A1: Engaging Customers

Our approach to, and findings from, our customer engagement for the PR19 price review

WONDERFUL ON TAP

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Contents

OVERVIEW: APPENDIX 1: ENGAGING CUSTOMERS

This appendix consists of three parts:

- **Part 1** – our approach to engaging customers, including further details and case studies of customer participation;

- **Part 2** – summary of the insight from our research programme for the balance of the plan overall, and for the nine outcomes. This section provides additional detail and evidence to support the outcome chapters and definition of performance commitments and targets; and

- **Part 3** – a summary of each of the research projects we have undertaken, including sample size, approach and key findings.

PART 1: ENGAGING CUSTOMERS

Our plan starts with people. Drawing on our largest, and most in-depth programme of insight to date, we first worked to better understand what's really important to our customers. Then we built our plan around how we can meet those needs. This outside-in approach truly puts customers at the heart of everything we do.

With a step-change in the quality, breadth and depth of our engagement - and a Water Forum (customer challenge group) that has challenged us to think differently, use new methods and engage with different types of customers - we now have a much richer understanding of our customers and how we can enhance their lives. And we've engaged over 32,000 customers and analysed over 2.4m customer contacts in the process. Notwithstanding the breadth of our approach, we have focused on quality, not quantity, with our aim being to understand our customers as people first and then build our plan as a direct response to their needs.

In this section we explain:

- our customer insight framework, developed with our Water Forum and with its roots in established psychological theory;
- a sampling approach that reflects the diversity of our region;
- our overall insight programme;
- how we're changing our relationship with customers from passive to active participants in our service design;
- challenge from our Water Forum and our approach to triangulation; and
- a summary of what we learned.

1.1 Our approach to customer engagement

Traditionally, water companies focus on evidencing customer support for industry-centric issues and investment choices, with a strong reliance on willingness to pay (WTP) and other stated research techniques. We want to be different.

For this plan we wanted to gain two things from our insight programme. We wanted to really understand our customers – what motivates them, what's important to them, and what they need from us – and in doing so, we wanted to uncover new areas of value to them.

This means:

- trying new techniques;
- engaging with different types of customers;
- making greater use of data;
- asking about difficult issues;
- building a continual process of engagement; and
- starting with the people we serve, not ourselves.

Expert challenge and fresh perspectives

Consistent with our ambition to gain a much richer understanding of our customers, for this plan we introduced a new range of expertise compared to the Water Forum that first worked on our 2015-20 plan. With a remit including challenge to our approach to customer engagement, the extent to which our plan reflects the outcome of that engagement and direct, unprecedented access to our Board, the Water Forum has been instrumental in the development of this plan.

In 2016 we welcomed a new independent chair, Gill Barr, who has bought extensive executive level experience from leading retailers including John Lewis and the Co-op, swiftly following by four new members (recruited by Gill following an independent process) with expertise that include market research (Dr Nick Baker), social responsibility (Karen McArthur), investment planning (Rish Chandarana) and climate change (Dr Steven Wade).

They joined our existing members from CCWater (Dr Bernard Crump and Paul Quinn), the Environment Agency (Bill Derbyshire), Natural England (Ian Butterfield), the CBI (Richard Butler) with a further two new members with expert knowledge of our region from the East Midlands Councils (Stuart Young) and the West Midlands Combined Authority (Jan Britton).

Gill Barr - Chair
As an Executive, Gill worked at Management Committee level in blue-chip corporates including John Lewis, The Co-operative Group, Kingfisher and MasterCard.

Dr Nick Baker
Nick is Managing Partner at Add Verve – a leading London agency and a member of the board of the Market Research Society (MRS) and

Bernard Crump - CCWater
Bernard is the Chair of CCWater's Central and Eastern Region.

Dr Steven Wade
Steven is an Associate Director Climate and Resilience at Atkins

Jan Britton - West Midlands Combined Authority
Jan is the Chief Executive at Sandwell Council

Stuart Young - East Midlands Councils
Stuart is the Executive Director of East Midlands Councils and has been since its establishment in 2010.

Karen McArthur
Karen has had leading roles in corporate responsibility for global companies including Vodafone and Thomson Reuters.

Richard Butler - CBI
Richard is responsible for CBI membership recruitment and retention in the West Midlands and Oxfordshire.

Bill Darbyshire - Environment Agency
Bill Darbyshire is the Environment Agency's lead for protecting and improving the water environment.

Rish Chandarana
Rish is an Associate Director at ARUP in Investment Advisory.

Ian Butterfield - Natural England
Senior Freshwater Advisor, Natural England, East Midlands area

Paul Quinn - CCWater
Environment and Sustainability Professional. Paul worked for the Environment Agency and its predecessors for 36 years.

A subgroup dedicated to challenging the rigour of our research

Dr Nick Baker, the Water Forum's expert in customer research, also sits on the Board of the Market Research Society, the world's leading research association. Drawing on this depth of experience, he led the Water Forum's market research subgroup, which includes Dr Bernard Crump, Regional Chair CCWater, and has been extensively involved in the development and application of our customer engagement. Alongside our regular Water Forum meetings, the subgroup has met a further 10 times, and dedicated over 42 hours of challenge – across the full spectrum of our research – design, intent, sampling, execution and interpretation. And to better respond to the rigour of this challenge, we've made changes within our organisation too, bringing in research experts from other industries and other disciplines, notably sciences and product design.

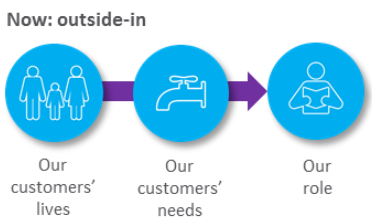
1.2 A framework for customer insight

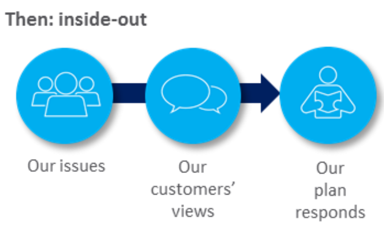
So, we set out to build a framework that would help us to uncover meaningful insight rather than simply focusing on the number of customers engaged. And that's because we believe it's this new insight, and critically how we respond to it, that will make a real difference for our customers.

An outside-in approach

We started our plan by talking to people as individuals – not just as customers – and asking them what is most important to them in their daily lives – their family, their time, their money, their future – completely separate to what we do. We then related our service back to those needs - an outside-in approach that looks at the role of our service in our customers' day.

Our approach now compared to previous plans





Engaging with customers about water isn't straightforward. It involves issues that they're often not aware of or haven't experienced, or decisions that run across decades and affect future generations. It also risks being a one-way dialogue, rather than a genuine discussion or an opportunity to solve challenges and create new plans together. To reflect this complexity, we've developed a framework in conjunction with the Water Forum to make sure our plan benefits from meaningful insight that gets right to the heart of our customers' needs.

Our framework is based on three principles:

- there's a hierarchy of customers' needs where satisfaction and dissatisfaction are experienced differently at each level;
- the tools we use to understand our customers' needs should reflect the underlying characteristics of the issue or service; and
- our sampling strategy needs to reflect the diversity of our consumer base.

These principles helped provide us with a cumulative understanding of the needs of our diverse customer base, explore our role in customers' lives (as opposed to their views on our issues) and allow us to co-create business plan propositions. We've also been mindful of proportionality - each piece of research is justified and the resulting insight builds a complete view of customer needs and priorities. And as research is ultimately funded through customer bills, we've been careful to build on existing knowledge to avoid spending customers' money on things we already know.

Not all customer needs are equal

Our understanding that not all customer needs are equal sits at the heart of our research framework. We must consider the hierarchy of customer needs and avoid asking customers to make trade-offs across different types of needs. For example, we can't expect customers to trade-off clean, safe drinking water with the range of payment channels they're offered - both are important.

Our categorisation of customer needs has its roots in established psychological theory - Maslow's[1] hierarchy -drawing on three levels: delivering functional needs; meeting psychological needs; and creating opportunities for self-fulfilment.

Our view of the hierarchy, as it relates to the water sector, is based on:

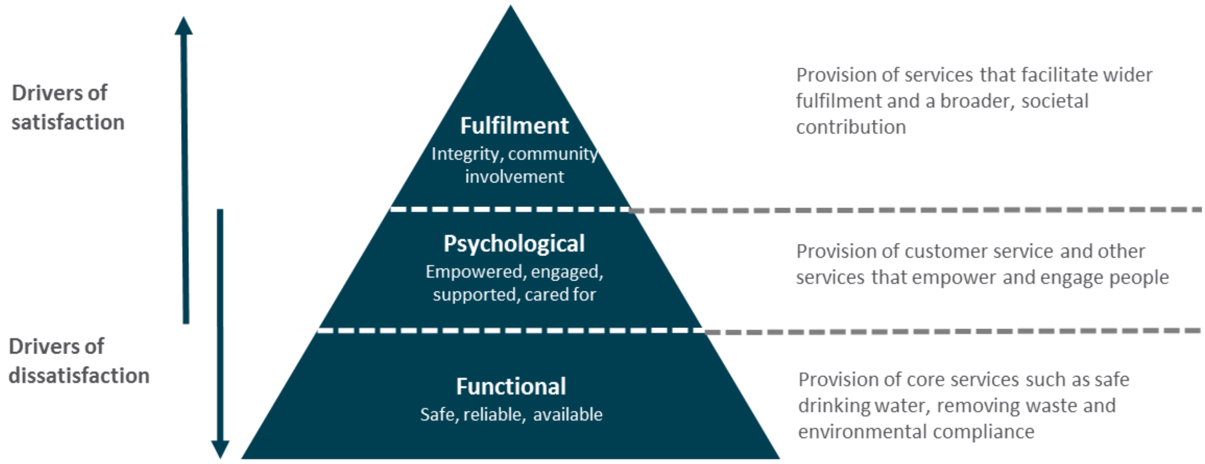
- targeted qualitative research in 2016 to uncover the issues that are important in people's lives (separate to the role that water may play);
- validation of the themes through focus groups, social media scraping, a review of our extensive catalogue of historical research, engagement with front line staff and data from customer interactions; and
- seeking on-going challenge from the Water Forum on our conclusions.

Improving satisfaction is not the same as preventing dissatisfaction

By applying the concept of a hierarchy we've been able to build a more structured, insightful view of what drives customer satisfaction (and dissatisfaction). Fulfilling basic needs at the bottom of the hierarchy may only serve to meet customers' expectations and is very unlikely to improve satisfaction. But failing to meet those needs – falling short of these expectations – is likely to drive dissatisfaction.

[1] A Theory of Human Motivation*; A.H.Maslow (1943), Psychological Review, 50, 370-396*

Customer needs differ at each level of the hierarchy



This simple concept has been transformative for our plan. Traditionally, water companies have focused on understanding customers' needs at the bottom of the hierarchy – preventing sewer flooding or supply interruptions. But it's only by exploring the higher end of the hierarchy that we can uncover new ways to drive satisfaction and trust or create value for our customers.

Challenged by the Water Forum, we've built a plan that responds to our new understanding that:

- the layers must be considered in sequence, starting at the bottom - if basic needs have not been met then those above are less important;
- the environment appears in each layer, from meeting environmental legislation at the bottom to delivering wider benefits such as biodiversity enhancements towards the higher end;
- we have an opportunity to learn much more about how we can meet customers' psychological and self-fulfilment needs, thereby improving customer satisfaction; and
- we could improve our understanding and delivery of basic needs and thereby reduce dissatisfaction.

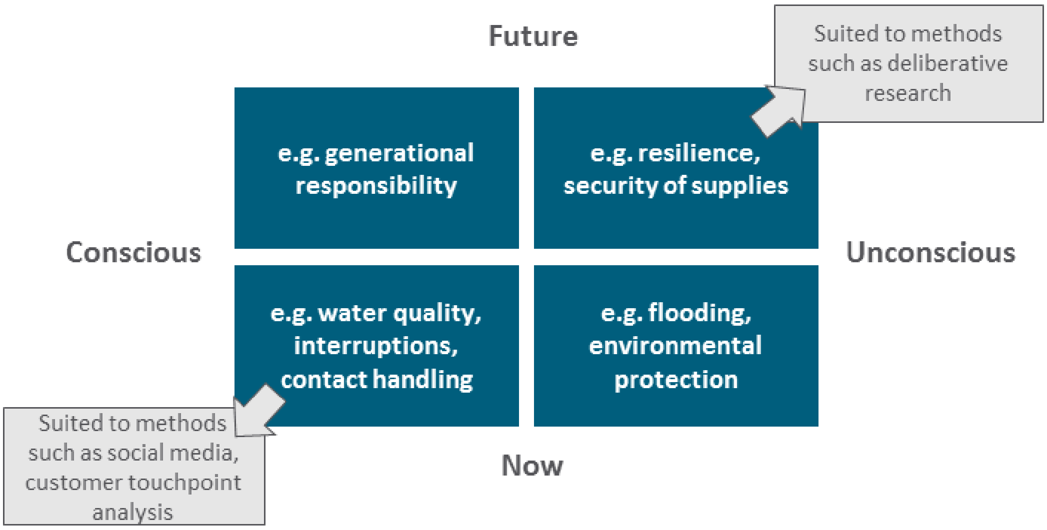
Insight tools chosen from our customers' perspective

The hierarchy helped to reveal gaps in our understanding of customers' needs. But we haven't simply asked customers how to fill these gaps – instead, we've used research techniques that take into account how our customers understand issues by considering:

- where the service/issue sits within the hierarchy;
- the extent to which customers are conscious of the service/issue; and
- whether the issue occurs today or could occur in the longer term.

The Water Forum have challenged us to consider that the further one goes into the future, the less customers are conscious of the key issues that might affect them, future generations, and their water service. We have used the model below to map some of the key research topics to the four dimensions – the spectrum of consciousness and whether the issue affects customer experience now or in the future. This has guided decisions on the research approach and methodology. For example we consider that issues such as resilience, which are both unconscious and future facing, are best addressed using deliberative research, which builds awareness and uses active participation to get more informed opinions. Issues such as complaints handling – a 'now' issue and one of which customers are well aware - can be analysed using social media scraping and day-to-day customer contacts.

Choosing research tools based on our customers' perspectives



Learning something from our customers every day

As well as talking to our customers, we've looked for opportunities to use revealed insight. Customers continually interact with us, either directly (through multiple touchpoints) or indirectly (through conversations with others on social media). We've gained a much richer understanding by analysing these outputs. For example our social media scraping has revealed that the majority of customer conversations about "pain points" relate to uncertainty. And our analysis of customer complaints has revealed that low pressure is a bigger issue than we previously thought, having successfully delivered on our regulatory target for over a decade.

Using comparative information to empower customers

Customers are often unaware of how their water company compares, in terms of service and performance, to other suppliers in the UK. Appropriate contextual and comparative information can empower customers in their decision making.

We've included comparative information where possible in our research. For example, in our valuation research and budget game, we highlighted for respondents where performance is above, below, or about average, based on consistent definitions and industry data from Discover Water. We also explored the role that comparative information plays when discussing future performance targets, and tested customer views on the importance, and interest in such information, through our online community. Whilst we find that the majority of customers find comparative information important for transparency, particularly in a monopoly industry, in discussions on future service levels we find that the first consideration tends to be based on customers' own experience (either direct of anecdotal), or perceptions as to what Severn Trent ought to be doing as a water company.

Sampling that reflects the diversity of our region

We serve one of the most diverse regions in the UK – covering urban spaces such as Birmingham (the largest outside of London), cities such as Leicester and Derby and also rural areas including the Peak District and parts of the Cotswolds.

In our research we've embraced this diversity and the rich mix of experiences, faiths and cultural backgrounds of our customers. We've worked to understand whether their needs and views differ and how we can use a more bespoke approach to engaging them going forward.

We took into account the demographics of our region and used this to inform recruitment specifications for our research to ensure that the findings are representative. Where relevant, we defined quotas which reflect our customer base (using data from the Office of National Statistics, census and profiles of bill paying customers) and if necessary weighted the results accordingly.

Making research accessible

The Water Forum challenged us to learn the lessons from recent political polls and capture the views of 'initial non-responders' and customers who historically may have been unable to engage in research. We responded to this challenge in three ways:

- by adapting research to reduce cognitive challenges and to reflect the different languages in our region;
- by adopting a preference for direct face-to-face engagement for the key valuation research so we could follow-up on initial non-responders; and
- by adapting our techniques to gain views from hard-to-reach customers.

