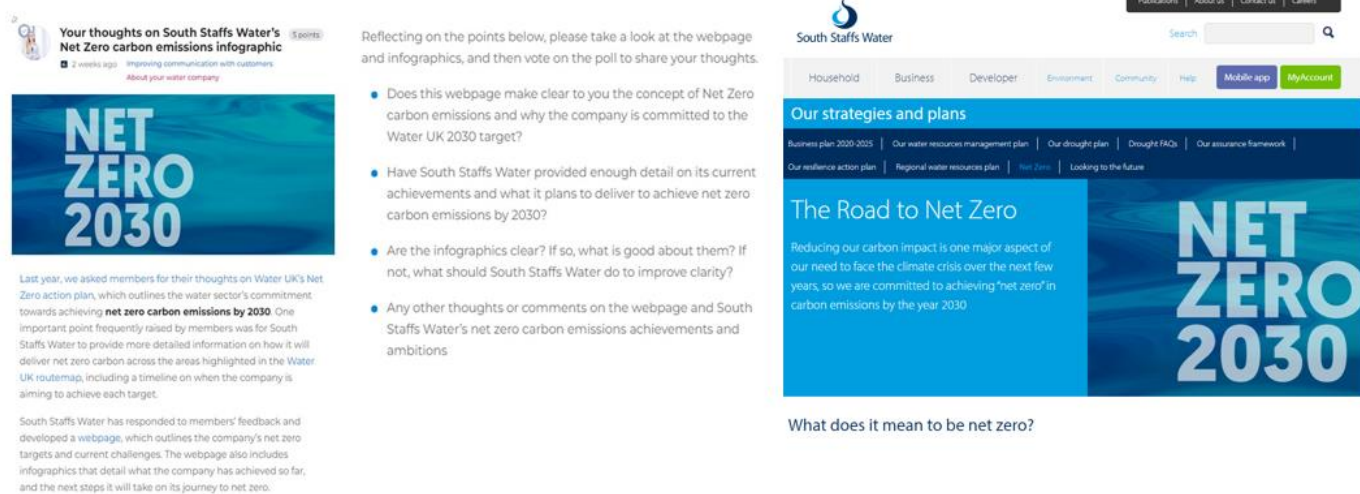
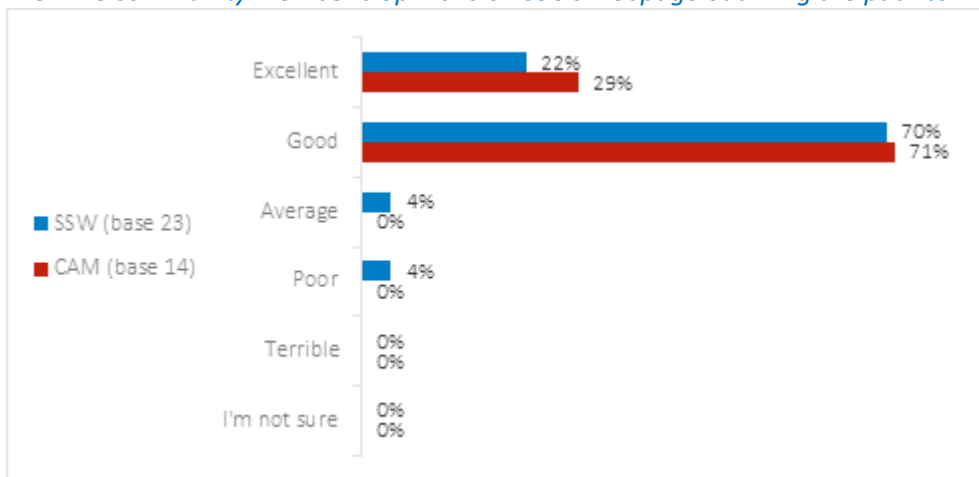


Figure 16.23: H2Online community member's opinions on SSC's webpage outlining the path to Net Zero by 2030.



Comments on the post varied but reflected the results of the poll, i.e., they thought it was good. Some also shared ideas on areas the website could improve to better communicate Net Zero targets and asked for more details in terms of how these targets were going to be achieved.

“Generally I am content with the page. I am not sure why there are bullet-points after the infographic as the infographics are very clear to read.” Comment from SSW member.

“Webpage is excellent in giving an initial insight into what net zero is all about and what SSC is doing. Would like to see specific targets with specific dates for achievements and a quick cost v benefit chart from each event. Thanks.” Comment from SSW Member.

“As an overall statement, it is satisfactory and gets the message across. I personally would like more detail could this be done via links in the webpage?” Comment from CAM member.

Golden Threads

Golden Threads	The need for customer information and engagement	Some customers were sceptical of SSC’s goals regarding Net Zero, citing a lack of information and a desire for more insight into Net Zero and SSC’s plans concerning it, before they could state trust in SSC to carry out its 2050 pledge.
		Many customers were also often unaware of key terms and themes around climate change, including Net Zero, which shows a clear need for clear information for customers to access.

Golden Threads	Concern for the environment	Concern for the environment and a desire for carbon Net Zero often occur hand in hand, however this is not always the case. Examples emerged within the sources where customers had a high concern for the environment, but relative knowledge of key terms and themes around climate change, specifically Net Zero were often lacking.
Emerging thread	Cost of living	The cost-of-living was often seen as a higher priority than Net Zero, especially in more recent samples with a higher strain on participants' financial situation.

Demographic Splits: Net Zero

The table below provides a brief summary comparison of each of the key demographic groups, related to net zero. Please see the appendix for detailed tables of each split.