Removing language barriers

The 2011 census shows that of the residents in the East and West Midlands whose main language was not English, only 40-60% reported speaking English at a high level. There are therefore, likely to be customers who do not have a high enough level of English to meaningfully participate in some research. To engage with customers in these communities, we analysed the most common foreign languages spoken in our region (Polish, Urdu and Punjabi) and used hall tests and a translated version of the WTP survey.

We also included the Punjabi and Urdu speaking community in our acceptability research, using translated research materials and native speaking fieldworkers.

Taking time to engage initial non-responders

Following the Water Forum challenge, we sought to capture the views of customers who initially do not reply to surveys, either because they are not at home when the fieldwork takes place, or because they decline to take part. We did this by undertaking some research (e.g. WTP) in person and recording which properties did not chose, or could not, take part. We reached out to these customers again through a postal survey and compared their views with those of initial responders.

From over 3,000 addresses of initial non-responders collected, we achieved 432 responses – an innovative and potentially sector leading approach to understanding the views of these previously ignored customers. We are presenting on this to the Market Research Society Utilities conference in October 2018.

Reaching the harder to reach

We adapted our techniques to gain feedback from "hard to research / reach" customers. For example, we used in–home depth interviews for customers in vulnerable circumstances (from both a financial and health and wellbeing perspective) to give us more insight into potentially sensitive individual circumstances. This also allowed us to observe needs first hand, in the comfort of familiar surroundings, rather than rely on reported evidence.

Understanding both customers and consumers

We debated with our Water Forum how to define 'customers' for individual research pieces. For some projects, such as WTP, it's appropriate that we include those household customers solely or jointly responsible for paying the water bill, as well as non-household customers. However, when exploring wider customer needs, we've widened our definition to consumers, including those who consume our services but do not directly pay a bill (which includes future customers). We've carried out research with those paying bills indirectly (for example through landlords or as part of a shared housing arrangement) as well as multi-generational households and future customers.

We've include more diverse customer groups than ever before

Customer types	Description
Household customers	Those with joint or sole responsibility for paying the bill, or who pay through their rent or who contribute in shared households
Non household customers	Small, medium and large non-household customers
Single service customers	The vast majority of our single service customers are waste only customers, with water services provided by South Staffordshire Water
Customers who have suffered service failure	Customers who have suffered a service failure (e.g. water supply interruption, flooding, low pressure, water quality notice)
Customers who engage highly with waterways	Customers who live in proximity to watercourses and who are more highly engaged with the environment
Customers in financially vulnerable circumstances	Those on low income, low disposable income or who are struggling to pay their bills
Customers in vulnerable circumstances due to health and wellbeing	Those for whom a physical or mental wellbeing issues could make our services less accessible
Future customers	Younger people who live at home and who are not currently contributing to the bill
Non – English speaking customers	Those who are not native English speakers and who might struggle to take part in research. The three most spoken languages in our region are Punjabi, Urdu and Polish.
Ethnic / cultural groups	Those from minority ethnic and cultural backgrounds
Digitally disenfranchised customers	Those who do not have access to the internet and therefore would not take part in online research
Retailers	Those who provide retail services to non-household customers
Developers	Larger developers

1.3 Our insight programme

Using our framework, we've developed a programme to uncover new insight cumulatively, building on existing knowledge but not repeating what we already know.

Our programme includes:

- bespoke research, including an extensive programme of deliberative research and stated preference 'WTP' studies;
- day-to-day analysis, such as customer contact or complaint data and insight from frontline employees;
- wider customer sentiment, such as social media scraping; and
- ongoing dialogue with customers, including through our community panel Tap Chat.

We've used a range of insight to understand our customers' needs

Customer types	Description
Customer needs and priorities research	Improves our understanding of customers' needs, wider priorities and the role that a water company plays in meeting those needs
Social media scraping	Provides revealed insight about the conversations customers have about the water industry and Severn Trent
Customer satisfaction quarterly tracker	Monitors the extent to which customers trust their water company and are satisfied with the service
Operational insight	Expands our understanding of the causes of satisfaction and dissatisfaction using complaints and "voice of the customer" feedback
Valuation research	Quantifies the importance of service improvements in the context of other areas of our plan, through both stated preference and revealed preference methods
Deliberative research	Allows detailed discussion on important topics, moving from the spontaneous customer view to a more informed perspective. Topics have ranged from the environment to how we ensure a fair balance of charges over generations, from resilience to how we deal with uncertainty in our plan.
Co-creation	Enables customers to work with our employees on specific topics or to solve specific challenges
Research on helping customers who struggle to pay	Improves our understanding of how we help customers who are struggling to pay their water bill, and how much customers are willing to cross-subsidise them
Best in class customer service and experience research	Improves our understanding of current and future service offerings
Choices research	Provides insight on the performance targets, incentives and support for strategic investments
Acceptability research	Allows us to understand whether customers find the overall service package and bill levels acceptable and affordable

We've directly engaged with over 32,000 household and non-household customers through our research and co-creation, and many more through wider participation activities. But it's not all about the numbers. We've focussed on the breadth, diversity and the depth of the conversations and quality of the resulting insight.

Our leading research and insight projects

We've summarised seven of our headline research and insight projects below, but our programme is much deeper – it's explained in full in Part 3: Individual research summaries of this appendix.

Understanding different needs

We've developed a much richer understanding of how the needs of customer groups might differ, whether that's due to vulnerable circumstances, cultural background, faith or ways in which they engage with water. Our research programme included diverse research techniques - including online communities, deliberative workshops, in home interviews and co-creation with customers - to explore both the role we play in customers' lives and some of the strategic challenges for the future of their water service. This research has provided a considerable depth of insight on our customers, and in particular the areas are service they are interested of hearing more about.

Supporting customers in vulnerable circumstances

We've spoken in depth with customers in vulnerable circumstances, whether caused by health and wellbeing or financial issues. This engagement has helped us develop a detailed understanding of the support offerings they would like (for example, support during incidents).

We've also carried out detailed research with customers on our current social tariff, the Big Difference Scheme, and with those struggling to pay, including customers in water debt. Using the Index of Multiple Deprivation, we focused on customers living in areas with a high degree of deprivation who would be likely to qualify for assistance. We wanted to understand both the effectiveness of the existing social tariff scheme and develop a more detailed understanding of the journey to water debt, including approaches to prevent future arrears and encourage debt repayment. Following quantitative research, we tested a range of ideas which were then developed further with customers using a co-creation approach. Through this research we have identified improvements to our social tariff, such as reducing the average level of discount whilst still providing meaningful support. This, alongside the increased financial support our customers are willing to pay, identified through our cross subsidy research, will enable many more of those who struggle to receive support.

Gaining a richer understanding of customer valuations

Customer valuations underpin crucial components of our plan, including our outcome delivery incentives. Obtaining robust valuations of different service attributes – particularly at the lower end of the hierarchy - has been a critical objective. For this plan, we've incorporated improvements over the approach we took for our 2015-20 plan. In particular, we've responded to the Water Forum's challenge to design approaches that are cognitively simpler for our customers, within a multifaceted programme that provides richer insight and multiple data points.

This new approach included targeted samples with those who have suffered service failures (contextualised WTP), a 'design your own plan' budget game and an innovative approach to understand the views of initial non-responders. We also included a sample of customers who had attended our deliberative workshops, and who had been immersed for a day / half a day in some of the challenges we face. The design and analysis of the results of our valuation research have been peer reviewed by an expert in the field. We find that experience of sewer flooding, and immersion in the water industry, have a significant impact on customer valuations. We also uncovered differences between the valuations obtained through face to face research, and those of our non-responders group.

We've also used a type of revealed preference research, analysing and costing avertive behaviours in order to develop an alternative valuation for short term interruptions to supply, which is one of our key performance measures. The insight from our valuation research has been triangulated, compared to historic valuation results for Severn Trent and other companies in order to investigate outliers, and used to inform our incentive rates and in cost benefit analysis.

Informed views on complex topics and longer term issues – including resilience

We supported the valuation research with an extensive programme of deliberative research to build participants' knowledge - which enables them to give informed views about issues they may not have previously considered, and helps us understand what drives their views. This covers both the basic needs level of the hierarchy (getting views on future challenges to our water system such as resilience, ensuring water is available for future generations and flooding) as well as the self-fulfilment level, covering wider environmental benefits such as biodiversity. Using deliberative approaches means that for complex subjects like resilience we've been able to hold in depth conversations on issues that drive to the core of how we run our business, including our customers' tolerance of risk.

Exploring intergenerational fairness

We have used deliberative research as well as quantitative research with a representative sample on our online community, to explore how we ensure a fair balance of charges over time, and between generations. We find that customers want bills which are stable, and charges to be set in a way which means each generation pays their fair share. Our proposed approach to longer term bill profiles receives considerable support from customers, with 87% of those surveyed preferring a smaller bill reduction over the next five years, but a more stable profile over time.

Getting to the heart of renationalisation

We know that customers are often cynical about private businesses, and might be concerned about water being a privatised industry. Our acceptability research tells us that these views can influence customer's support for our plan as a whole. We have used focus groups and depth interviews with customers in vulnerable circumstances to gain a deep understanding of views on renationalisation, and the role that we should play in society. We find that customers have some latent concerns about profits being made from a public good, but these can be overcome to some extent by community initiatives and support for those less fortunate, including our new community dividend. Nationalisation wasn't found to be a front of mind issue, and most are indifferent to the idea or conclude that the Government wouldn't be able to give the sector sufficient investment or attention.

Testing acceptability

It is important that the plan we propose is acceptable and affordable to our customers. We have consulted over 2,600 household and non-household customers, though online and face to face research, including a sample of South Staffs Water Midlands customers, on the acceptability and affordability of our plan, including potential ODI impacts. The sample allows us to understand customer views for the bill presented in both real and nominal terms, as well as segmenting different customer groups, such as those in vulnerable circumstances. We conducted our research over two waves, as our proposed bill reduction and plan improved significantly after the initial research. Our final wave of research found that 85% of customers find our proposals acceptable, with over 90% of customers agreeing with our committed levels of performance.

1.4 From passive research to active and engaged

We want active and engaged consumers who are demanding about their service and take part in its design and delivery.

We recognise that we don't have all the answers – to deliver better outcomes for our customers we need to create a culture and mindset that actively encourages customer participation. Over the past three years we've widened and adapted our approach to customer engagement to ensure it is part of our day-to-day business. And by involving our customers not only in service design, but also delivery, we're confident we can drive greater satisfaction and deliver better outcomes at a lower cost.

Participation goes much further than simply the consumption of water and its disposal. It's an opportunity to co-create future solutions with customers, such as the communications they would like when we're changing water supply to maintain the Elan Valley Aqueduct. Participation is about empowering and actively connecting customers with our retail services, through tools such as 'Track My Job', and giving them control over their experience

In our approach, we've drawn on Ofwat's March 2017 publication *Tapped In* and used the four elements referred to as the FACE model – Futures, Action, Community and Experience - to shape customer participation.

Our commitment to customer participation

We've made a step change in how we view and engage with our customers, in part through cultural and organisational improvements. These changes mean that customer participation is not just something we're doing for this plan – we've already established three new teams across our business as part of a longer term commitment.

Three new teams to drive customer participation

Innovation team	Customer insight and analytics team	App technology team
To support our aim to be at the forefront of innovation, we analysed best practice outside the sector and created a new innovation in 2015. Our model includes specialist innovation management roles, including a team focused solely on innovation needs and idea generation, and is unique to the sector.	In recent years, the power of modelling and analytics has grown exponentially. We've created an Insight and Analytics team to implement behavioural analysis, modelling and analytics across the business. An improved understanding of customer behaviours, together with demographic data is being used to nudge behaviour change in key areas of the business	The rapid evolution of the smartphone has allowed people to achieve so much more "on the go" than ever before. To focus and harness the power of this technology, we created an App Technology team to devise and develop mobile apps that can enhance customer experience, and help us progress as a business overall.

As we embed this cultural change in our business we're realising the benefits of customer and stakeholder involvement. We've included examples throughout our plan, such as:

- more targeted campaigns that deliver increased engagement and behaviour change, including the award-nominated 2017 water efficiency campaign;
- reduced customer contacts thanks to the new bill format, which was co-designed with our customers;
- engagement with over 2,000 farmers to protect our raw water sources; and
- partnership working to successfully protect properties from sewer flooding.

Futures: customers helping us to shape the future

Participation starts with actively engaging customers and enabling them to have a voice in decisions that affect their lives. We've used deliberative research and co-creation to give customers a real say on specific business issues across our insight programme, working alongside technical experts across the business, as well as with Board members and our executive team.

We have also expanded how we learn from others to shape the future, seeking out innovation through data, open platforms, new horizons across the globe and seeking best practice and best in class technology from a variety of sources. Appendix 7 explains more about our approach to innovation.

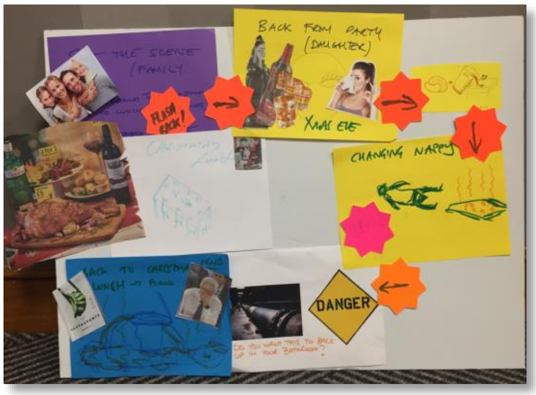
Asking customers for their views isn't new for us - in fact our historic research catalogue is extensive. But the way we've gone about it, raising awareness and informing customers so they can genuinely contribute to the debate and shape the future, is dramatically different. Similarly, while we've always had a strong research and development function, we're now introduced a new Innovation model, which will drive further benefits, as well as actively involving employees across the business in exploring and embedding new ideas.

Co-creation

Using co-creation has allowed us to design areas of future service delivery, in conjunction with customers. Our use of co-creation has focused on five topic areas:

- Communication and engagement: as we explored what matters to customers a consistent theme that emerged was the need to communicate and engage more with customers. We used co-creation to explore this further and to enable customers, working with Severn Trent colleagues, to determine a series of practical recommendations for communications on the topics they were most interested in hearing about.
- Metering: a theme that emerged throughout our research programme is the tension between support for metering, as a demand management option, and the myths surrounding metering. Our co-creation has enabled us to define 20 myths customers have about metering, refine our metering strategy and build a communications toolkit.

- Customer service propositions: we ran a small ‘ideas factory’ in which employees and customers developed and refined future propositions. These were subsequently tested through wider customer research.
- Helping customers who struggle: we refined and tested ideas for improving and promoting our social tariff and assistance scheme offerings, including designing text message reminders after missed payments and testing eligibility criteria and bill discount levels.
- Education with future customers: we are proposing an expanded education programme which will aim to inspire a generation of primary school aged children through experiential learning. This represents a step change compared to our current offering. We ran co-creation events with teachers to refine and test our propositions.



Deliberative research

Across our insight programme, and aligned with our strategic insight framework, we have used deliberative research. This is to primarily engage customers on matters which they don’t consciously consider or which are future facing. We have partnered with leading research agency Britain Thinks to run a series of workshops on topics ranging from how to address the supply demand deficit to how we balance charges across current and future generations. The deliberative approach allows us to provide information and build participants knowledge so they can make informed decisions about issues they might not previously have considered. This provides us with much deeper and considered insight compared to the spontaneous responses we get through other research methodologies. Levels of engagement through the workshops were high, and the feedback from participants was overwhelmingly positive.

“My opinion of Severn Trent has improved. I now understand they challenges they face and how their operation works” – Workshop participant

“A good, informative session. Made me think about my water usage in the future” – Workshop participant

“Realised they aren't to blame for a lot of the flooding that happens” – Workshop participant

Shaping our future brand and bills

We have developed a new brand in partnership with our customers to help us achieve our vision of being most trusted water company in the UK. During the course of the development, we conducted three pieces of customer research to ensure that we truly understood their views:

- Initial customer research to understand their awareness and understanding of the Severn Trent brand and their usage and attitudes towards our key performance areas.
- A presentation of initial brand concepts to get guidance on the most compelling position, tone of voice and visual style, and to understand the initiatives that they find most engaging.
- A presentation of the proposed brand campaign to customers to measure how it works and what it would deliver in relation to our key metrics of trust, satisfaction and connection to Severn Trent.

We are confident our resulting brand, Wonderful on Tap, is one that will engage strongly with customers.

We have also worked with customers to co-design and test a new bill, making it easier to understand by using conversational English and more visual. This has resulted in a 17% reduction in unwanted customer contacts. During the 2018 main billing run, in February alone, there were 15,000 fewer calls from customers. Feedback from customers on the improvements have been great.

"Out of all bills I have coming in this is the first time I can look at my bill and actually see what I have used and the cost. Well done Severn Trent Water. Love your new Billing. Thank you" – Customer feedback on new bill

Innovation tour

We face a potentially significant supply/demand deficit by 2030. In order to gain a wider perspective of this issue, our Head of Innovation travelled to the other side of the world, visiting places such as Singapore's effluent reuse plants and training academy, and spending some time with SEQ and Sydney Water in Australia. We were able to learn how these nations and their utilities faced similar supply/demand challenges to ourselves. Singapore is threatened with the loss of 60% of its drinkable water supply from Malaysia in 2061, when an existing agreement expires, and Australia recently suffered their 'millennium' drought, recognised by many as the worst on record.

It became clear during the visit that these nations are at the forefront of tackling supply/demand issues. This visit led to a number of considerations for us:

- per capita consumption (PCC) - we can learn from Australia who have delivered a sustained 40% reduction in PCC through incentivisation, a massive education programme and a specific push on tackling showerheads and leaky toilets;
- leakage - many communities have significantly better leakage rates than in the UK, with Tokyo being the best at 3.2% vs. a UK average of 24%. The utility invested heavily in asset replacement over a 20 year period, at five times Severn Trent's rate, and staff capability. Singapore has in-situ leakage detection which covers 90% of their network, and had a dedicated academy to train their staff on tackling leakage, helping them to achieve leakage rates of only 5%; and
- metering - we found that 100% metering was common to each area. With a high proportion of leakage believed to be originating on the customers' side, we believe that some form of flow sensor could be considered to further improve leakage levels and reduce per capita consumption.

"Bike on the boat" innovation grants

Our CEO, Liv Garfield, spoke to almost every employee in a series of roadshows across our patch, and set two big bold ambitions- reducing leakage by 15% over the next five years, and reducing water consumption by 50% over the next ten years. These are ambitious targets, but there are places in the world that have already achieved great results like this.

As a result, a fund of £100,000 was established and which any Severn Trent employee can apply for. This enables people across the business to go out and explore places in the world that operate better than we do, so we can learn from their experience.

The fund has only been accessible for a few months, but already some of our employees are bringing back new ideas from their travels. This insight not only will help us achieve our ambition but also highlights the fact that the best ideas come from across the wider organization, not just within the Innovation team itself.

Tech scouting

We aim to utilise intermediates outside of the company to increase the pace of our innovation, and have launched a global technology scouting activity to help us address key strategic challenges.

We are looking at technologies, community projects, and modelling techniques to help manage rainwater within our catchments areas, and sent an enquiry to a global network of 48,000 researchers who endeavoured to find information, articles, patents, products and services in relation that topic. We received 653 different documents back from across the globe, including PhD theses, articles and product brochures.

Our next step will be to work with subject matter experts to filter, analyse and document the information in a way that can be used to inform our innovation and technology strategy.

#LeakageSolveIt

In November 2017, we hosted a #LeakageSolveIt event in Coventry. Over 100 people from 38 organisations including universities, suppliers, local companies, as well as customers, collaborated to discuss and develop ideas to drive a step change in leakage reduction. Over four days participants took part in different activities, including a design sprint, a data hackathon, and an expo of the top global leakage technologies.

Teams were formed and tasked with developing ideas and solutions to leakage, before pitching to a panel of judges. Out of thirteen pitches, four of these collaborations are now being pushed forward into solutions within the business.

Energy hackathon

In June 2018 we hosted an energy hackathon, making our energy usage data public to give experts and enthusiasts the opportunity to look for ways in which we could make energy savings in the future. Over 50 participants attended across two days, including businesses, local universities and other utility companies such as Northern Ireland Water, EDF, and Elemental Energy. A second phase of the data release will go live in the autumn. This open approach to data can help improve competition, drive efficiency and stimulate innovation within the sector.

Action: customers take action to change behaviour

By changing customer behaviours, we can help ensure that the outcomes that matter to customers are delivered in a cost effective and environmentally sustainable manner. For example, changes to water consumption behaviours can ensure that water is available for future generations, despite the supply demand challenges we face, or taking action to reduce sewer misuse can prevent customer disruption due to sewer blockages and reduce cleansing costs.

Our Insight and Analytics team uses demographic data analysis and behaviour data tools to understand our customers - and then find ways to nudge them to change their behaviours. We believe incorporating this understanding of customer behaviour can:

- give us greater insight in to our customers' priorities by understanding what really drives changes in behaviour or satisfaction in service; and
- help us develop targeted solutions that deliver the greatest benefits by having customers help design and implement the solutions.

Observing real world behaviour is often better than research at telling us about our customers. Behavioural economics can also show us how to use subconscious methods to achieve behavioural change to the benefit of all customers.

Water efficiency - customers taking action

Our 2017 water efficiency campaign, shortlisted for a Utility Award, was our first targeted campaign based on analysis of billing information, water consumption data, product purchase data, behaviours, ACORN data, geospatial mapping and demographics of our customer base. We used different messages and channels to promote water saving devices to high water usage customer groups. In our campaign we had nearly 2,000 customers ordering products (from 264,000 households targeted) resulting in over 7,000 more water saving products in customers' homes.

Direct mail and door drop

Social and digital animations

We're exploring how we can further improve the effectiveness of this work by reaching those who don't traditionally respond, all with a view to set ambitious targets for the future.

Water efficiency - taking action in communities

We want customers to know how much water they could be saving with some small behavioural changes. That's why in 2016 we began our in home water efficiency check service. This allows our customers to sign up for a free home visit, where we can fit free water saving devices, offer tailored advice on how to save water, and check for leaks.

We have initially rolled out this programme in two distinct towns, Rugby and Coventry. Each water efficiency check can help reduce customer demand by 10%, as well as getting excellent feedback from those engaged. We've undertaken over 15,000 in house audits, including working with Nottingham Country Council to target the more difficult to reach customers in social housing through a multi-utility review of their household spend.

Water efficiency - developers taking action

Infrastructure charges are one-off costs that developers have to pay when they add new water and/or sewer connections to our network, to make up for the increased demand this puts on our system.

However, in 2017 we set up a discount scheme, allowing developers to save up to 100% on their water charge if they build homes with more water efficient fixtures and fittings. This means that developers have a great financial incentive to become more water efficient.

We’re first in the industry to introduce such a scheme across our whole region, because we want to embed water efficiency in the minds of all new developers. If developers decided to build to our discount-receiving water efficiency level, rather than to the standard national level, then there would be a 30l/day saving per household. If this saving could apply to all new properties then it would greatly reduce the demand on our network and save the eventual residential customers a significant amount of money.

Developers can also qualify for either a 75% or 100% discount on the sewerage infrastructure charge by showing us that either there is no surface water connection, or a sustainable drainage system is in place. This is a key driver in reducing the risk of flooding in homes and streets caused by excess surface water.

We’ve already had great feedback on this scheme from some key stakeholders:

‘Ambitious and innovative – just the kind of thing we need to see from water companies’ – Nicci Russell, MD, Waterwise

‘A fantastic initiative and an innovative way to approach infrastructure charges’ – Stephen Wielebski, National Technical Committee Chairman, Home Builders Federation

‘Very good incentive. I think you’ll be one of the first water companies in the country to have promoted that.’ – Quote from research with large developers

“Obviously that [scheme has] been a massive win for us developers, it’s nearly £700 per plot that we’re not paying now that we used to [pay], if we conform. That’s a lot of money!” – Quote from research with large developers

Water efficient new homes

We’d love all homes in our region to be the most water efficient they can be, which is why we’re passionate about supporting both our customers and developers to achieve just that, when building a new home.

Our ‘Infrastructure charges discount scheme’ invites our customers and developers to be part of our water saving ambition and in return, we’ll help them to save money on the cost of new builds. We do this by offering discounts on both clean water and sewerage infrastructure charges (by up to 100%) if house builders install water efficient fixtures and fittings to meet our qualifying conditions.

FIND OUT MORE

Fats, oils and greases – businesses taking action

In partnership with Environmental Compliance and Services (ECAS), we’ve begun working with many restaurants in our area that discharge fats, oils and greases (FOG) into our system. We engage these restaurants to raise awareness about the issues associated with FOG discharge and provide guidance for how to manage the problem.

We’ve engaged with around 900 restaurants, which has resulted in grease traps being installed in over 40% of cases. One example of this is in Cheltenham, where we met with a local restaurant and discovered that their grease trapping equipment was not big enough or fit for purpose. We worked together to find the best solution for this business, which led to the installation of two well-equipped grease recovery units. The owner expressed his gratitude to us for highlighting this issue, and noted that he’d be encouraging other restaurants and friends to follow suit.

We've also worked with a number of national fast food chains as part of a drive to minimise blockages in sewers and drains across our patch. With one company, we set up an awareness raising programme for a pilot group of managers on how to dispose of fats, oils and greases (FOG) from cooking, and helped them understand the environmental benefits of looking after their pipes and local sewers. We also support them with regular maintenance of the sewer pipes near to the restaurants. We believe that these large chains can help serve as role models in their behaviour to other companies. We're also using it as an opportunity to talk to them about how they can become more efficient with the amount of water they use.

Debt nudging – proactively using data

We are building the capability to conduct full data sharing with credit reference agencies. The rest of this AMP will focus on trialling how we can use this technology, with the aim to implement solutions in AMP7. Together, data sharing and predictive analytics will enable us to pre-empt debt problem and identify and support customers before they go into debt.

We will combine this with our outbound dialler, email and messaging capability to proactively engage customers to see if they need any additional support if they miss a payment or start to slip into debt. Currently reminder letters are often our first engagement with customers. We will be able to identify erratic payers and customers who regularly contact us, which are often warning signs for customers who may be struggling to pay. We can then proactively offer a variety of payment options.

Through our customer data capability, we will also be able to better distinguish between those who are struggling to pay and those who won't pay, and therefore target our actions accordingly. We will know more about our customers, so we'll be able to develop more personalised debt management.

Direct debit nudge campaign

Our research tells us that many customers are not aware of all our payment options, and that they would be happy to switch to what could be a more convenient (and lower cost to serve option) if we ask them. We have used behavioural economics and customer segmentation to create a behavioural nudge campaign, targeting customers not currently paying by direct debit. We want to make customers aware of the best bill payment options for them in order to make their payment "journey" as easy as possible. We used a range of sources, from ACORN data to customer research, to understand how to target customers which the most relevant and effective communication method. Our campaign this year has seen an uplift of over 1.7% in customers switching to direct debit

Dear Customer,

Give yourself one less thing to do

Paying your bills can be a hassle – especially if it means going out to post a cheque, or paying at the bank or Post Office.

So why not start paying for your water services by Direct Debit, and join the majority of our customers who now pay in this way?

Your Direct Debit can fit around you

With our improved Direct Debit, you can pay every six months when a bill is issued. Or you can pay more regularly if you prefer.

Whichever option you choose, you'll still pay the same amount overall – but the more regularly you pay, the smaller and more manageable your individual payments will be.

It's a simple, safe and reliable way to pay for your bills automatically through your bank account – and we'll always let you know when payments are going to be taken.

Set yours up now

GET SET UP IN 5 EASY

To set up your Direct Debit:

1) Visit **stwater.co.uk/my-direct-debit**
2) Login (or register) to your online account
3) Enter your bank details
4) Choose the frequency and amounts
5) Review and confirm

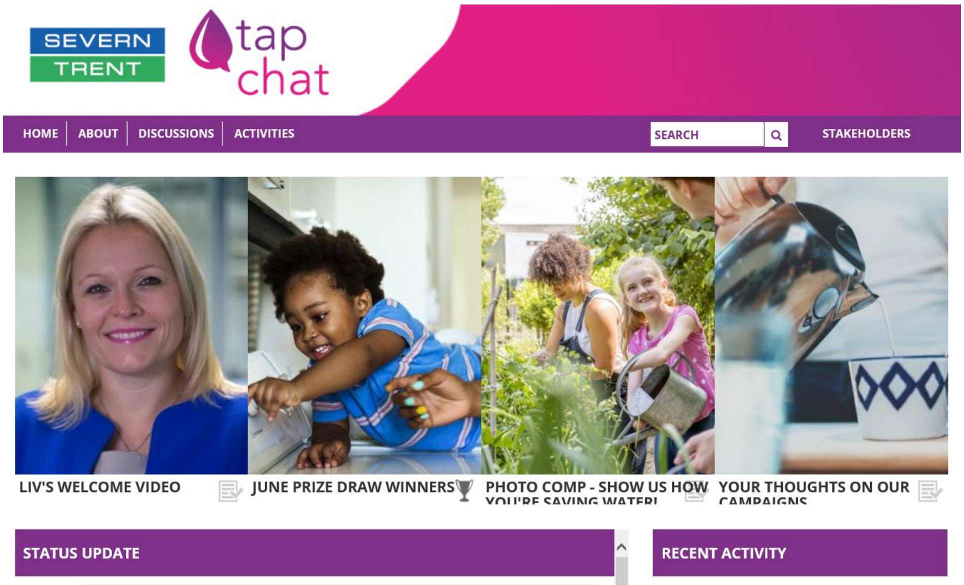
Alternatively, you can complete the enclosed mandate and send it back in the prepaid envelope

Community: increasing community ownership and participation

Working in partnership with expert groups and communities, together with increasing community ownership of issues, can deliver the outcomes our customers want while providing wider benefits for the community. We've engaged with communities in many different ways. These include working with stakeholders and expert partners, embedding partnership working in outcome delivery, and establishing a 15,000 member online customer community which enables enabling participants to engage with us and shape our business.

TapChat – our online customer community

We have launched an online community – Tap Chat, inviting consumers to sign up and share their views on our services through fun online activities, discussions, surveys and quick polls on a whole range of topics. Tap Chat is open to all Severn Trent customers, and was launched via an email, press and social media campaign. We are delighted to have recruited 15,000 members to Tap Chat.



Tap Chat is more than just a research tool, our aim is to create self-sustaining online and (in the future) offline communities, where customers can share information, ideas and innovation. We want customers to be able to continuously share their views, preferences and opinions with us so that they can directly shape our future. Through this proactive, ongoing and two-way dialogue, we will be able to constantly identify precisely what matters to our customers in an ever-changing world.

Since Tap Chat was launched in March 2018 our members have started over 30 discussions on topics ranging from nationalisation to fracking, water meters to leisure activities at reservoir sites. Our initial discussion topic on what is important to you (in the context of their future water supply) received over 1,100 comments from members. We are delighted with the level of engagement and participation from members.

Catchment management

We are working with the farming community to limit and remove metaldehyde, an effective pest-control which has historically been used by farmers but that requires expensive, energy intensive treatment at our works to remove it from the water supply. We have two notable success stories in this area:

- Through our STEPS scheme, we have worked with farmers to improve their practices as part of a catchment pesticide amnesty.
- We have explored an approach whereby we educate farmers on the problems of using metaldehyde products and create a marketplace for them to sell the pollutant free water to us as an incentive.

Our collaborative approach to catchment management has led to remarkable uptake levels. Over AMP6 so far we have engaged over 2,000 farmers and funded more than 620 grants, totalling more than £2.5m. Our efforts are increasingly being recognised – we won the top prize for Best Environmental or Sustainable Programme at the Corporate Engagement Awards 2018.

Community Champions

Our “Community Champions” volunteer programme partners with a number of local organisations to achieve mutual benefits for our region’s environment. We have developed strong relationships through information sharing and trading of expertise, which helps us to grow our network of people when it comes to tackling environmental issues. Our volunteering programme is flexible; if we have an unexpected issue, our partners help inform the most beneficial action to take and work collaboratively with us to develop solutions.