Demographic group(s)	Key findings/ comparisons
SSW vs CAM	Appendix A.15.1 summarises SSW and CAM preferences in relation to carbon Net Zero. In general, CAM customers showed greater support for net zero and greater concern for climate change. However, in some samples there was only a minor difference between regions, with other studies showing no regional difference at all. CAM customers additionally were more sceptical about reaching net zero targets in comparison with SSC customers.
HH vs NHH	Appendix A.15.2 summarises HH vs NHH preferences in relation to Net Zero. Research shows that NHHs rank achieving net zero carbon as a higher priority than HHs, and are also more likely to agree that SSC is environmentally focused. However, NHHs were less ambitious than HHs in regards to timings of reaching net zero, with HHs more in favour of SSC performing ahead of their targets.
FBP vs current bill payers	Appendix A.15.3 summarises future customer preferences in relation to Net Zero. Younger customers tend to show high concern for the environment and expressed a stronger desire for Net Zero before 2050 in comparison to other customers. Despite this, older customers tend to display more concrete actions to prevent climate change compared with younger ones. In future billpayers specifically, concern for climate change issues tended to take a backseat to monetary issues such as the cost-of-living crisis. Many engage in smaller environmentally-friendly behaviours, however, few take larger-scale action. Additionally, knowledge of the utilities sector among these groups is generally low.
Vulnerable vs other customers	Appendix A.15.4 summarises vulnerable customers' preferences in relation to Net Zero. Customers who are likely to be financially vulnerable, in the social grade C1C2 and DE, were more likely to lean towards keeping bills low/ affordable over several environmental investment related statements.

19. Bibliography

Report	Published Date	Participants	Sample Size	Project Objectives
Aptumo – Affordability and the Water Sector (2022) (Echo) Link to report	2022	HH customers	2,000 HHs	Research asked bill payers how their financial situation has changed over the last year or so, how they are dealing with these changes and what their expectations are for the next few months.
Artesia – MOSL Enhancing Metering Technology (2022) Report available on request	April 2022	Stakeholders	30 stakeholders	The aim of this project is to capture and understand the collective stakeholder view of current state of metering technology in the retail market and to develop a technology strategy and framework for assessing the business case for smart, AMI, AMR and data solutions which will benefit stakeholders in both the retail and wholesale market. Provide a consistent approach to support adoption of future standards and protocols and more efficient rollout across the industry.
Cambridge County Council Email to CW Correspondence available on request	May 2023	Stakeholders	Stakeholders	Email from Cambridge County Council to CW as a response to recent consultation of CW's WRMP.
Cambridge Water Representation dWRMP24 Correspondence available on request	March 2023	Stakeholders	n/a	Consultation response to SSW's WRMP draft business plan.
Cambridge Water Stakeholder Roundtable (2021) (Community Research) Link to report	October 2021	Stakeholders: Attendees from a wide range of organisations, including local and national environmental organisations, a social housing provider, a local authority planning department, a university and an MP	18 stakeholders	To consider stakeholder views at a formative stage of the plan development process.

Carbon Next Zero Customer Insights (2023) Confidential.	January 2023	n/a	n/a	Takes insights from a number of SSC and external sources relating to Net Zero.
CCW - Citizens Forum Communications (2023) Link to report	2023	n/a	n/a	Framework for communications with customers, participants and the general public.
CCW – Customer Licence Condition Research (2023) (Walnut) Link to report	January 2023	HH customers	64 HHs for online community, focus groups and diary task, as well as 14 depth interviews with digitally disconnected customers	Purpose of this research was to understand customers' expectations of water and wastewater companies in relation to specific areas of customer service and support, their views on what principles the new licence condition should include, customer views on the guidance proposed to support the interpretation of the licence condition, and the range and diversity of views that customers have in relation to this.
CCW – Desktop Review of Behaviour Change Campaigns (2023) Link to report	April 2023	n/a	n/a	Review of campaigns aimed at households, both large and small, on reducing water usage, reducing flushing of unflushables, and disposal of fats oils and greases in the sink.
CCW – Environmental Awareness Index (2023) Link to report	February 2023	HH customers	1,466 HHs	The second phase of the Environmental Awareness index, tracking results in 2022. Aimed at understanding attitudes around environmentally damaging water behaviours including supply and demand, things flushed down toilets and fats, oils and greases poured down sinks.
CCW – Evidence Review of Retail Business Water Market (2023) Link to report	January 2023	NHH customers	n/a	Desk research and synthesis of existing research to focus on 4 themes from business customers' experiences: experience of the market, perceptions of the market, causes of adverse impacts and examples of best practices.
CCW – Lifting the Lid (2023) Link to report	January 2023	HH customers	2,126 HHs (from England and Wales)	To understand people's water habits, specifically abnormal habits such as running taps to cover toilet noises, and skipping shower days and how these habits differ by region.

CCW – Public Views on the Water Environment (2021) (Community Research) Link to report	July 2021	HH and future customers	Total: 62	The Consumer Council for Water (CCW) wished to conduct research into how people value and understand the water environment, their preferences for how it should be managed, and their views on current policy directions, taking account of the difference in policies between England and Wales.
CCW – Smart Thinking Metering for Business Customers (2023) Link to report	March 2023	NHH customers	524 NHHs, including 313 smart water meter owners and 148 who did not own one.	<p>To assess NHH awareness of smart water meters.</p> <p>To identify the most appealing benefits of these meters.</p> <p>To investigate benefits experienced already.</p> <p>To assess how much NHHs would be WTP for smart meter installation and access to consumption data.</p>
CCW – Testing the Waters (2022) Link to report	January 2023	NHH customers	Total: 1,825	<p>To track awareness and activity in the water retail market in England.</p> <p>To analyse business customers' satisfaction with various aspects of their water, sewerage and retail services in 2022.</p>
CCW – Water Matters (2022) (DJS Research) Link to report	July 2022	HH customers	5,410 HH customers (150 in CAM, 150 in SSW)	To understand HH customers' views of the initial WRMP proposals. Specifically, to gauge response to proposed use of water restrictions, ways to reduce demand, use of smart meters, plans to meet the new leakage targets, plans to use water transfers, and plans to support private supply households.
CCW – Water Matters (2023) (DJS Research) Link to report	April 2023	General UK HH customers	Total: 5,502 CAM: 150 SSW: 150	Tracking survey which tracks the views of household customers on the services they receive from water companies in England and Wales.
CCW and Ofwat–Water Consumer Views (2022) Link to report	April 2022	HH, NHH and future customers	Online focus group: 12 Depths: 16	Research aimed at understanding water consumers' views on water and sewerage services, what is important, views on Ofwat's proposed common PC areas for PR24, any new areas for exploration and to test descriptions and measurements of PCs.
Communicating with the Public about Climate Change (2021) (Blue Marble) Link to report	2021	HH consumers (UK Public)	Focus groups: 20-25. Survey: 2,000	Webinar deck discussing a survey on UK-wide views on climate change including Net Zero, including awareness and actions currently being taken against climate change.