We try to link our employee volunteer work to areas in which we may have caused disruption (e.g. through the capital programme delivery), as a way to give something back to the community. In Newark, we’ve invested £60m into improving our water and wastewater systems. As a result, we wanted to make sure that we gave something back to the community to compensate for any disruption this may have caused. So we sent our volunteer teams there to help maintain the riverside, in partnership with the Canal & River Trust. This meant our volunteers were able to help make the river a more attractive and welcoming place for the local community.

Birmingham Urban Demonstrator

In order to close the gap in our supply/demand deficit, we need to work with our customers and stakeholders to sustainably reduce per capita water consumption. Our Innovation team are leading a number of community-based water efficiency initiatives in the Hay Mills area of Birmingham, which have included:

- Plug-In Hay Mills – working alongside local residents and community groups, at coffee mornings and workshops, to highlight water efficiency;
- Redhill Primary School - evaluating the potential of rainwater harvesting and SuDS, whilst engaging with pupils around water efficiency; and the
- Integrated Water Management (IWM) Pathfinder Project - working with the local community to shape the design for IWM, which would involve using SuDS to improve green space quality, and become integrated with streets, alongside rainwater harvesting.

Partnering with Lead Local Flood Authorities

We liaise with LLFA’s – government bodies responsible for managing local flood risk – when there are numerous sources of flood risk. We do this because it means we can come up with solutions that reduce the risk of flooding to customers from both the sewerage network and overland. It also means the cost of the solution can be reduced, and more benefits can be delivered for the same level of investment.

Severn Trent partnered with Nottinghamshire County Council & Ashfield District Council to tackle flooding in Thoresby Dale. This is a residential street which has seen 11 properties suffer from internal and external flooding over the past 30 years due to significant overflow. As a result, the Property Level Protection (PLP) scheme was developed as well as information sharing between organisations to identify and understand flood mechanisms. The PLP scheme delivered fluvial flood risk, surface water flood risk and combined sewer flood risk reduction at the same time; this meant there was minimum impact and disruption to the area and its residents.

As a result of this partnership, 11 affected properties were protected from sewer flooding along with a significant reduction of flood risk to the community, which is a key objective for our commitment against flooding. We recognise that we have a responsibility to our customers and our environment, so we collaborate with these authorities way for everyone to own the problem and work together to deliver a scheme with a focused approach to tackle sewer flooding. This has massively increased public confidence in us, with a number of residents openly stating that they felt their health and well-being improved through reduced worry and anxiety over flooding issues. This was only made possible through joint collaboration and, subsequently, greater understanding of residents' flooding issues.

Experience: increasing control of customers' experience

The more customers can control their experience, the more they can become active agents in their own service. We're developing multiple ways in which customers can take greater control in their use of water as a product, as well as their experience of our service. This includes launching apps such as the leak locator, which allows customers to validate leaks, and Track My Job which enables customers to monitor progress on reported jobs. Digital contact channels, such as web self-service and web-chat are also becoming increasingly popular. Some areas where we have seen benefits are:

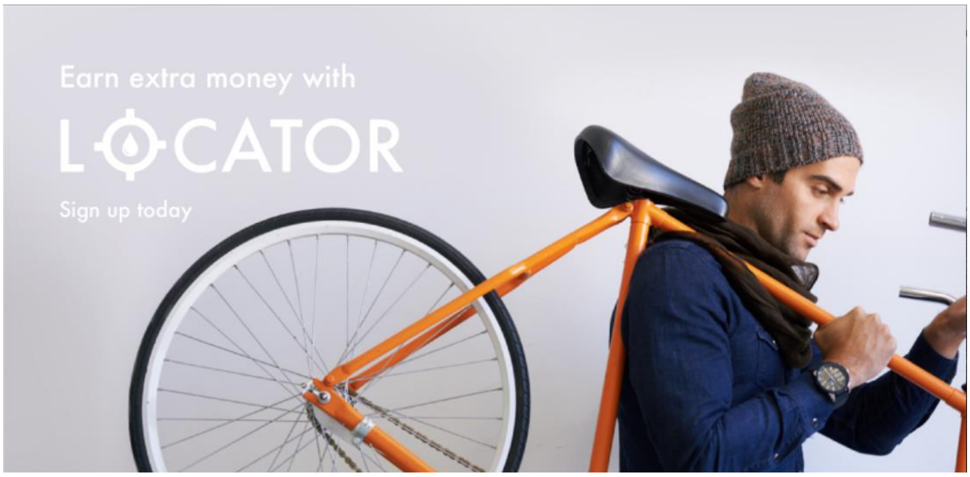
Web self service

We have implemented a new web self-service platform which increases customers' ability to manage their accounts and pay their bills through our online self-service forms. We trialled a campaign to promote this channel which helps us to understand the uptake rate and behaviours of our customers, and helps to plan future promotion. We found that, after five days of messaging:

- 1.5% and 0.8% of customers registered online from our email and SMS campaigns respectively;
- 1.2% of customers who had an email campaign and were already registered (but not transacting previously) have now transacted online; and
- 0.5% of customers who had an SMS campaign and were already registered (but not transacting previously) have now transacted online.

Leak locator

In collaboration with innovation consultancy Fluxx, we trialled a project that would make customers active agents in tackling leakage (a totemic issues for customers). Through a series of trials and experiments, we developed an online service, Leak Locator, which would use gig economy workers to validate leaks via Facebook Messenger communication. We would pay them £15 and ask them to validate a reported leak in our patch, which they would do by visiting the leak and sending us photos. This trial gained the most success and uptake from students, who were interested from both a financial and an environmental perspective.



This service cut down on the time to validate leaks from 48 hours to just over one hour, whilst saving £18 per visit. Overall, if this technology was rolled out to deal with all our reported leaks, we could save over £350k. Through this platform, we are able to empower customers and actively engage them in the day-to-day work we carry out.

Track my job online service

Through our Track My Job online service, we allow customers to instantly keep up to date with how their jobs are progressing. Customers are able to see live updates, with detailed status updates and dates such as when the job was raised, whether teams are on site, if the site is being resurfaced, and finally when the job is completed. This service is vital for busy customers on the go. In the digital age, customers have an increased desire for instant updates about their situation, and we've taken heed of the advancements made by other sectors, like telecommunications. This technology gives customers a better overall experience, as we've improved the communication we provide, and are able to give customers much more awareness about their jobs.

Video calls for leakage

We are trialling video calls with customers for leak identification in our operational control centre. We receive around 40,000 calls relating to leakage each year – but it is often difficult to identify the issue over the phone, meaning a visit from a technician is often needed. Video calls between our customers and technicians could raise jobs more swiftly because we are able to identify the issue faster. Initial results look promising – 80% of customers were willing to take a video call, resulting in around three quarters of these not requiring a visit. We've also received great feedback from customers – with 75% giving us a 5* for the interaction.

MOBI–pay

In May 18 we launched a Mobi-pay trial – Mobi-pay allows us to remind our customers about their upcoming bill with a simple SMS or email instead of a letter via the post. We will be sending an average of 500 messages each day to a select group of customers to encourage them to pay their bill online – which is quicker and easier and has the added benefit of reducing print and paper costs. We are using historic data to target customers who typically pay their bill once they receive their first reminder letter.

In the first ten weeks of the trial we have contacted over 21,000 customers and seen over 9,000 individual transactions completed. This has removed the need to send over 9,000 white mail notices and reduced incoming call volumes into the contact centre. We have seen a 43% response rate, of which 14% used the link provided to pay and 29% payed using another channel such as Web Self Serve, Paypoint, Water Card or Direct Debit. We will continue to track how many of our customers successfully pay their bill using the links provided and if it prompts our customers to call up and pay over the phone.

1.5 Water Forum challenge

The Water Forum has worked with us collaboratively to design our research programme. It's challenged how we've interpreted and synthesised the insight, and then challenged how we've used that to build our plan.

The Water Forum has continuously challenged the link between the customer insight and the way in which it has shaped our plan, through the performance commitments, outcome delivery incentives and our enhancement expenditure proposals. All Water Forum members used this appendix as a practical tool to access key customer insight findings and to challenge our proposals.

The Water Forum captured 379 challenges in total, including over 60 relating to customer insight. We have summarised some of the key challenges here:

Water Forum challenges	Our response
Develop a strategic framework for market research and customer insight, with a clear rationale for the chosen approach and research tools used.	We've set out an initial hierarchy of customer needs, taking into account the fact that the drivers of satisfaction / dissatisfaction are different at the different levels of the hierarchy, and developed our strategic insight framework.
Make use of operational data as well as the insight from research.	We've analysed contacts and complaints from customers over the past few years. This has revealed interesting insight and the findings have then been sense checked against outputs from research.
Provide a clear plan for the approach to triangulation and a rationale where judgement is being used.	Our approach to triangulation is in two parts, which work together. The first part is the "synthesis and judgement" in this appendix. This is used for developing the performance commitments, informing targets and validating incentive rates and strategic investment proposals. The second part involves the triangulation of valuation data, which is used to set robust incentive rates and in cost benefit analysis.
Incorporate in-depth qualitative research in the process of triangulation.	Within this appendix, we've incorporated the insight from both qualitative and quantitative research. Insight from qualitative research has also been used in the validation of valuation outliers.
Expand the choice of research agencies and bring new ideas and expertise from outside the sector.	We've commissioned key projects with agencies from outside the water sector, leading to new perspectives and approaches.
Consider co-creation as an ongoing tool in the delivery of the plan.	We're proposing to engage with customers during the delivery phase of the plan, and in particular when considering scheme feasibility and additional benefit valuation for the cost adjustment proposals.
Consider how the environment is reflected in the hierarchy of needs.	Engaging customers on the environment, and longer term issues, requires a considered approach. We've worked with our environmental stakeholders on the Water Forum to consider how the environment aligns with the hierarchy of needs.
Consider the views of those customers who are unable or unwilling to take part in the core WTP research (a group called the initial non-responders)	We've used a postal survey to follow up with this group of customers, who were unable or unwilling to participate in the face-to-face interviews. The Water Forum believes that this is an innovative and sector leading approach to understanding the views of this customer group, which gives us crucial insight on this previously ignored group of customers.
Analyse the views of customers who have suffered service failures (not just the "average" customer who might never have experienced disruption).	We've targeted a number of niche audiences. These include customers who have experienced a disruption to supply or a leak, as well as those who have recently had a different type of contact compared to the average customer - and could be likely to voice stronger opinions.
Take the opportunity of the more customers understand and are informed, the more decisions they can make.	Our deliberative research used engaging and informative materials to raise customer awareness of key issues. This helped them make more informed decisions about the issues we face and the future decisions we need to take.
Use behavioural research.	We recognise that behavioural research should form part of our customer engagement, and have been using behavioural insight and data analytics to run more targeted campaigns (such as a direct debit nudge campaign and a water efficiency campaign) and to reveal implied valuations.

Overall the Water Forum has reported to us that, in its view, we've made a step change improvement in the quality of the customer engagement, which it believes is robust, rigorous and comprehensive in scope. Read more about their challenge in the Water Forum report.

1.6 Triangulation and assurance

Our insight programme has enabled us to develop a rounded view of our customers, accepting that different research methodologies, perspectives and contextual information can inevitably lead to different results.

This insight has underpinned the development of our outcomes, our plans for the next five years, and our performance commitments. It's also helped us to balance our plan – considering issues like intergenerational fairness and the sharing of risk and reward.

Triangulated evidence from a wide range of sources

Ofwat expects companies to cross check and sense check evidence, drawing on a range of techniques and sources. In this appendix we have triangulated the evidence for each outcome, as well as provided the details for each evidence source (including objectives, sample, new insight and validation of existing knowledge). This has been used both internally – the challenge back on how customers have shaped the plan and performance targets, and externally with the Water Forum, to enable members to see the line of sight between customers and key decisions.

In synthesising the evidence for each outcome we have considered the extent to which customers regard the service area as a priority for improvement, which informs the level of stretch we are proposing in our performance commitment. Our view on whether an area of service is of "low importance", "important" or "very important" is based on the sources of evidence presented for each outcome. In some cases, such as in the example presented below, we have evidence from multiple pieces of research. In other cases, it is more appropriate to use other techniques, such as deliberative research, to uncover customer views on more complex topics and infer the relative priority from this.

Triangulating different sources of insight

	Implications for target	Customer tracker	Willingness to pay	Budget game	Deliberative/other research	Choices research
Leakage	**Very important**	High priority	High priority	High priority	High level of support	Top priority
Water supply interruptions	**Important**	High priority	Low priority	High priority	Shorter duration interruptions less important	Medium priority

In addition to the customer's relative priority, one of the basic principles of our strategic framework is the concept that not all customer needs are equal – in order to bring this to life we have allocated each performance commitment to a level in the hierarchy.

In summarising the findings from a rich evidence base we find a great deal of internal consistency in terms of understanding customer priorities, and also findings which on the face of it are different. Our insight programme has developed a rounded view of our customers and what matters to them, accepting that different research methodologies, perspectives and contextual information inevitably can result in different results. In this appendix we've brought these together and explained the rationale for the conclusions we've drawn to develop our plan. Alongside this, we've triangulated our valuation data in order to inform incentive rates and for use in cost benefit analysis. This is explained in Chapter 9 of the main plan.

Read more: our outcomes in Part 2 of the plan explain how we've used insight to design our service and make our performance commitments.

Independent assurance

The Water Forum challenged us to have our triangulation and synthesis assured by an independent third party. We welcomed the challenge, as the synthesis of customer insight findings inevitably includes an element of judgement. We subsequently appointed an insight consultancy firm, which had not been involved in the research programme, to carry out an independent, third party review of our findings.

We feel that the Customer Insight report clearly and accurately synthesises the results of STW's research programme and showcases variety and volume of research undertaken by STW as part of the 2019 Price Review process.

A wide variety of research approaches have been used throughout the research programme, and a very wide sample of customers have been able to participate in the research. Importantly, all groups of customers have been able to participate in ways that suit them. In addition, the inclusion of a wide variety of research methodologies is important as it helps to draw out any method bias within the research. - Summary of assurance findings, report by Trinity McQueen

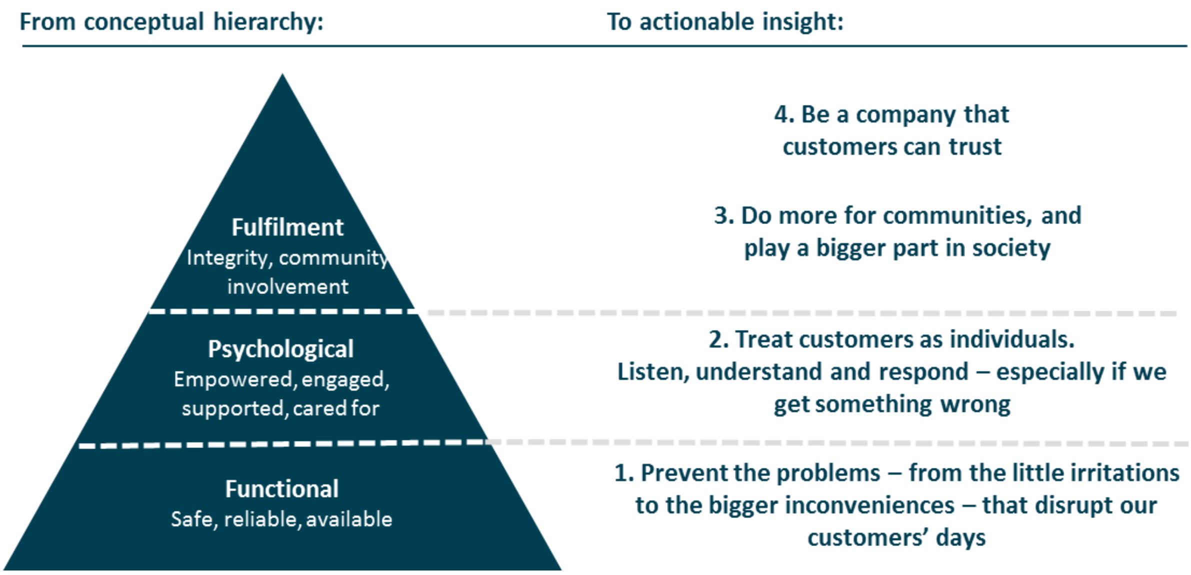
1.7 What we learned

As a result of our programme, we've a much deeper, richer view of our customers than ever before. We've summarised what we've learned in two ways: firstly, how the concept of a hierarchy translates into four important lessons about our customers' needs from us; and secondly, new areas of value for customers we've uncovered as we've carried out our programme.