DEFRA - South Staffordshire Water - Smart Meters (2023) Correspondence available on request	March 2023	Stakeholders	n/a	Consultation response to SSW's WRMP draft business plan.
Dŵr Cymru Welsh Water – Metering and Efficiency Research Report (2021) (Relish) Link to report	October 2021	DCWW customers	30 online community, 700 online interviews and 100 CATI interviews	To collect feedback from customers to understand their views, preferences and priorities on the subjects of water efficiency, metering and tariffs.
Garden Water Behaviour Change (2022) Link to report	October 2022	HH customers	15 HH, with 3 each from South Staffs and Cambridge, South East Water, Northumbrian Water Group, Portsmouth Water, and Southern Water	Aimed to understand garden water usage in customers, specifically to what extent hot weather changes water usage, what drivers and barriers there are towards behavioural change in this area as well as developing a tool/messaging to enable customers to change behaviour.
Hafren Dyfrdwy – WRMP Customer Research (2022) (Blue Marble) Link to report	June 2022	HH, NHH and future customers	35 customers overall: 4 future, 20 HHs, 6 NHHs, 5 digitally excluded customers.	To understand HD customers' views of the initial WRMP proposals. Specifically, to gauge response to proposed use of: water restrictions, ways to reduce demand, use smart meters, meet the new leakage targets, water transfers, and response to plans to support private supply households.
SSC LTDS Triangulation – A Decision-making Framework (2023) (Impact research) Link to report	August 2023	n/a	n/a	Develop a decision-making framework for SSC to evidence that its long-term delivery strategy (LTDS) ambition and strategy reflects customers' priorities.
Net Zero - A Greener Future (2021) (Explain) Report available on request	2021	HH consumers (UK Public)	158	Aimed to understand customers' awareness and attitudes towards Net Zero
Net Zero Citizen Jury (2023) (Explain) Link to report	June 2023	HH and NHH customers	CAM: 20 SSW: 20	Citizens' Jury to understand customer preferences relating to their plans to reduce carbon emissions. This paper specifically aimed to look at what SSCs Net Zero ambitions should be, when should these be achieved, and how customers should be involved in helping this
Ofwat – Business Customer Insight Survey (2022) Link to report	February 2022	Registered businesses, charities and public sector organisations	n/a	To gain further insight from business customers about their experiences and views concerning the business retail water market, including the extent to which they have engaged with the

		based wholly or mainly in England		market, how far their needs and expectations have been met, and the reasons for these outcomes, as well as concerning the impacts of the Covid-19 pandemic.
Ofwat - Trust and Perceptions Views on the Water Sector (2023) Link to report	February 2023	HH customers	2,016 HHs (and boost of 300 participants from ethnic minority communities, and 300 from Wales)	This research was commissioned to develop insights on the reputation of the water sector, the level of trust in the sector, and views on river water quality.
ONS – How has lockdown changed our relationship with nature? (2021) Link to report	April 2021	n/a	n/a	Aimed at studying the effects of the COVID-19 pandemic on the populations' interactions with their natural environment. Specifically, our perceptions of nature as a wellbeing space both during and after the pandemic.
Severn Trent – Environmental Destination and Compulsory Metering (2022) (Accent) Link to report	May 2022	HH and NHH customers	1,000 customers overall: 817 HHs and 183 NHHs. (490 metered, 434 unmetered customers)	To understand customer views and support on universal metering and environmental ambition.
Severn Trent – Proactive Metering Research Report (2021) (DJS Research) Link to report	June 2021	HH and NHH customers	34 HH and NHHs (28 in groups, 6 depths)	Severn Trent wanted to conduct deliberative research to understand five key themes, relating to metering; views on metering, installation of the meters, drivers and barriers to metered water billing, Severn Trent communications, and mandatory metered billing.
Severn Trent – Strategic Report (2022) Report available on request	2022	n/a	n/a	A strategic report on the activities of Severn Trent and Hafren Dyfrdwy.
Severn Trent – WRMP24 (2022) (DJS Research) Link to report	May 2022	HH and NHH customers	HH: 624 NHH: 149	Measure customers' preferences for water resources, levels of service and the options or plans that Severn Trent might create to address any changes to levels in service or to address a supply-demand deficit. To develop a Best Value Plan in line with Water Resource Planning guidelines.
South Staffs Water – Stakeholder Roundtable Feedback Summary (2021) Link to report	October 2021	Stakeholders: Attendees from councils, Citizens Advice, Natural England, Waterwise and consumer	8 stakeholders	To consider stakeholder views at a formative stage of the plan development process.

		industry representatives		
Southern Water – Affordability Concern and Diverse Culture Research (2021) Report available on request	April 2021	HH customers (Southern Water)	Qualitative: 20 low-income customers with long-term affordability concerns, 12 customers with recent concerns of a mix of circumstances, 18 diverse cultural background customers Quantitative: 200 low-income households aged over 18 in charge/jointly in charge of water bills	Aimed at understanding the needs, wants and views of those in financial hardships and those from diverse cultural backgrounds. Specifically aimed at delivering a voice to key audiences, understanding the long-term affordability concerns for water and other HH bills from COVID-19, and explore how to best engage these audiences.
SRO Schemes Research – Public Value (2022) (Accent) Link to report	July 22	HH, NHH, and future customers	Qual: unknown Quant: 5,902 HH, 533 NHH	To understand what added value customers perceive is important as part of infrastructure development. To understand preferences for the added value – what should be the balance between options such as economy, jobs, apprenticeships, leisure, education and carbon sequestration etc? Do the preferences change depending on the geographical location/type of scheme or other factors? How much are the customers prepared to pay? What language should be used to explain the added value?
SSC – Appendix E - Customer Research Findings Summary CAM WRMP (2018) Link to report	2018	HH, NHH and future customers	7,000+	n/a
SSC - Arqiva Consultation Response to CAM draft WRMP Correspondence available on request	n/a	Stakeholder	n/a	Consultation response to SSW's WRMP draft business plan.
SSC - Arqiva Consultation Response to SSW draft WRMP	n/a	Stakeholder	n/a	Consultation response to SSW's WRMP draft business plan.