From conceptual hierarchy to actionable insight

By exploring the concept of a hierarchy of needs, we've been able to gain a new perspective on our customers' needs. Across our insight programme our customers have told us that:

- we should keep improving our delivery of basic needs to prevent problems, from the little irritations to the bigger inconveniences;
- they want to be treated as individuals – we should listen, understand and respond with an empathetic and human touch, especially if we get something wrong;
- we have an opportunity to do more to meet customers' psychological and self-fulfilment needs, doing more for communities and playing a bigger role in society; and
- we should be a company that customers can trust.



And customers have clearly told us that they expect the above to be just as true for future generations as customers today – it should not be achieved at the expense of either – and at a price that is affordable for all.

And we’ve translated this into actionable insight that underpins *what* we’ll deliver, *how* we’ll do it, and reminds us to explain to our customers *why* we want to do it.

Uncovering new areas of value to customers

Better engagement

One common theme emerges across all of our research – for many customers their understanding of our function is limited and they expect us to be more proactive in our efforts to engage and inform them, their children and grandchildren. This includes more effective messaging about water efficiency and sewer use but also improved engagement on topics such as help with paying bills and how they can get the best out of their service. We also know that we cannot expect our customers to trust us if we cannot explain or evidence our intent.

So we’ll be doing more to tell our customers how their money is spent, how they’re making a contribution to their community through their bill, and how they can get more out of our service. And we’ve already started - one of the first examples of this commitment in action is that this summer, for the first time in over a decade, we're using TV adverts to promote how we can all use water wisely. Our WONDERful on tap campaign helps customers appreciate the “wonder” of water and how ultimately it is “on tap” as a result of the role we play. Over 900 members on Tap Chat have been discussing our campaign and engaging with our brand and key messages.

Altruism and supporting the wider community

Although we knew that there was a degree of altruism in our customers' behaviour, this is more pronounced than we initially understood. This altruism is most evident in relation to where we choose to invest, with support for targeting investments in socially deprived regions, particularly if our investments can deliver multiple benefits.

In response, we’ve created a suite of performance commitments that are designed to deliver multiple benefits for our communities, for example our green communities commitment which creates new natural capital while we tackle sewer flooding.

To re-emphasise our community intent, we have committed to creating a community dividend, using 1% of profits, toward community projects to be agreed with and advisory board including our customers.

Low pressure

We’ve discovered that low pressure is a much bigger issue for our customers than we previously thought. Traditionally, our focus has been to address chronic low pressure, which affects a few hundred properties. But our retrospective review of customer contacts and social media sentiment, shows that low pressure is clearly a much more emotive issue - and one which creates dissatisfaction for customers.

In response, we’ve introduced a new performance commitment which, by focusing on our response to customer complaints rather than whether we’re reaching statutory standards, views the issue from their perspective.

Social tariffs

We have an opportunity to help even more customers by making minor changes to our social tariff. Participants in our co-creation sessions told us that our current 90% discount on bills could be reduced for some customers and still be highly impactful. We can also improve awareness of our support and make the process easier for customers.

We’ve taken this on board as we’ve designed our new package of support options – including reducing our discount to 70% so that we can help more customers in need, without compromising on the impact, and continuing to invest in the Severn Trent Trust Fund

Metering

To address the supply-demand challenge, customers want us to help them reduce their water consumption, with strong support for metering. This includes support for smart metering. Many customers draw on their experiences with energy providers and expecting similar engagement from us.

In our plan, we're proposing a significant increase in metering but we've also listened carefully to what our customers told us about how we go about it. Through our co-creation sessions we've identified 20 metering myths that we need to tackle to obtain greater customer support. So during 2018-20 we'll be trialling different approaches to engagement and smart meters to inform our meter-roll out programme post 2020. There are also opportunities to make metering more acceptable by introducing new features, such as an amnesty period for supply-side leaks.

Read more: Chapters 10 to 18 explain how we've used insight to design our service and make our performance commitments.

Keeping the dialogue going

We've quickly learned that we cannot earn the trust of our customers if we only engage when we need to. So in addition to our existing feedback mechanisms, including our voice of the customer channels and growing analytics capability, we've launched a 15,000 member online community, Tap Chat, which allows us to have ongoing dialogue with our customers.

Our plan has already been shaped by discussions on a wide range of topics, including what matters to customers (in terms of their future water supply), lead in drinking water, the design of incentives and asset health. We've also used Tap Chat to review design materials for our 2018 water efficiency campaign, and to test how we describe inflation and performance improvements in our acceptability research.

Going forward, we'll be using Tap Chat to design service changes with our customers, from their views on how we can best present our performance to them to changes we're proposing to our policies. We've already laid the foundations for a much more collaborative approach to service design and we want to build on this momentum in the future.

PART 2: SUMMARY OF CUSTOMER INSIGHT BY OUTCOME

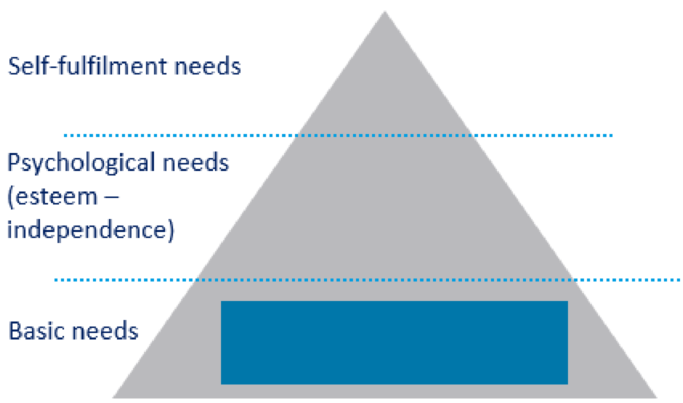
In this section we have summarised the evidence for the plan overall and for each outcome, drawing out the key insights for specific programme areas (e.g. customer views on supply resilience, or partnership working) and performance commitments (in order to inform the level of stretch that customers want for each performance commitment).

In summarising the findings from a rich evidence base we find a great deal of internal consistency in terms of understanding customer priorities, and also findings which, on the face of it, are different. Our insight programme has developed a rounded view of our customers and what matters to them, and different research methodologies, perspectives and contextual information inevitably can result in different results. In this appendix, and in the performance commitment appendix, we have brought these together and drawn necessary conclusions in terms of what it means for our plan.

2.1 The lowest possible bills

Water should be affordable for all

Our customers expect that bills should be no higher than necessary, and believe that water is a basic human necessity that everyone should be able to afford. As such, having the lowest possible bill can be considered a basic expectation.



We have explored customer views on the affordability of our current bill, as well as our proposed plan, as well as the other elements which affect bills, including incentives and penalties, approaching uncertainty and how we balance charges across generations.

We've used a range of insight to understand our customers' views, including

Approach	Purpose
Acceptability research	Quantifies whether customers find our proposals acceptable and affordable and the reasons why
ODI uncapping research	Explores customer views on ODIs and the uncapping application during AMP6
Choices research	Explores customer views on ODIs and provides feedback on relative ODI rates
ODI design research	Discussion and survey on ODI design, including collars for extreme weather
Deliberative research	Allows detailed, informed discussion on important topics – in this case our balance of charges over time and how we deal with uncertainty
Customer tracker	Quantifies changes in customer satisfaction, value for money and affordability over time as well as capturing views on discrete issues

Based on our research we have triangulated our customer evidence to determine customer's relative priority for each of our performance commitments. Whilst we have not discussed voids with customers directly we have inferred their relative priority based on the expectation that all customers should pay their fair share.

We have triangulated our evidence base to determine customers' relative priority

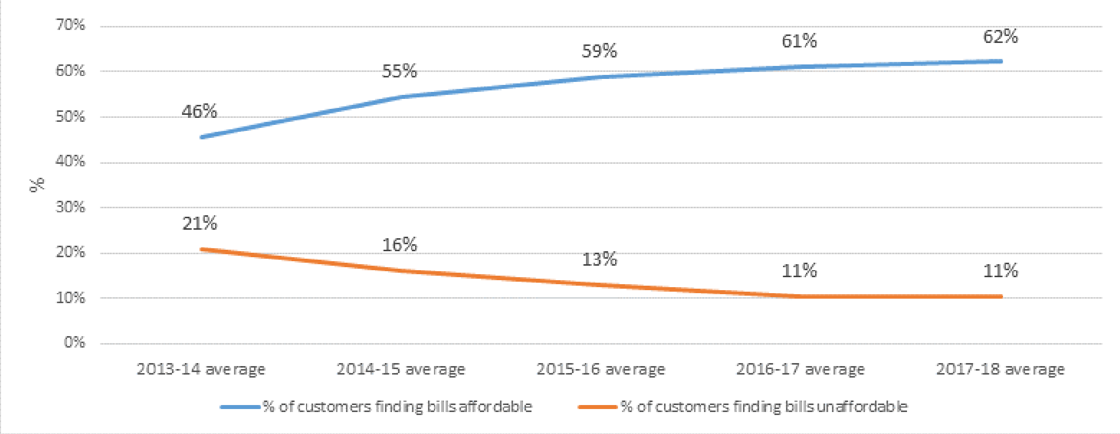
Performance commitment	Relative priority	Hierarchy of needs	Rationale
Reducing residential void properties	Low importance	Basic	No direct customer insight however there is an expectation from customers that every customer should pay their fair share, and that bills will be no higher than they need to be
Reducing residential gap sites	Low importance	Basic	
Reducing business void and gap site supply points	Low importance	Basic	

Having the lowest possible bills

Since AMP5, we've regularly tracked our customers' views (in our customer tracker) on a range of issues including affordability, value for money and customer satisfaction. Our latest full year of survey data shows:

- 11% of our customers find our bills unaffordable;
- 62% of our customers explicitly state our bill is affordable;
- 59% of customers rate us good value for money; and
- 81% of our customers are satisfied with us overall.

The percentage of customers who explicitly state our bills are affordable has been on an upward trend over this period. Similarly, the percentage of customers who find our bills unaffordable has dropped from 24% to 11%. Only 51% of our least affluent customer segment find bills affordable - but satisfaction amongst these customers still remains high, with only 8% explicitly stating they are dissatisfied.



Our tracker also tells us that 69% of customers are unaware that Severn Trent combined bill is the lowest in England (Q1, 2018/19), although this percentage has decreased since we first tracked it at 87% in Q3 17/18. Those who are most aware are the younger age group, those who have visited our website, and those who have had contact with us in the last 12 months. Despite the lack of awareness, when asked if this is important to them, the majority of customers told us they feel it is important for this to continue.

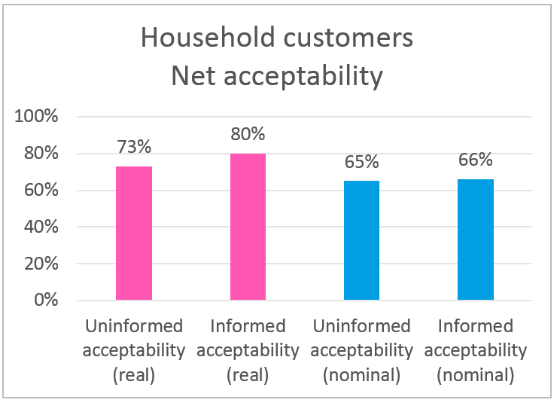
Only 5% of customers would want a bill reduction if this meant services were to deteriorate, whilst 79% of customers feel they understand fully what their bill pays for (Q1, 2018/19).

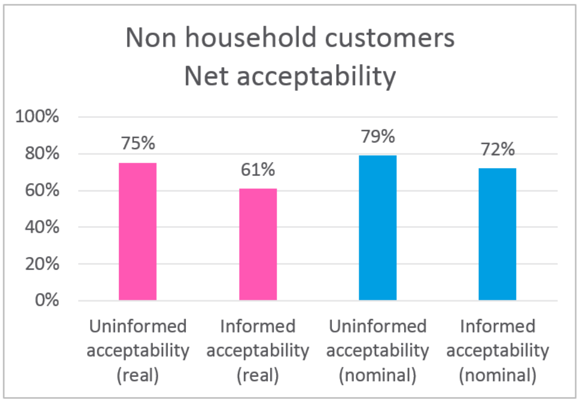
Acceptability of the plan – wave 1

We have done a large piece of acceptability research over two waves, with over 4,000 customers, to understand if our proposed plan is acceptable and affordable to our customers, including both online and face to face surveys. Our initial wave of acceptability research was based on a 3% bill reduction in real terms, and finds that 80% of household customers, and 61% of non-household customers find our proposed plan acceptable, when presented with the service plan and bill in real terms. We asked customers whether the proposed performance commitments for water, wastewater and retail are acceptable, and the majority of customers agreed they are:

- 81% of household customers, and 80% of non-household customers, supported the proposed package of water performance commitments;
- 80% of household customers, and 78% of non-household customers, supported the proposed package of wastewater performance commitments;
- those who disagreed often perceived they would be paying more for the improvement or had no issues with the current service;
- 75% of household customers supported the retail performance commitments; and
- those who disagreed with the retail commitments felt other aspects of water supply are a higher priority compared to helping others.

In response to challenge from CCWater, and feedback from our customers on Tap Chat, we split our research sample in order to analyse the impact of presenting bills in real or nominal terms. We find that this does have an impact on net acceptability, although results from the questions in nominal terms are still very positive, with 66% of household customers finding the proposal acceptable. Interestingly, acceptability increases to 72% for non-household customers when presented in nominal terms.





Some customer groups are less likely to find our proposals acceptable – low income customers and those who are "just about managing". Despite the fact the difference is significant we still find that 72% of low income customers, and 74% of those "just about managing" find the plan acceptable. Experience of service failure, and a disability in the household, do not make a significant different to acceptability.

Attitudes towards water companies impact on acceptability, those who say they trust their water company report the highest level of acceptability (91%), followed by those who are satisfied with the service they receive (89%), whilst those who believe profits are too high, or are pro-renationalisation report lower levels of acceptability (73% and 74%).

As we have found in other research, customers are altruistic. The main reason for finding the plan to be acceptable was that all customer would benefit from the improvements, followed by the improvements being needed and the environment benefiting. In the sample which saw the bill presented in real terms, we find that customers understand and expect inflation to further impact their bill.

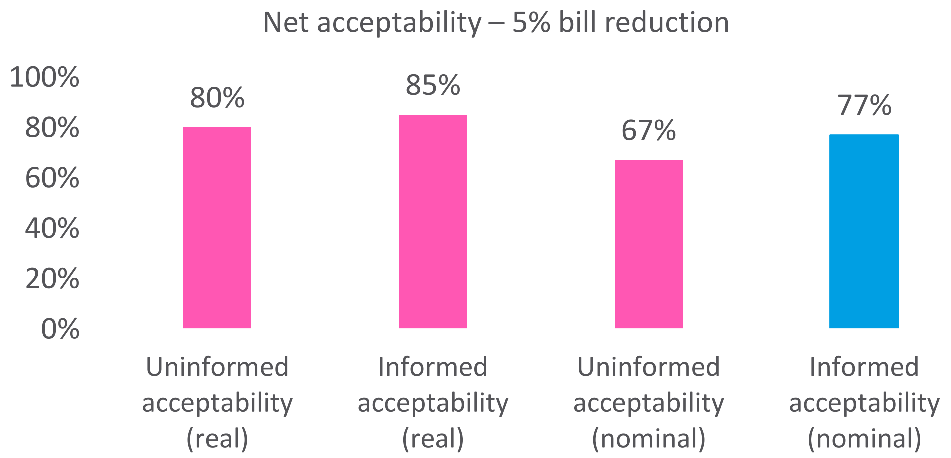
"I think that the proposed improvement targets are acceptable. Given the fact that inflation has an effect on the bill, the reduction in the baseline average bill means that when inflation is taken into account, the bills should still largely remain affordable" – Household customer, acceptability research

Those (relatively few) customers who find the plan unacceptable tell us this is down to the bill being already expensive, or company profits being perceived to be too high.

The future bill is also seen to be affordable by customers, with 61% of households finding the future bill affordable (and less than 10% net disagree). This is an increase compared to those who find the current bill affordable. Those on a low income and who always struggle to pay their bills report lower levels of agreement.