Correspondence available on request				
SSC - Cambridge and South Cambridgeshire Green Party Consultation Response to CCW's draft WRMP (2023) Correspondence available on request	May 2023	Stakeholder	n/a	Consultation response to CAM's WRMP draft business plan.
SSC - Cambridge City Council and South Cambridgeshire District Council Joint Consultation Response to CAM's draft WRMP Correspondence available on request	n/a	Stakeholder	n/a	Consultation response to CAM's WRMP draft business plan.
SSC - CCW Consultation Response to CAM draft WRMP (2023) Correspondence available on request	May 2023	Stakeholder	n/a	Consultation response to SSW's WRMP draft business plan.
SSC - CCW Consultation Response to SSW draft WRMP (2023) Correspondence available on request	February 2023	Stakeholder	n/a	Consultation response to SSW's WRMP draft business plan.
SSC - Customer Experience Slide for Community Engagement – July (2023) Report available on request	July 2023	n/a	n/a	Gives stakeholder feedback on attendance at Tipton Muslim Centre requesting flexibility in language for customer online forms.

SSC - Customer Experience Slide for Community Engagement – June (2023) Report available on request	June 2023	n/a	n/a	Gives stakeholder feedback on attendance at Walsall Welfare Reform group on creating a working group for social tariff.
SSC – Customer Preferences on Added Value for Large Resource Schemes (2022) (Accent) Report available on request	April 2022	n/a	n/a	Literature review to understand what types of public value customers perceive are important and preferences among those types (and if preferences change depending on the geographical location/ type of scheme or other factors). To understand how much are customers prepared to pay. To understand what language should be used to explain public value.
SSC – Customer Priorities Desk Research (2020) (Accent/PJM Economics) Link to report	September 2020	Various	13 reports	Review current SSC understanding of its customers’ priorities, as reported in SSC research outputs. Review methodologies for customer priorities measurement, including a review of research conducted by other water companies for PR19. Review Ofwat expectations for PR24, as set out in Ofwat’s recent Time to Act strategy paper.
SSC – Customer Priorities Infographic (2022) Available on request	May 2023	HH and NHH customers	HH: 44 Vulnerable: 5	To provide insight presenting customers’ priorities for now and the future.
SSC – Customer Priorities Research Qual and Quant Year 3 (2022) (Accent) Report available on request	May 2023	HH and NHH customers	Total: 1,154 CAM: 353 SSW: 801	To identify and explore the priorities with SSW and CAM households and non-household customers and understand what matters to them now and for the future.
SSC – Customer Priorities Research Qual Year 3 (2022) (Accent) Link to report	May 2022	HH, NHH customers and future customers	32 HH, 12 NHH	Explore what matters to customers now and in the future to root SSW/CAM plans in the customers’ world. Understand what customers want and expect SSW/CAM to focus on in the short term and long term to 2050. Track and measure any changes in

				short- and long-term priorities and what is driving these changes.
SSC – Customer Priorities Research Tracker Quantitative Insights Year 3 (2023) (Accent) Link to report	May 2023	HH customers	Total: 1,072 CAM: 372 SSW: 745	Provide a benchmark against which customers’ priorities will be tracked for both wholesale and retail services. Explore any differences between uninformed/informed priorities and qualitative/quantitative insights. Understand the customer impact of the cost-of-living crisis (2023).
SSC – Customer Priorities Tracker Qual Year 1 (2020) (Accent) Link to report	October 2020	HH customers	c60 in total	To understand customers’ uninformed and informed priorities in the short and long term. To understand what factors drive any changes in priorities including whether there are any wider “Water Industry” trends. To understand whether there have been changes since Summer 2017 and what has driven those changes.
SSC – Customer Priorities Tracker Quant Year 2 (2022) (Accent) Link to report	April 2022	HH customers	Total: 1,054 SSW: 701 CAM: 353	Provide a benchmark against which customers’ priorities will be tracked for both wholesale and retail services. Explore any differences between uninformed/informed priorities and qualitative/ quantitative insights. Understand the customer impact of Covid-19 and, from 2022, the cost-of-living crisis.
SSC – Customer Promises Tracker Annual Report (2023) (Turquoise) Report available on request	March 2023	HH and NHH customers	Total: 1,134 HHs: 837 CAM 269 SSW 569 NHHs: 297 CAM 93 SSW 204	To monitor ongoing customer satisfaction, deliver on-going customer sentiment tracking, probe awareness and usage of key services and track changes in the way customers wish to interact with SSC.
SSC – Customer Promises Tracking Research Report (2022) (Turquoise) Report available on request	April 2022	HH and NHH customers	Total: 1,106 HH: 814 NHHs: 292	To monitor ongoing customer satisfaction against the key metrics that engagement has shown to be important to customers; these include hard and soft measures. To deliver on-going customer sentiment tracking against key brand statements. To probe awareness and usage of key services and track changes in the way customers wish to interact with SSC.