Acceptability of the plan – wave 2

Following our first wave of acceptability research, the proposed bill profile over AMP7 improved, to a 5% reduction in real terms. We repeated the acceptability research with a sample of 1,400 household customers on Tap Chat, with versions of the survey in both real and nominal terms. We find that 85% of customers find the plan acceptable when presented in real terms, and 77% when presented in nominal terms. Uninformed acceptability (in which the customers are presented purely with the future bill and not the details of the plan) is 80% in real terms and 67% in nominal terms.



The vast majority of customers support the proposed performance improvements, with over 90% agreeing with the water, wastewater and retail improvement packages, and 75% agreeing with the community dividend (and 18% neither agreeing nor disagreeing).

Engaging with our single served customers

The majority of our single served customers receive their water service, and billing, from South Staffs Water (SSW). In the past we have tended to be slightly neglectful of this customer group, however within both our valuation research, and acceptability research, we have included significant samples of these customers. We have strengthened our relationship with insight contacts at South Staffs Water, and in order to make both our research more meaningful for customers have shared bill profiles.

Our acceptability research with SSW customers shows that 81% of customers agree with our wastewater performance commitments, and 81% of customers find their future combined bill acceptable.

An appropriate balance of risk and reward

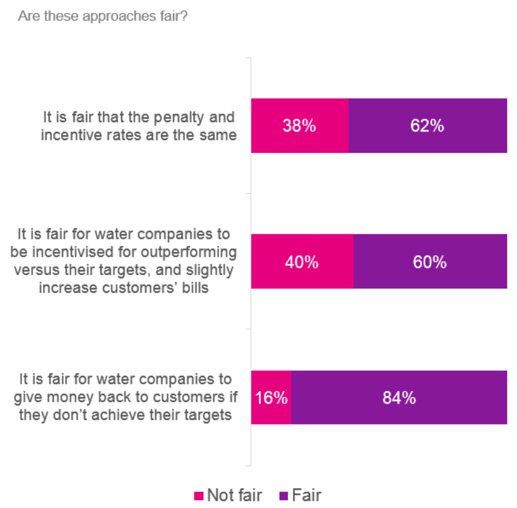
As a company we have embraced the ODI framework, and our customers support this. In the research we did to support the ODI uncapping application we found that 82% of customers support bills being linked to outcomes performance.

"It has a small effect on my bill and it motivates them to higher standards" – Customer, ODI uncapping research

Within our choices research and ODI design research we explored customer views on the framework, and specifically on the ODI RORE range. We find that the ODI mechanism is seen as a fair way to encourage good service, although some customers are concerned about Severn Trent being rewarded for doing the "day job". No customers mentioned concerns about bill volatility as a result.

"I would rather pay the extra to have a leading performance" – Customer, Choices research

"I'm happy to pay more as long as I'm genuinely receiving a top-drawer performance" – Non household customer, Choices research



Some customers find the prospect of underperformance payments being returned to customers concerning, and they would rather see additional investment in infrastructure to improve services.

"If they meet their targets they should be rewarded in order to maintain their efficiency. If they don't meet their targets they should have to increase their efforts by ploughing more money into improving their systems, rather than being financially penalised." – Customer, research on ODI design

"I think there should be a financial incentive for better performance however, penalty monies should go to infrastructure not individual customers as they were probably not directly affected even if their region was?" – Customer, research on ODI design

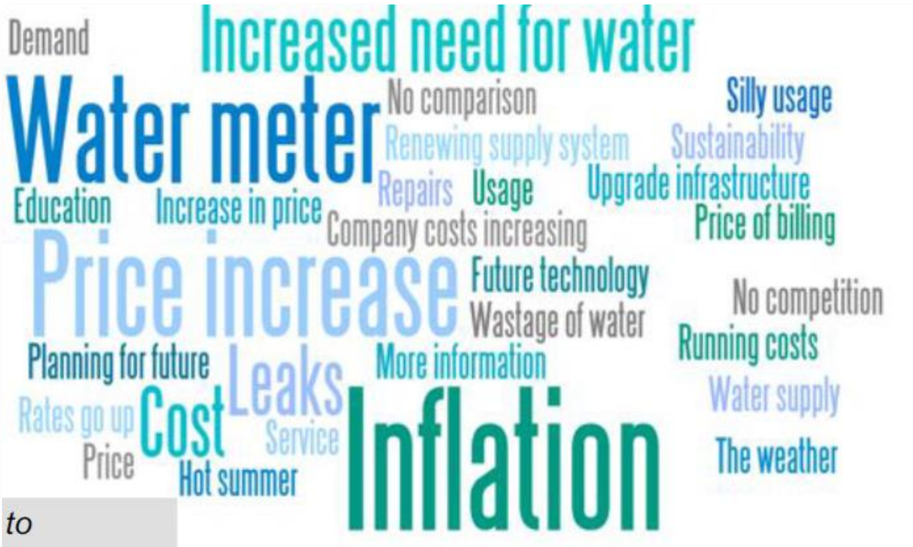
61% of customers in the choices research find the ODI framework acceptable, in the context of a ±3% RORE range, with only 10% net disagreeing. Of those who disagreed, few changed their mind when presented with a lower RORE range – suggesting opposition to the mechanism being the primary reason. In the choices research we also designed an interactive exercise to allow customers to feedback on our proposed ODI rates, including reducing the rate to zero if they disagreed with an ODI for any of the performance areas. This has allowed us to use a richer evidence base to inform our final proposals.

In the first wave of the acceptability research we find that reduced service and a reduced bill (through underperformance payments) is only supported by 44% of household customers, and 60% of non-household customers. However, 59% of customers support improved service and a higher bill (through outperformance payments). In the second wave customers are less accepting of reduced performance (compared to targets, and with resulting underperformance payment) however, acceptability of improved performance (exceeding targets, with resulting outperformance payment) is acceptable to 60% of customers in real terms, and 64% in nominal terms.

83% of customers agreed with our proposal to use collars to protect against extreme weather – some of those who disagree are worried Severn Trent won't prepare for any extreme weather events or that profits should be used instead of having a collar.

Bill volatility

Our research tells us that customers want us to be mindful of bill impacts when making investment decisions, although cost is by no means the most important, or only, consideration. We wanted to understand what sort of bill variation customers would be concerned about. We found that most customers have a relatively relaxed attitude to their water bill, because generally it is much lower than other household bills. Customers were used to bills going up over time, and identified the following reasons for bills increasing.



Customers in our deliberative research told us that they would be concerned about increases between £3 and £10 extra per month. Whilst this is insight comes from a deliberative workshop, and is not necessarily representative of our customer base, including those in more financially vulnerable circumstances, it does suggest that variability in the future bill of this level is not a considerable concern. Customers do however appreciate being kept informed about any bill changes – some mentioned recent texts during the heatwave as great example of short, snappy and useful communications.

"[I would like] Information (honest) attached to the bill explaining why there is a change" – Customer, deliberative research

Approaching uncertainty

Customers have an expectation that their bills are no higher than necessary. Within our investment programme, and in particular in the areas of supply demand and the Water Framework Directive, we are mindful that there is uncertainty, whether due to climate change forecasts or the approval cycle of particular schemes. We have undertaken extensive engagement with our customers to understand their views on how we manage risk and bill volatility. We received strong support for a 'real options' mechanism – to invest only when we have greater certainty. At the same time, we should take action to minimise the time to respond, thereby protecting the interests of customers by not exposing them to the risk of unnecessary upward pressure on bills.

Read more: we describe customer views on our real options mechanism under the relevant two outcomes (water always there, and thriving environment)

A fair balance of charges

As well as the future AMP7 bill we have sought customers' opinion on longer term bill profiles, and how we made decisions about balancing charges over time. As this is a low saliency topic we have used a deliberative approach, as well as a simple survey on Tap Chat to engage a wider, and representative, audience.

When we explained how investment is funded in the water industry we find that customers broadly understand that Severn Trent borrows money to fund investment, and all participants agreed that the cost of this should be shared by bill payers over a long period of time, to reflect the lifetime of the infrastructure it funds.

"The people who are going to benefit of it – it's morally right that they pay" – Customer, deliberative research

Spontaneously, customer identify some principles Severn Trent should use when deciding the balance of charges over time. All identify themselves as the future (as well as current) generation of bill payers, although some think also in the context of having children and grandchildren that they do not want to push costs on to.

Bills should remain stable

- All want to avoid a scenario where bills suddenly rise, even if this means they would suddenly fall too. For many, this is their key concern.

"Flat [bills] would be better from a planning point of view."

ST should maintain the current level of service delivery

"If you put too much on us and not on the future than it would all be swallowed up by inflation."

Each generation should pay their fair share

- A minority mention this in the context of inflation

When presented with Severn Trent's principles (see our Chapter and Appendix - Risk and Reward), we find a considerable degree of alignment with those spontaneously developed by customers. On further discussion, bill stability is seen as most relevant and important, with most saying they care more about this than lower bills (if there is a risk of this option leading to higher charges for customers in the future).

We recognise that our principle that the "balance of charges over time should support a credit rating that allows for low cost borrowing to fund future investment" is least resonant. However whilst customers are not necessarily concerned with Severn Trent having a good rating, they do see that an increase could impact their bills and therefore are glad Severn Trent is taking this into consideration.

Seeing Severn Trent's principles helps customers to trust they are making decisions in the interest of customers, and the role of Ofwat provides further reassurance.

"I think it is really important that they have these principles because there is no competition. We can't move" – Customer, deliberative research

Customers agree with our proposed approach to ensuring a fair balance of charges through switching to CPIH and maintaining access to low cost borrowing, and when presented with potential bill profiles continue to support the approach. There is some recognition though that for customers on lower incomes a larger bill cut over the next 5 years might be preferable and it's important that our approach to supporting customers with affordability challenges is effective.

"It seems like the ethical and best thing to do for the customer" – Customer, deliberative research

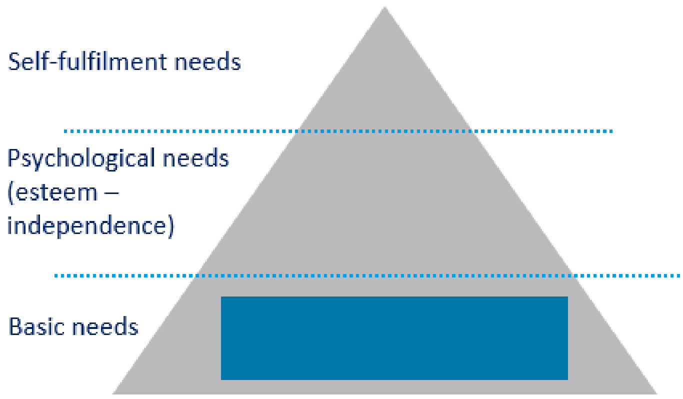
"I think personally, they're right. It's probably the best time to make the change [to CPIH]…we're not going to feel the pain when you change over [with the 5% price cut]" – Customer, deliberative research

To quantify these findings we used a simple survey with customers on Tap Chat, and found that 88% of customers supported our proposed approach and bill profile over time.

2.2 Good to drink

Your water is consistently safe, clean and good to drink

Our research consistently shows that delivering safe drinking water is one of customers' top priorities and part of their core expectations from their water company, and a basic need in our hierarchy. Whilst customers do not necessarily see the need to improve the safety of their drinking water, anything which alters customers' perception of the safety of their drinking water can drive dissatisfaction and negatively impact on their perception of us as a company.



It is not surprising that customers see this as our primary function and expect us to be able to deliver a good quality and consistent product every time they open the tap. Changes in aesthetics such as colour, taste due to our treatment processes or alterations in hardness as water sources are moved around our network all cause dissatisfaction in our customers' experience of their tap water, as well as affected perceptions of value for money, trust and affordability.

"What matters most to me is that the water is safe to drink and is available" - Tap Chat – What matters most discussion)

In the past we have tried to improve many of these issues from an operational perspective. It is, however, becoming clear that the way in which customers perceive the product they receive is just as important as meeting the regulatory requirements. We have more to do to continue to build trust in our product and meet the expectations of our customers every time. There is also a role for education and communication about changes to the water supply.

We have explored customer views on both appearance and taste and odour of tap water, as well as how we should tackle the issue of lead in drinking water and protecting our raw water sources, using a range of insight sources.

We've used a range of insight to understand our customers' views, including

Approach	Purpose
Customer needs research	Improves our understanding of customers' needs and the role that a safe, clean product plays in meeting those needs
Social media scraping	Provides revealed insight about the conversations customers have about their water when unprompted
Operational insight	Expands our understanding of the causes of satisfaction and dissatisfaction using complaints and voice of the customer feedback
Valuation research	Quantifies the importance of drinking water compliance improvements in the context of other areas of our plan
Deliberative research	Allows detailed, informed discussion on important topics – in this case our use of catchment management
Customer tracker	Quantifies changes in customer satisfaction, value for money and wider perception over time as well as capturing views on discrete issues

Based on our research we have triangulated our customer evidence to determine customer's relative priority for each of our performance commitments. Whilst we have not discussed CRI specifically with customers, we can infer customers' relative priority from our evidence base.

We have triangulated our evidence base to determine customers' relative priority

Performance commitment	Relative priority	Hierarchy of needs	Rationale
Water quality compliance (CRI)	**Very Important**	Basic	Water quality is always a top concern, and a fundamental expectation, although customers do not necessarily distinguish between compliance /whether the water is safe to drink and aesthetics.
Water quality complaints	**Important**	Basic	Customer priority depends on whether this is a taste and odour complaint or appearance.
Farming for water	**Important**	Fulfilment	Customers support the use of catchment management approaches (but expect that risks will be managed).
Protecting our schools from lead	**Important**	Fulfilment	Our customers perceive lead pipes – regardless of mitigations in place - as a health risk and support tackling the issue.

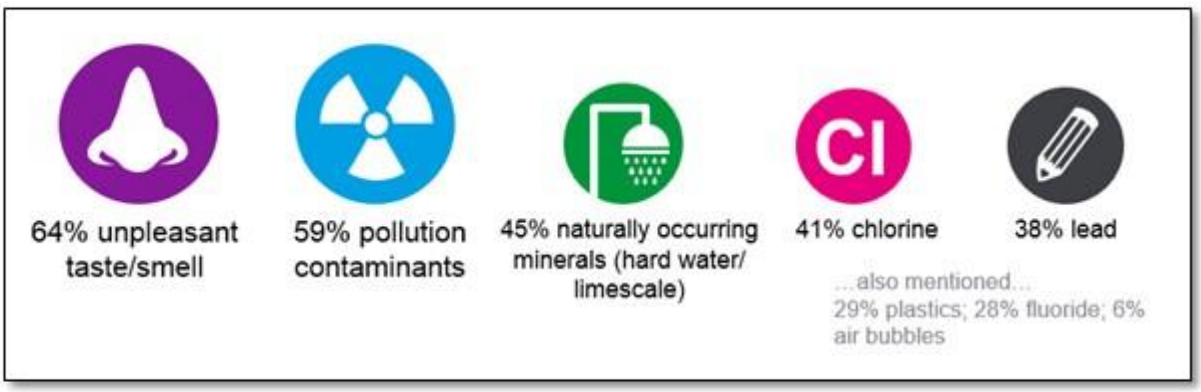
Water quality compliance

Customers expect that we will provide them with safe drinking water. They see safety as an absolute requirement and there is no option to 'go beyond' the standards as the water should always be the best it can be.

In general, the majority of customers are satisfied with the quality of the drinking water we provide, and have trust in it. CCWater Water Matters (2017) tells us that 91% of customers are satisfied with the safety of their drinking water, compared to 90% satisfied with the colour and appearance and 85% with the taste and smell.

In the recent wave of our customer tracker trust in drinking water fell from 71% (in Q2 of 17/18) to 64% (in Q3 of 17/18), possibly due to three water supply incidents (in Tenbury Wells, Telford and Cheltenham) which happened just before and during the fieldwork period. The average over the 17/18 reporting year is that 69% of customers trust the drinking water we provide.

Clearly, there is a not insignificant proportion of those interviewed who do not trust the product we supply, and our tracker also tells us that around 17% of our customers drink bottled water at home (Q3 of 17/18). In research on our community, Tap Chat, we find that 16% of customers are worried about the quality of their tap water, with unpleasant taste/smell, pollution and hard water / limescale being the main causes for concern, followed by chlorine and lead.



Our research with customers who have experienced issues with their water supply provides insight into how we could better manage water quality incidents. As part of our customer needs research we spoke to customers who had experienced a "Do not drink" notice. We found that customers found out about the issue in a variety of ways ranging from Severn Trent calling to talking to their neighbours. This doesn't always meet their expectations – they want to be told about the issue quickly and directly (via phone call or text) and be kept informed on a daily (or more frequent) basis. All customers we talked to expected Severn Trent to supply them with bottled water.

When discussing service failures more generally, not surprisingly, "Do not use" notices were felt to be the highest impact (water supply) service failures, with a major negative impact on essential daily activities and an impact on schools and business customers. In such a case customers expect bottled water and compensation. They recognise that customers in vulnerable circumstances might need additional support, and wonder whether the definition is wide enough, for example whether families with young babies should be included.

Research after the Castle Donington incident in 2016 provides consistent insight on the views and opinions of customers who had been affected by elevated levels of chlorine in the water supply. The views largely showed that there was an increase in distrust towards Severn Trent as people felt that information being provided was inconsistent or inaccurate. They reverted to social media to find out about the situation rather than official messaging from the company.

"I only found out through Facebook because my mum rang me up and told me it was on Facebook and then I went on Facebook and saw it then but I hadn't seen it up until then" – Customer in Castle Donington, didn't receive a letter.

However, it appears that social media coverage generated a lot of inaccurate or misleading information and speculation. Customers are clear that, in times of an incident, it is critical for us to provide targeted and consistent information to those who are directly affected, as well as those who may be unsure whether they are affected due to proximity to the issue, and to back this up with information on the website and social media. Above all, consistency of the information was key.

Water quality complaints

Appealing taste, smell and colour of tap water are also a basic expectation of the water supply. Many customers are unaware that discoloured water is still safe to drink, and feel there is a role here for more communication and education on why the water might be different.

"[Tap water should be] clean, not full of too higher concentration of chemicals or anything detrimental to health" – Tap Chat – What matters most discussion

Our WTP research shows that improving the taste and smell of tap water is a customer's third top priority, and the WTP budget game shows it is the second most desired improvement (29% of customers selected one of the two improvement levels). Non household customers prioritised these improvements less compared to household customers.

It is considered less of a priority for improvement in our customer tracker research where is doesn't appear in the top five priorities and in our choices research, although some of those who had experienced discoloured water themselves did prioritise improvements.

"It doesn't happen that much, mainly after engineering works and only temporarily, so it's not much of a concern" – Non household customer, Choices research

"If it's safe to drink then it's not a problem" – Non household customer, Choices research

Our WTP research shows a higher valuation for reducing taste and smell complaints compared to discoloration complaints. However discoloration complaints make up the majority of complaints about drinking water quality.

Short term changes such as discolouration following an incident, or a change in taste as the blend of water in the network changes, can lead customers to question the safety of the water they are receiving. Social media scraping demonstrated that, of nearly 13,000 conversations relating to water quality, the vast majority of these referenced chlorination of the water supply (11,714). This was unsurprising due to a significant event that had occurred during 2016 (Castle Donington incident). Cloudy water (597), discoloured water (567) and hard water (59) also led to customer dissatisfaction.

In 2016 we took advantage of a temporary change to the water supply (to a blend of 30% river water and 70% Elan water) for Birmingham to assess whether customers noted the difference, and took any action as a result. We compared results for a control area (who had not had any change to their supply) to the "treatment area", and found that the temporary changeover to not affect perceptions of customers. In the control area 6% of customers had noticed a change in their tap water, compared to 5% in the treatment area.

Our research to inform communications on the Birmingham Resilience project told us that when considering the quality of tap water, customers initially tend to notice a change in appearance, followed by the smell and finally the taste of the water. However, more customers identified a change in taste during a blind taste test, followed by smell and then appearance. 79% of participants noticed a difference between two samples of water, one sourced from the Elan Valley and one from an alternative, 'harder' source.

Hardness of water is an issue that affects customers in two key ways. Some customers experience a chronic issue with hardness, others experience short term changes due to operational issues. Avertive behaviour research done for PR14 showed that hardness of water is likely to drive avertive behaviour as customers procure alternative products such as bottled water or water filters.

"I have recently moved from Birmingham to Bromsgrove and there is significant degradation in quality. The water is no longer drinkable without filtration and my hair and skin are suffering" - Tap Chat – What matters most discussion)

When considering short-term changes to the hardness of water, as cited in the project we conducted looking at the future communications strategy for the Birmingham Resilience Project, 62% of customers in the Birmingham area who were surveyed agreed with the statement, 'I care deeply about whether my home is supplied with' hard' or 'soft' water' despite that fact of over 40% of those surveyed stated they knew nothing, or little about the difference between hard and soft water.

Customers felt that temporarily changing the source of their water would not have a hugely detrimental effect, and would not even be noticed by everyone, however, the way in which Severn Trent decides to communicate about this would be crucial. Being kept informed of changes and timelines were important.

Farming for water

Catchment management is a complex topic and not something customers would have consciously thought about. We used deliberative research to inform customers about catchment management and understand their views. We found that customers were supportive of the idea of Severn Trent working in partnership with farmers to tackle the pollution of raw water sources, and felt like this should be "common sense". This was further supported when presented with information about potential cost reductions (for catchment vs treatment solutions) and the wider environmental benefits. However, they also expressed concerns about the farming community and whether these activities would hurt their bottom line, and whether they would actually meet their obligations. On reflection they felt that Severn Trent should be prepared to use treatment solutions as a backup, if, on review, catchment solutions were ineffective. The issue of incentives was initially divisive, but on balance is was felt to be a sensible approach.

Within the deliberative research we also discussed whether customers were concerned about Severn Trent potentially investing in assets they don't own. This wasn't a concern for customers, as they felt that the results are more importance that the method. However there were some minority opposing views, with some customers raising concerns around fairness and the issue of personal responsibility and the fact that others need to take responsibility of their actions and ensure they are not impacting the environment.

Protecting our schools and nurseries from lead

In the Choices research we talked to customers about lead in drinking water. Customers perceived lead pipes to lead to significant health risks, and therefore considered it is important to tackle this issue. They also perceived that there could be a potential impact on the integrity of the network, as lead pipes could be older and possibly in a worse state of repair.

We asked customers whether we should prioritise particular customer groups. Broadly the prioritisation of children felt fair to customers, however simply targeting households with children didn't feel right since people move house and therefore this is a transient reason.

"If lead is so toxic they should get rid of these pipes completely. My grandchildren come to stay at my house all the time I don't want them to be exposed to lead poisoning" – Customer, Choices research

We also did research on Tap Chat to explore customer responses to our lead-free schools performance commitment. Although concerns about lead do not typically emerge spontaneously in discussion, when prompted we find that 79% of customers are aware that lead pipes were used in the past, and that of those who are aware 51% are concerned about it. 95% of customers believe the approach of tackling the lead pipes in schools and nurseries first is a good idea, and that the proposed target over the next five years is acceptable. The majority of customers (76%) are happy if faster progress is made and there is an outperformance payment for exceeding the target. Some customers do not accept this, largely due to feeling that *every* household's pipes should be checked for lead, not just those belonging to schools and nurseries.

2.3 Water always there

Our customers can rely on water to start their day, every day. And we work together to make sure it stays that way for future generations.

This section is divided into two parts in order to describe fully the research findings on balancing supply and demand and ensuring a resilient distribution network. We discuss the following attributes in each part:

Part 1 – Supply Demand Balance

- Customer views on the overall package of measures to address supply demand
- Approach to climate change uncertainty
- Water efficiency and per capita consumption
- Leakage
- Metering
- Drought and supply restrictions
- Supply solutions, including water trading

Part 2 – Network operation and resilience

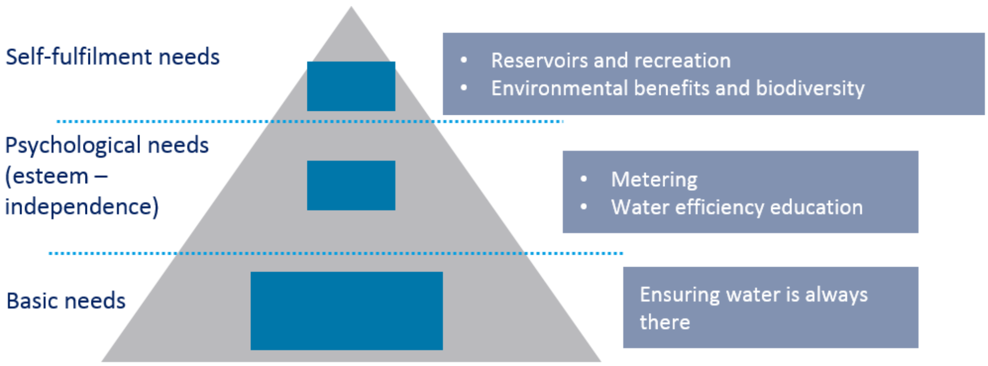
- Water supply interruptions
- Mains bursts
- Low pressure
- Supply resilience

Our research consistently shows that customers take their water supply for granted, and ensuring water is always there is a basic need that, once met, is not given much further thought.

"I never worry about having water. I assume it will always be available and I am ashamed to admit that I take it very much for granted" – Tap Chat – What matters most discussion

"What do I want from my water company? I want it to work, running 24/7 and that it's clean and drinkable. That's all I can think of." - Customer needs research (health and wellbeing vulnerable customer)

Once this need it met, there are aspects within the delivery approach (in terms of how we balance supply and demand) which can meet higher needs. By giving customers information and choice, more psychological needs are met, for example by giving customers the tools to reduce their bills through water efficiency advice and metering. Customers and their families can also benefit from our public access sites, such as reservoirs. These can provide the opportunities for people to meet many different needs, for example basic needs in terms of promoting health and wellbeing whilst also providing opportunities for self-fulfilment through recreation and enjoying nature.



Our evidence base for this outcome is rich and covers multiple sources and research techniques, ranging from valuation research and revealed preference, to analysis of customer experience and contacts.

We've used a range of insight to understand our customers' views

Approach	Purpose
Customer needs research	Improves our understanding of customers' needs, their appetite for using water wisely and how we respond when service failures such as supply interruptions occur.
Social media scraping	Provides revealed insight about the conversations customers have about their interaction with their water supply when unprompted.
Operational insight	Expands our understanding of the causes of supply interruptions and of the causes of dissatisfaction, such as low pressure.
Valuation research	Quantifies the importance of a reliable supply of water in the context of other areas of our plan.
Revealed preference	Quantifies avertive behaviour from customers during short and medium duration interruptions to supply.
Deliberative research	Allows detailed, informed discussion on important topics – in this case supply resilience.
Customer tracker	Quantifies changes in customer satisfaction, value for money and wider perception over time as well as capturing views on discrete issues

Based on our research we have triangulated our customer evidence to determine customer's relative priority for each of our performance commitments. We have not discussed unplanned outage with customers specifically as this is not a customer facing measure. We know that customers expect and rely on us to maintain our assets in order to keep their taps flowing.

We have triangulated our evidence base to determine customers' relative priority

Performance commitment	Relative priority	Hierarchy of needs	Rationale
Leakage	Very important	Basic	Leakage consistently emerges as a high priority for customers, across multiple research projects, social media scraping and operational insight
Speed of response to visible leaks	Very important	Psychological	Customers play a high priority on both overall leakage as well as improvements to the response time
Resilient supplies	Very important	Basic	Customers support improvements in resilient supplies in multiple research projects, including when presented with the bill impact
Increasing water supply capacity	Very important	Basic	Ensuring water is there for future generations is a key expectation from our deliberative research
Water supply interruptions	Important	Basic	A mixed picture - high priority in some research, in others customers are pragmatic about the inconvenience if we get the response right (e.g. alternative supplies)
Per capita consumption	Important	Basic	Customers are interested in water efficiency however aren't always actively doing this now.
Mains bursts	Important	Basic	Same as interruptions as customers recognise the link between these measures and don't understand how one can be targeted in isolation of the other
Persistent low pressure	Important	Basic	Customers report high levels of experience of low pressure, which causes dissatisfaction. Emerges as a medium / low priority in research.
Resolution of low pressure complaints	Important	Basic	Customers report high levels of experience of low pressure, which causes dissatisfaction.
Security – reducing the risks to our sites	Important	Basic	Customers expect Severn Trent to be actively managing anything which might threaten the core service, including security risks.
Risk of severe restrictions in a drought	Low importance	Basic	This is a low priority as customers feel that current service levels are adequate
Abstraction Incentive Mechanism	Low importance	Basic	No specific insight on AIM but we do know customers value the environment and expect us to avoid detrimental impacts
Unplanned outage	Low importance	Basic	No specific insight and not a customer facing measure

Part 1. Balancing Supply and Demand

Balancing supply and demand is an important aspect of our work and a critical part of the Water Resources Management Plan (WRMP) process. Our insight in this area is rich and comes from a number of sources. Aspects such as leakage tend to be top of mind for customers and high priorities for improvement in numerous research projects and contacts.

"I have on many occasions seen mains water leaking onto the highways – a waste of precious resource" - Tap Chat – What matters most discussion

Conversely, the pressure of ensuring there is sufficient availability of water for the future is something customers do not consciously consider – only 7% of customers think that we won't have enough water in 10 years' time (and 10% think we won't in 20 years' time) (customer tracker, Q1, 2018/19). Our joint research with Thames Water and United Utilities on water trading corroborates this finding – little is understood about the scale of the water scarcity issue, and once informed the emotional reaction is one of surprise and disbelief. 7 in 10 customers are concerned, particularly those in the Thames Water region, and any lack of concern is largely due to disbelief. Interestingly, younger or future customers were concerned to a less extent.

"[Ensuring there's enough water for everyone in the future] That's for the water companies and government to sort out. I expect my bills to insure me against having to worry about providing water to my family" - Tap Chat – what matters most discussion

Since customers are not necessarily aware of the future pressures on water availability, we have used deliberative research to explore perceptions of water stress and the best way we can meet these challenges in the round. It's only when prompted and informed that customers recognise the pressures of ensuring there is sufficient availability of water for future generations and understand that everyone has to play their part to make this happen.

"The information provided is very frightening, perhaps not for my generation selfishly but for our children and grandchildren. This makes you realise how serious the situation is" – Customer, water trading research

There is a clear expectation from customers that Severn Trent should have plans in place to ensure a continuous water supply, both now and in the future. As part of this customers expect Severn Trent to be prepared to address any long term challenges which could affect the water supply, such as climate change, population growth. Customers also expect Severn Trent to meet their statutory obligations, including those related to restoring unsustainable abstraction and ensuring no environmental deterioration.

In our joint research on water trading we find that water scarcity is seen as a national issue, to be coordinated by water companies, the regulator and government. A minority of households believe water company regions should sustain their own supplies.

Our supply demand deliberative research discussed a range of options to meet the supply demand deficit with customers. The research took participants on a "journey" from obtaining their spontaneous reactions to a high level description of the options, through to more informed views when presented with a range of considerations for each supply and demand option, including relative cost, customer participation, certainty of outcome, environmental impact and lead time. The materials used to engage customers were both accessible and engaging, and were designed by a leading research agency in deliberative research, with input from technical experts in the business.

Our research tells us that customers tend to consider four specific questions when considering supply demand options.

Does it encourage responsible use of water?	Is this a long term / sustainable solution?	Is it value for money?	Does it avoid harming the environment?

Does it encourage responsible use of water? Customers have a strong moral frame when thinking about water usage, resulting in an emphasis on personal and corporate responsibility to use less water. Because of this, they tend to favour demand management approaches over supply side approaches, but they recognise that any solution will need to include a blend of both. Customers say they want to be involved in securing the long term supply of water, but there is an appreciation that changing behaviour is difficult so they want us to play an equal part in ensuring water is always there, including an emphasis on reducing leakage.

Is this a long term / sustainable solution? Customers don't want options which present a short term fix as they tend to be sceptical about how effective they would be for a long term challenge such as this.