				To monitor and track the impact of Covid-19 pandemic on customers – new objective added in 2020/21.
SSC – Customer Service Themes: Top CX Impacts and Themes (2023) Report available on request	April 2023	HH and NHH customers	n/a	Data from CMeX, Qualtrics, Call/ Complaints / Incident Report data to triangulate common themes and trends to determine opportunities for key stakeholders to consider.
SSC - CVF Consultation Response to CAM draft WRMP (2023) Correspondence available on request	May 2023	Stakeholder	n/a	Consultation response to CAM's WRMP draft business plan.
SSC - CVF Extra Information for Consultation Response to CAM draft WRMP Correspondence available on request	n/a	Stakeholder	n/a	Consultation response to CAM's WRMP draft business plan.
SSC - Demographics Report (2023) (Impact Research) Link to report	August 2023	n/a	n/a	Data from a variety of sources aimed at creating a demographic profile of the South Staffs and Cambridge water regions. Looking at the two regions separately as well as the local authorities which form most of the two regions. As well as SSC and England as a whole.
SSC - Environment Agency Consultation Evidence Report for SSW draft WRMP Correspondence available on request	n/a	Stakeholder	n/a	Consultation response to SSW's WRMP draft business plan.
SSC - Environment Agency Consultation Evidence Report to CAM's draft WRMP	n/a	Stakeholder	n/a	Consultation response to CAM's WRMP draft business plan.

Correspondence available on request				
SSC - Environment Agency Consultation Response to CAM's draft WRMP (2023) Correspondence available on request	March 2023	Stakeholder	n/a	Consultation response to CAM's WRMP draft business plan.
SSC - Environment Agency Consultation Response to SSW draft WRMP (2023) Correspondence available on request	February 2023	Stakeholder	n/a	Consultation response to SSW's WRMP draft business plan.
SSC - Environment Agency Consultation Response to WRW draft WRMP Correspondence available on request	n/a	Stakeholder	n/a	Consultation response to the WRW WRMP draft business plan.
SSC – Feedback on draft WRMP2024 from the WRAP (2022) (Community Research) Link to report	August 2022	HH NHH and future customers	26 overall: 13 CAM and 13 SSW (18 HHs, 2 futures and 6 SMEs)	This is the fourth activity with the WRAP (Water Resources Advisory Panel). Exploring strategic choices through an online forum to provide feedback on the draft WRMP24 plan.
SSC - HE Consultation Response to CAM's draft WRMP Correspondence available on request	n/a	Stakeholder	n/a	Consultation response to CAM's WRMP draft business plan.
SSC - Historic England Consultation Response to SSW draft WRMP (2023) Correspondence available on request	February 2023	Stakeholder	n/a	Consultation response to SSW's WRMP draft business plan.

September 2023

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SSC - Hobson's Conduit Trust Consultation Response to CAM's draft WRMP (2023) Correspondence available on request	May 2023	Stakeholder	n/a	Consultation response to CAM's WRMP draft business plan.
SSC – Household Affordability Income Analysis (2022) Confidential	June 2022	HH customers	4,419 customers overall: HH tracker: 800 From other SSC surveys: 3,619	To track a range of key service related and brand metrics each year, such as customer perceptions of “affordability of water bill”
SSC – LTDS Report (2023) (Turquoise) Link to report	July 2023	HH, NHHs and future customers	Qualitative: 34 HHs, 12 NHHs, 6 FBPs Quantitative: 980 HHs (including 82 FBPs), and 100 NHHs	To understand customers’ attitudes and perceptions towards SSC’s long-term vision to 2050 and their spontaneous preferences in terms of long-term delivery. Also, exploring SSC’s performance and future targets in 10 key ambition areas, and to understand the main reasons that drive customer preferences, and to explore the issue of intergenerational fairness.
SSC – Metering Presentation (2017) (QA Research) Report available on request	July 2017	HH customers	101 CAM, 101 SSW	To understand the key barriers to customers switching to a meter. To understand what messages and communication channels would be most effective in switching customers to take up a meter.
SSC - MOSL Consultation Response to SSW's draft WRMP Correspondence available on request	n/a	Stakeholder	n/a	Consultation response to SSW’s WRMP draft business plan.
SSC - National Trust Consultation Response to SSW draft WRMP Correspondence available on request	n/a	Stakeholder	n/a	Consultation response to SSW’s WRMP draft business plan.
SSC - Natural England Consultation Response to CAM's draft WRMP (2023)	May 2023	Stakeholder	n/a	Consultation response to CAM's WRMP draft business plan.

Correspondence available on request				
SSC - Natural England Consultation Response to CW draft WRMP Correspondence available on request	n/a	Stakeholder	n/a	Consultation response to SSW's WRMP draft business plan.
SSC - Natural England Consultation Response to SSW draft WRMP (2023) Correspondence available on request	February 2023	Stakeholder	n/a	Consultation response to SSW's WRMP draft business plan.
SSC – NERA Willingness to Pay for Water Services at PR24 (2022) Link to report	December 2022/ September 2023	HH, NHH customers and future billpayers	Total: 1,250 CAM: 424 SSW: 833 Future billpayers: 54	Aimed at designing, implementing and analysing a stated preference survey in order to gain an estimate of customer WTP for service improvements from SSC with the overall aim of informing their PR24 business plan. HH, NHH and future customers were of specific focus.
SSC – Net Zero Debrief (2023) Link to report	July 2023	HH and NHH customers	SSW online jury: 13 HH and 6 NHH. SSW F2F jury: 7 digitally disengaged CAM online jury: 13 HH and 5 NHH CAM F2F jury: 7 digitally disengaged	Covers what should SSC's net zero ambitions be. Does the current plan deliver against expectations? When should SSC achieve its net zero ambitions? How should customers be involved in helping the comp to achieve its ambitions - what should SSC focus its efforts on?
SSC - NFU Consultation Response to CAM's draft WRMP (2023) Correspondence available on request	May 2023	Stakeholder	n/a	Consultation response to CAM's WRMP draft business plan.
SSC – ODI Research (2023) (Accent and PJM Economics) Link to report	May 2023	HH and NHH customers	Total: 807 HH: 609 NHH: 198 Medically vulnerable: 109 Communications vulnerable: 90	Aimed at analysing further segmentation of SSW and CAM Water customer values on top of previous Collaborative ODI research by Ofwat and CWW

			Life-stage vulnerable:89 Financial vulnerable: 27	
SSC – ODI Research Pilot (2022) (Accent/PJM Economics) Link to report	January 2022	HH and NHH customers	n/a	A review of methodological options aimed at informing ODI rate for PR24.
SSC - Ofwat Consultation Response to CAM's draft WRMP (2023) Correspondence available on request	March 2023	Stakeholder	n/a	Consultation response to CAM's WRMP draft business plan.
SSC - Ofwat Consultation Response to SSW draft WRMP (2023) Correspondence available on request	February 2023	Stakeholder	n/a	Consultation response to SSW's WRMP draft business plan.
SSC - Ofwat Consultation Response to WRE draft WRMP (2023) Correspondence available on request	March 2023	Stakeholder	n/a	Consultation response to WRE's WRMP draft business plan.
SSC – PR19 Data Triangulation Study SSW WRMP (2018) Link to report	2018	HH, NHH and future customers	9000+	Appendixes for SSWs PR19 triangulation research. A review of all SSW customer engagement activity relating to their WRMP focusing largely on customer priority.
SSC – PR19 Foundation Research June (2017) (Accent) Link to report	June 2017	HH and NHH customers	Total: 93 HH: 70 NHH: 23	To understand customer priorities for service delivery both now and over the longer term (prompted and unprompted) and to check these against previously established priorities in PR14 work.
SSC – PR24 Affordability and Acceptability Testing (2023) (Accent) Link to report	September 2023	HH and NHH customers	987 HHs 117 NHHs	A survey to provide views on the affordability and acceptability of SSC's PR24 plan.

SSC – PR24 BAU Data (2022) Confidential	n/a	n/a	n/a	Customer Satisfaction Metrics, C-Mex scores, Complaints Data, Contacts Data, Trend Contact Data.
SSC – PR24 CSA Research (2023) (Impact Research) Link to report	September 2023 (Unpublished)	HH and HH customers	43 customers via 6 qualitative focus groups. 10 in-depth HH interviews and 4 NHH. 1,314 HH and 149 NHH quantitative survey	This research was conducted in order to gather insight into customer willingness to pay and acceptance of SSC's CSA plans as well as to understanding the main supporting and opposing factors towards this plan.
SSC – PR24 Qualtrics Sentiment themes (2023) Confidential	March 2023	n/a	n/a	A review of how incidents are impacting on customer satisfaction
SSC – Social Tariffs Research (2023) Link to report	September 2023	HH and Stakeholders	Qual: SHs 6 HHs 52 Quant: Total: 1238 HHs Panel: 130 Vulnerable HHs: 99 On PSR: 23 H2Online: 21	To engage with consumers about the future development of the Assure tariff, and establish customer views towards a possible new affordability tariff aimed at those struggling to pay their water bills, but who don't qualify for Assure due to their HH income being too high.
SSC – South Staffs Water Quality Metrics (2022) Confidential	July 2022	n/a	Data from SSW customers' in-bound water quality contacts. 1,515 for the period 2021/22.	Review of SSW customer contacts between 2017 and 2022, looking specifically at the drivers behind trends in contacts and recommendations for SSW
SSC - SSW Draft Drought Plan Statement of Response (2021) Correspondence available on request	September 2021	Stakeholder	n/a	SSW's statement of response to SH consultation responses.
SSC – Stakeholder Roundtable: Helping Businesses Save Water (2022) Link to report	March 2022	Stakeholders: Universities and local industry	6	To work with businesses in the Cambridge area to find out what can be done with retailers to further support, promote and implement water efficiency in NHH in the next 5 years and beyond (challenges, visions, opportunities).

SSC - Summary of Consultation Responses to SSW draft WRMP Correspondence available on request	n/a	Stakeholder	n/a	Consultation responses to SSW's WRMP draft business plan.
SSC – Tracking Customer Priorities, Desk Review (2020) (Accent and PJM Economics) Link to report	September 2020	n/a	n/a	The first stage of a three-part programme. Its key aim was to lay the groundwork for the remaining two stages of research (qualitative and then quantitative by reviewing the following: <ul style="list-style-type: none"> · current SSC understanding of its customers' priorities · methodologies for customer priorities measurement · Ofwat expectations for PR24
SSC – Water Hardness Triangulation Conversation (2018) Report available on request	2018	HH and NHH customers	3,010 SSW HH and NHH, 1,889 CAM HH and NHH	Discusses SSW and Cambridge customers' priorities and grievances around water behaviours and developments, as well as their willingness to pay for these developments.
SSC - Waterscan Consultation Response to SSW draft WRMP (2023) Correspondence available on request	February 2023	Stakeholder	n/a	Consultation response to SSW's WRMP draft business plan.
SSC - WaterSmart Trial Executive Summary (2019) Confidential	April 2019	n/a	n/a	Summary of SSC's WaterSmart water efficiency trial
SSC - Waterwise Consultation Response to CAM draft WRMP - April (2023) Correspondence available on request	April 2023	Stakeholder	n/a	Consultation response to SSW's WRMP draft business plan.
SSC - Waterwise Consultation Response to SSW draft WRMP - Feb (2023) Correspondence available on request	February 2023	Stakeholder	n/a	Consultation response to SSW's WRMP draft business plan.

SSC – Willingness to Pay Research (2018) Link to report	June 2018	HH and NHH customers	Total: 1,999	Understand customers’ willingness and ability to pay for various services and investment levels for water services over the period of 2020-2025. This research looked specifically at customers’ priorities for service investments and the value placed in these investments.
SSC – WRAP Deep Dives (2021) (Community Research) Link to report	November 2021	HH, NHH and future customers	87 customers overall: CAM: 45 SSW: 42 Future customers: 15	To explore household customer, future customer and SME business customer views in depth on; universal metering and water transfers.
SSC – WRAP Focus Groups Report (2022) (Community Research) Link to report	February 2022	HH, NHH and future customers	11 customers overall: 5 HHs, 1 future, 1 NHH (6 SSW and 5 CAM)	To explore the following topics with online groups; metering options (covered in both regions), new types of tariffs/incentives (SSW only), water transfer options (CAM only).
SSC - WRE Consultation Response to CAM draft WRMP (2023) Correspondence available on request	March 2023	Stakeholder	n/a	Consultation response to CAM's WRMP draft business plan.
SSC – WRMP and Long-Term Resilience Customer Engagement Insight Full Report (2017) (Community Research) Link to report	September 2017	HH and NHH customers	Workshops 62, business and stakeholder round tables 21, survey: 300 in SSW, 200 in CAM	To use the research findings from Phase One to support the development of SSC’s WRMP19 in both supply regions, specifically understanding customers’ views on; levels of service, leakage, water efficiency, metering, and (if possible) environment impact, and initial thoughts on options for the future and to use the findings from Phase Two to inform investment choices, by giving customers the opportunity to feed into SSC’s strategic challenges.
SSC – WRMP MCDA Quantitative Insights (2022) (Accent) Link to report	February 2022	HH and NHH customers	Total: 1,015 CAM: 445 SSW: 570 HH: 887 NHH: 128	Explore customers’ attitudes and views regarding the natural environment and SSC’s approach to planning.
SSC – WRMP Themes 1 and 3 Quantitative Insights (2022) (Accent) Link to report	April 2022	HH and NHH customers	Total: 1,180 CAM:427 SSW: 753 HHs: 1,028 NHHs: 152	Core purpose of this study was to provide evidence of customer response and support for; managing droughts, universal metering, leakage, environmental ambition.

<p>SSC – WRMP24 - WRAP Theme 1 Research Findings (2021) Link to report</p>	August 2021	HH, NHH and future customers	<p>Total: 47 HHs: 28 NHHs: 10 Future customers: 9</p>	<p>To explore household, future and SME businesses customer preferences in terms of; environmental ambition, levels of service/resilience ambition, water efficiency ambition, and best value planning criteria. To ensure a “golden thread” of customer preferences in these strategic areas, which sets the context for the remainder of the engagement programme.</p>
<p>SSC – WRMP24 Acceptability Testing Wave 1 Report (2022) (Turquoise) Link to report</p>	September 2022	HH, NHH and future customers	<p>HHs: 382 SSWs and 216 CAM. NHHs: 58 SSW and 20 CAM. Future: 25 SSW and 17 CAM</p>	<p>To provide a view of what is driving acceptability and or lack of acceptability of the plans, to determine whether customers find the SSW/CAM WRMP draft plan acceptable. To aid SSC to communicate why the plan is acceptable or unacceptable to each region.</p>
<p>SSC - WRW Consultation Response to SSW draft WRMP Correspondence available on request</p>	n/a	Stakeholder	n/a	<p>Consultation response to SSW’s WRMP draft business plan.</p>
<p>SSC – Young Innovators Panel (2023) Link to report</p>	September 2023	Future customers	<p>2-day panel with 25 attendees representing 18 state schools: - 14 female - 11 male - 13 BAME - 12 White Schools survey of sixth formers (43 replies at time of report)</p>	<p>Aim: Develop a teaching resource for SSC’s water efficiency education tools for schools across the region. Hearing future customers’ views in the 16-18 range as part of their PR24 evidence. Including general attitudes, environmental beliefs, acceptability of business plan proposals, high-level response to investment phasing and intergenerational fairness.</p>
<p>SSC - Your Water Your Say Link to report</p>	June 2023	n/a	n/a	<p>Transcript of a customer engagement event run by SSC.</p>
<p>SSC H2Online – Monthly Report (October 2022) (Explain) Report available on request</p>	October 2022	HH customers	<p>For the discussion reported on (about topics of interest), there were 13 SSW comments and 8 CAM comments.</p>	<p>To build a truly engaged community of customers, and raise the profile of the SSC brand among the customer base. To gain insights more quickly to allow the customer voice to be built into more day-to-day decision-making within the business.</p>

SSC H2Online – Monthly Report (August 2022) (Explain) Report available on request	August 2022	HH customers	For the poll reported on (about schemes they support), there were 38 SSW voters and 23 CAM.	To build a truly engaged community of customers, and raise the profile of the SSC brand among the customer base. To gain insights more quickly to allow the customer voice to be built into more day-to-day decision-making within the business.
SSC H2Online – Monthly Report (February 2023) (Explain) Report available on request	February 2023	HH customers	For the poll reported on (about charity donations), there were 45 SSW voters and 19 CAM.	To build a truly engaged community of customers, and raise the profile of the SSC brand among the customer base. To gain insights more quickly to allow the customer voice to be built into more day-to-day decision-making within the business.
SSC H2Online – Monthly Report (June 2023) (Explain) Report available on request	June 2023	HH customers	For the poll reported on (about Young Innovators’ Panel), there were 22 SSW voters.	To build a truly engaged community of customers, and raise the profile of the SSC brand among the customer base. To gain insights more quickly to allow the customer voice to be built into more day-to-day decision-making within the business.
SSC H2Online – All activities relating to water quality (2022) (Explain) Report available on request	2022	HH customers	Total:605, across several polls CAM: 277 SSW: 328	A number of polls within the SSW and CAM regions concerning various water quality activities and attributes.
SSC H2Online - Community Feedback WRMP (2019-2022) (Explain) Report available on request	2022	HH customers	Panel responses vary over time CAM 360+ SSW 315+	To build an engaged community of customers, going beyond gathering insight to establish and sustain two-way engagement. To ensure that the PR24 engagement programme delivers a further step-change in customer engagement.
SSC H2Online Community – Carbon Net Zero Customer Insights (2020) (Explain) Report available on request	April 2020	HH customers	61 customers overall: 39 SSW and 22 CAM	To find out what customers think of Water UK’s Net Zero by 2030 target.
SSC H2Online community – WRMP24 Acceptability and Affordability testing study (2022) Report available on request	September 2022	HH customers	138 HHs: 85 SSW and 53 CAM	Gather feedback from on SSC’s WRMP24 from H2Online community respondents.

SSC H2Online Community web review – Carbon Net Zero Customer Insights (2020) Report available on request	April 2020	HH customers	Total: 37 SSW: 23 CAM: 14	To review the dedicated webpage set-up to communicate the company's path to NZ 2030.
SSC PR24 Retail Insight Update (2023) Confidential	April 2023	n/a	n/a	Presentation from a session seeking to understand what the overall PR24 research plan looks like and what insight has already been completed, what are the key messages from customers, what are the key points the team need to consider when building the retail plan, and what are the insight gaps that need to be filled to support the PR24 retail plan for testing.
Strategic Metering – Roles and Responsibilities in the NHH Market Report (2022) (PA Consulting) Link to report	June 2022	Stakeholders	n/a	Identifying a set of potential options to reform or enhance current roles and responsibilities in relation to metering and related activities in the NHH market.
Strategic Panel - Open letter to wholesaler CEOs (2023) Correspondence available on request	February 2023	Stakeholders	n/a	Open letter response regarding WRMP from Strategic Panel.
Sustainability First – Looking to the long-term report (2018) Link to report	February 2018	n/a	n/a	This report summarises the work carried out by Sustainability First's New Energy and Water Public Interest Network (New-pin) between 2015 and 2018.
UEA – Behaviour Change Interventions in the Water Sector (2022) (UEA and CBESS) Link to report	June 2022	n/a	n/a	To identify existing good practices, as well as opportunities for improving how evidence bases can support the design of interventions, and how the effectiveness of interventions can be monitored and evaluated over various timescales.
UK Customer Satisfaction Index (2023) Full report - confidential	July 2023	UK general adult population	10,000 consumers giving 45,000 responses (6,000 responses for utilities sector, 25% of which related to Water)	The UKCSI provides an objective, independent perspective on the state of customer satisfaction in the UK, enabling organisations to assess their performance compared to others in their sector, and with some of the UK's leading service organisations across a range of sectors.

UK Customer Satisfaction Index: Utilities Sector Report (2023) Full report - confidential	January 2023	UK general adult population	6,000 responses for utilities sector, 25% of which related to Water	The UKCSI provides an objective, independent perspective on the state of customer satisfaction in the UK, enabling organisations to assess their performance compared to others in their sector, and with some of the UK's leading service organisations across a range of sectors.
University of York – Households' Water Conservation Behaviour in the UK and Egypt Link to report	n/a	n/a	n/a	A selection of slides from a presentation concerning the comparison of UK and Egyptian water behaviours, specifically looking at the water behaviours of faith groups and how to promote better water consumption habits with religious framing.
Water Club Changes of Source (2022) (Britainthinks) Link to report	June 2022	HH and NHH customers	Qualitative Phase: 98 HHs. Quantitative Phase: 1,762 HHs, 198 NHHs	To review existing evidence. To identify and fill knowledge gaps about attitudes towards water source change. Provide a clear and actionable framework for water companies to use when communicating water source changes in future.
Water Efficiency in Faith and Diverse Communities (2023) Report available on request	July 2023	Representatives from a range of water suppliers, faith groups and universities	n/a	Aimed at understanding the differences in, and the needs of various faith groups in respect to their water supplier.
Water UK – Omnibus Research (2022) (Savanta) Link to report	December 2022	UK general adult population	2,061	To examine the public's opinion of the water industry (including on nationalisation) and the effect of the cost of living.
Water Usage in the Garden (2021) (Blue Marble) Link to report	November 2021	HH customers	15 HH (3 per water company area)	Observe, through ethnographic filming, garden water usage behaviour. Assess dissonance between recalled and actual (filmed) behaviour. Provide insight to support communications and behaviour change activities about "good" or "bad" garden water usage. Explore whether garden water usage is thought to have changed as a result of the Covid-19 pandemic.
WRE – Club Customer Engagement report (2021) (Blue Marble) Link to report	September 2021	HH and NHH customers, and stakeholders	HH: 20 (CAM 5, Essex & Suffolk 5: Anglian 10). NHH: 14 (Anglian 8, Essex & Suffolk 3, CAM 3) Stakeholders: 20	To understand consumer context (general environmental priorities, current awareness of long-term challenges and implications for water suppliers, perception of water suppliers).

			organisations across the 3 companies	<p>To explore expectations and priorities re environmental planning.</p> <p>To explore response to the 'best value' plan objectives.</p> <p>To explore options preferences (ranking of preferences and what drives importance).</p> <p>To explore intergenerational economics (response to affordability options to understand generational expectations).</p>
<p>WRE – NHH Demand Club Project – Stage 1 (2022) (Blue Marble)</p> <p>Report available on request</p>	January 2022	NHH customers	9 NHHs	To find out water retailers views and opinions on water efficiency, and on strategies to encourage NHH water efficiency.
<p>WRE – NHH Demand Club Project – Stage 2 (2022) (Blue Marble)</p> <p>Report available on request</p>	April 2022	NHH customers	4 NHHs	To develop and refine solutions with retailers and wholesalers.
<p>WRE – Promoting Water Efficiency among Non-Household Customers (2022) (Blue Marble)</p> <p>Link to report</p>	August 2022	NHH customers	26 NHHs	To find out current role of water efficiency –How, if at all, have businesses adopted water efficiency? Barriers to water efficiency – What is, and could be, preventing adoption of water efficiency? WRE proposition response – How do business' feel about WRE's water efficiency propositions?
<p>WRW - Updated Regional Plan (2023)</p> <p>Link to report</p>	March 2023	n/a	Triangulation of 120 pieces of research	To ensure the customer input in the regional plan is up-to-date by including the latest knowledge (by conducting a triangulation of the most recent customer and stakeholder research).