Is it value for money? Customers want Severn Trent to pursue the *best value* supply/demand options, not necessarily just the most cost effective ones. Questions of value and bill impact were particularly important to customers when thinking about solutions that will take a number of years to implement. While most customers are happy to contribute to the cost of long-term water security, they are clear this should be spread out over time, so as not to cause undue financial burden for customers.

Does it avoid harming the environment? Customers value the environment and are concerned about options which might be perceived to have a strong detrimental impact. For example, the high energy costs and chemicals involved with effluent reuse are a concern despite initial "warmth" for the idea because it recycling existing water. Customers want to be reassured that any new or increased abstractions from rivers would not cause harm.

Of the supply/demand options presented to customers in the deliberative research, **increasing the roll out of water meters** is the one that receives the most support, followed by water efficiency and reducing leakage. Metering also received considerable support from employees when discussing supply and demand in the Bike in a Boat tour. Supply options receive less support, due to concerns about not promoting responsible water usage and environmental damage.

Within the joint research on water trading we asked customers to rank a number of factors in selecting supply demand solutions. Sustainability emerges as the top priority, with 60% of our customers ranking it in their top two. The environment (whether an option has an environmental benefit or minimizes any negative effects) comes second, followed by the volume of water produced and solution resilience. Cost to build and customer acceptability are the lowest ranked options.

Approaching uncertainty

Investment in supply demand includes planning for the effects of climate change on future water resources. The impact of climate change is uncertain, and so some of the models of likely impact may suggest that investment is necessary when it is not. Within our supply demand plan we have proposed the use of real option mechanisms after undertaking extensive engagement with our customers to understand their views on how to manage risk and on bill volatility. One of the key themes that comes through in this research and our wider customer engagement is that customers expect that our services represent value for money, are efficient and that we are mindful of the bill impacts of our investment choices.

However this doesn't mean customers want us to pursue the cheapest option, as reflected in our deliberative research on supply demand, customers explicitly want us to pursue best value options. Similarly customers do not want us to ignore risks to future supplies. Rather what is revealed through our engagement is a much more nuanced view that seeks to balance issues such as affordability, long term sustainability and resilience.

Our engagement on real option mechanisms occurred through both a deliberative workshop and engagement using our online community (uncertainty research). Overall customers expressed strong support for finding a middle position to manage uncertainty, and there was a clear desire to protect the environment through the use of demand side measures. Customers did not support large scale supply solutions, despite the research occurring during a notable heat wave. Instead there was strong support for taking action to prepare for climate change uncertainty but not undertaking significant investment now (ie, prepare to move quickly).

We also used our online panel to test different options for how we might respond to the uncertainty associated with climate change. This research was undertaken using detailed polling with approximately 800 customers taking part. We followed the polls with a discussion thread on the panel to explore customers' views about the approaches to uncertainty, their preferences and why.

In relation to climate change, 69% of customers expressed support our approach to prepare now but to avoid significant investment until further information is available. We also note that 13% of customers supported no activity (including feasibility and design work), whilst 18% supported investment irrespective of the uncertainty.

Key feedback from our customers included:

"With the rapid changes in how water should be stored, managed and used, I think that it would be unwise to decide now what approach should be taken" – Customer, Tap Chat discussion

"As a customer and share holder I am definitely not in favour of large scale investment in one "lump" but feel looking into the requirements for future investment is suitable at this stage" – Customer, Tap Chat discussion

"I'm voting for research and project planning rather than leaping straight into solutions that may be outdated" – Customer, Tap Chat discussion

"I believe it is reasonable to assume the demand for water will increase, not least due to the increase in house building. It therefore makes sense to make a start on building a 'base' provision for anticipated future requirements, rather than being caught on the back foot playing catchup. Let's get on and make progress". – Customer, Tap Chat discussion

The feedback from our customers shows that there is strong principled support for managing uncertainty using our real option mechanisms. Customers want us to balance a range of factors when making investment decisions, including:

- protect the environment;
- promote affordability by investing only in assets that required; and
- promote resilience by being able to respond to changes or new information quickly.

The results of the bill volatility also helps allay concern that even in the extreme event that ALL schemes are needed, customers would not find the change in bills volatile.

Leakage

Reducing leakage consistently emerges as customers' top priority for improvement, and is often seen as a pre-requisite to asking customers to reduce *their* consumption.

"It's down to the public to look after the water we use. It goes with leakage- they go hand in hand together. It's very important that we use water responsibly – it should be everyone's radar" – Customer, Choices research.

In our customer tracker survey, reducing leakage is the top priority for customers (with 55% of customers saying it is their top priority). Our WTP research and budget game both report consistent findings, with leakage being the top priority for improvement in both surveys. Our choices research also echoes these findings. Leakage is seen in the context of Severn Trent's social contract to be custodians of the water supply, and if customers are expected to be responsible with water then the company must also prioritise leakage. Wasted water is seen to have an environmental impact and well as contributing to higher bills. In this context, customers were not concerned about the potential for additional disruption with increased leakage activity.

In addition to these research sources, our customer contact data tells us that, excluding retail functions such as payments and billing, reporting a visible leak is the second most frequent reason customers contact us. 58% of customers in the customer tracker feel there is about the same amount of leakage compared to 5 years ago, whilst one third of customers feel leakage has reduced.

Further analysis of social media also highlighted that leakage was a key metric dominating customer conversations. Primarily this was because most conversations relate to informing others about service issues experienced. Leakage also emerges as a key concern in discussions on Tap Chat.

"I think key issue for me, which is applicable to most water suppliers, is the need to ensure that there is sound reinvestment – in the infrastructure predominately. I have on many occasions seen mains water leaking onto the highways – a waste of such a precious resource." – Tap Chat, What matters discussion

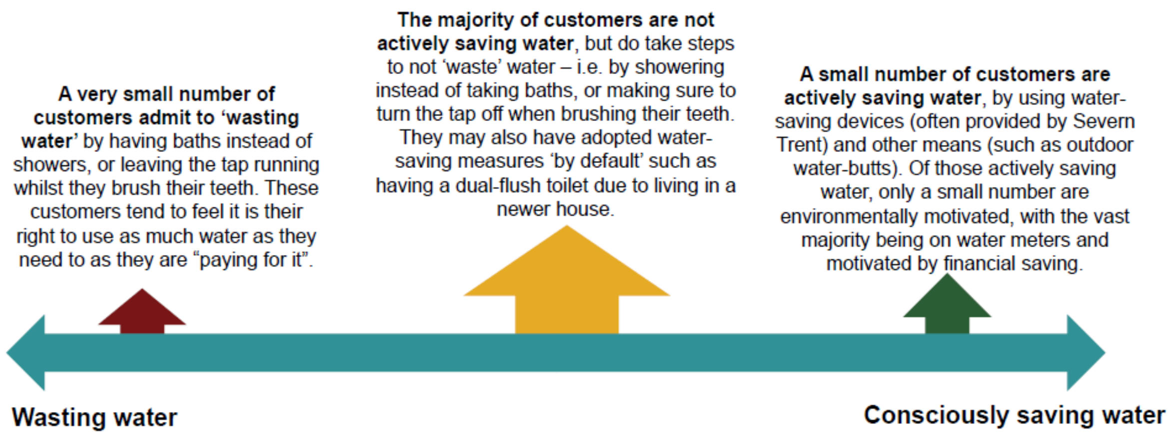
We have conflicting views on how quickly customers expect leaks to be resolved. In our best in class customer service research we found, in the qualitative element, that the average expected resolution time for a reported leak was three days. However the same project revealed much higher expectations in the online survey. Our choices research found that, while customers understand that each leak is different and may need a differing amount of time to fix, broadly they expect Severn Trent to attend to leaks within 24 hours. Leaks are generally remembered, and current resolution times are perceived to be slow.

	Attendance i.e. Severn Trent on-site	Resolution i.e. issue repaired
SEWER FLOODING Dirty water from a sewer pipe is in your house/garden or on your land.	Within 2 hrs	Within 1 day
WATER SUPPLY ISSUES You have no water or poor supply at your property.	Within 2 hrs	Within 1 day
LEAKING PIPES You see a pool or running water on the road, verge/garden/field, which may be a burst water pipe.	1-2 days	3 days
DAMAGED TAPS AND LIDS Broken or noisy manholes in the road or broken stoptaps or lids in the footpath.	2-3 days	1 week
SEWER SMELL You notice foul smell coming from a sewer pipe or sewage treatment works.	1 week Depending on proximity to property	2 weeks Depending on proximity to property
POLLUTION REPORT You notice pollution in a river or reservoir (debris, sewer content).	1 week	One month/ Ongoing

The extent of the **leakage from customers' supply pipes** shocked participants in our deliberative research. Many were unaware that these underground pipes (between their home and property boundary) are their responsibility and questioned how they would know they had a leak.

Water efficiency and per capita consumption

Many customers are keen to undertake what they see as their moral duty to reduce water consumption. At the same time many customers are not currently actively engaged in saving water and expect to be helped to use it more wisely. In-depth research in customers' homes as part of the customer needs project found little evidence of current water saving behaviours.



Our deliberative research on supply demand found that participants had a strong moral frame when they considered water consumption, resulting in an emphasis on personal and corporate responsibility to use water wisely.

In our WTP research we found that 58% of respondents identified with the statement "water is a scarce resource and society should conserve its use". Conversely however, 33% identified with the statement "water is actually quite cheap – we use it without ever thinking about how much it costs".

Social media scraping tells us that customers would welcome advice on 'quick wins' for saving water. This is supported by our quarterly customer tracker where 76% of customers say they would try to save water if asked to do so by Severn Trent. However, 56% of customers say they do not own any water saving devices, and 38% would not consider installing any.

Our choices research tells us that reducing per capita consumption goes hand-in-hand with reducing leakage, with the latter seen as a higher priority due to the scale of wastage, which is seen in terms beyond just the bill impact. Nevertheless, investment in reducing consumption and educating the public is still perceived to be important, although slightly beyond Severn Trent's core remit – customers themselves are seen as having a collective responsibility to preserve water.

"It's down to the public to look after the water we use. It goes with leakage – they go hand in hand together" - Choices research

We are currently undertaking an investigation in to the effectiveness of water efficiency campaigns for those in social housing. Our analysis showed that, at 17%, the uptake of home water audits in social housing was much lower than the average uptake. Our hypothesis suggested that using an alternative approach that offered multiple benefits for the occupants would lead to a higher rate of uptake of water audits. We also believe that the scope for uptake may be greater as social housing is likely to have older facilities that use higher volumes of water.

As such, we launched a trial in Nottingham in October 2017. This trial of 1,000 audits is in collaboration with Nottingham City Homes, a social housing provider. We worked with and trained the Nottingham City Homes staff to deliver the water efficiency audits alongside energy use audits, providing Severn Trent branded information and products. Initial data suggests that this approach has been successful with audits being undertaken in more than 50% of homes.

In terms of non-household customers, our research with retailers we found that only a couple have ongoing water efficiency activity or plans in the pipeline, and even then they at a general level. Demand for water efficiency services tends to come from customers, and the retailers we spoke to didn't feel the need to notify Severn Trent about any activity they are undertaking. There seems to be little awareness of any future changes to water demand.

Metering

Metering is seen as the fairest way to charge for water, although there are often misunderstandings and uncertainty about the benefits of metering for individual customers.

Customers are not always aware they can chose to have a meter installed for free, and only 20% of customers are aware that they can opt to trial a meter and that they can revert to rateable value within two years (Water Matters, 2017). Our best in class customer service research told us that customers assumed that it was something that only 'came with a house' and therefore they viewed meters with apprehension. Customers with meters were often unsure on where they were located and how often they were read by Severn Trent, and those without meters perceived that they could be expensive and difficult to manage, resulting in scepticism and caution.

Conversations on social media corroborate this finding, suggesting there is ongoing confusion over the benefits and risks of moving to a metered supply. Discussions on Tap Chat echo this, whilst some customers are fearful of meters, or concerned about whether it is the right solution for them, also are acting as ambassadors and promoting the benefits to others in the community.

"There are only two of us and having a water meter is the best option. We have saved a lot of money and also it has made us aware of just how much we waste in everyday chores" – Tap Chat, What matters most discussion

"I worry about being forced to have a water meter in the future, I know I use a lot of water. I am chronically ill and I have to wash clothes and bedding every day, and shower sometimes more than once a day" - Tap Chat – What matters most discussion

Our value for money rating in the customer tracker is higher amongst customers who have a water meter. Further, it is worth nothing that, whilst only 43% of customers who were surveyed have a water meter, almost 60% of customers feel that it is preferable that bills are based on actual water used rather than rateable value.

Our deliberative research on supply demand showed support for increasing metering as a solution to solving the supply demand deficit. Whilst some felt that ultimately all customers should be on a metered supply, there are repeated concerns about support for those more likely to experience an increase in bills due to high water use. In our customer needs research, we found that some customer groups, such as those with larger families, medical needs, and some of our Muslim customers are concerned about metering being imposed as their water usage is high (e.g. washing before prayer).

"I don't know how [water meters] work, I wish someone explained the pros and cons to me." - Customer needs, customer in health and wellbeing vulnerable circumstances

"We home school the children, so there are six of us in the home most of the day. We do wudhu before prayer, so we just use more water than most. I know it'd cost me more [to have a meter], even though we are careful." - Customer needs research

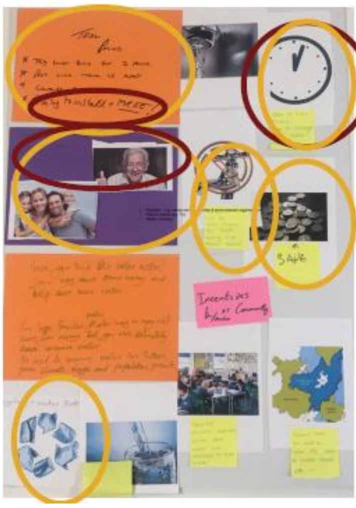
The deliberative research also considered a number of options for charging customers to gain views on which ones might promote metering / help target reductions in water use and therefore cost savings for customers. Specifically dual billing, rising block tariffs and peak/off-peak tariffs were tested. Ultimately, dual billing received the most positive feedback and support.

We used co-creation to work with customers on the topic of metering and delve into the best ways in which Severn Trent could communicate with customers about this topic.

“Time to save money? Time to change to a water meter”

Customers brought out:

- Trial period.
- Saving money.
- Case studies.
- Tips to save water.
- Ease and speed of switching.
- Environmental benefits.



Customers used language that:

- Challenges concerns that the benefits do not outweigh the costs – ‘Time to save money? Time to change to a water meter’.
- Makes it feel personal – use personal testimonies: : “I live on my own and I saved £50 a month”.
- Emphasises the ease of switching – “it’s cheap, it’s free”.

Drought and restrictions to supply

Awareness of the supply demand challenge is very low (according to our customer tracker only 7% of customers think that we won’t have enough water in 10 years’ time (and 10% in 20 years’ time)) and drought is not something that customers anticipate will affect the UK. Since drought is not something customers consciously consider, we used deliberative research to discuss it and understand their informed views. We used a drought “story board” to help customers imagine the development of a drought situation over time, with progressively more serious customer impact.

Occurrence of a drought would be seen as exceptional and outside of the company’s control. Climate change and changing weather patterns do give rise to some concern that droughts could become more common in the UK, and a feeling that this would have a negative impact on the water service. While hosepipe bans were mentioned spontaneously, these are generally seen as quite common and linked to ‘hot summers’ and not ‘droughts’, which as a term is interpreted as an extreme scenario that is unlikely to occur. In the engagement quiz about Severn Trent that we ran on Tap Chat, and in our deliberative research, we found that most respondents mistakenly believed that there had been a hosepipe ban in the region since 1996.

Temporary use bans are considered acceptable in principle; customers describe them as a pragmatic approach in such circumstances, provided the company can demonstrate it is taking additional steps to limit their own water loss. Some customers believed they had experienced a temporary use ban recently and were surprised to learn it’s been 21 years since Severn Trent had implemented one. Many customers noted that the likely impact on them from a temporary use ban was minimal.

Participants recognised that requiring the use of standpipes would only occur due to severe and exceptional weather conditions; therefore they see Severn Trent’s response as proportionate to the seriousness of the situation. However, they are clear that support would need to be put in place for vulnerable customers. The predicted frequency of these events is seen as acceptable by most customers. There was no willingness to accept a lower level of service in exchange for a bill reduction. Information on levels of drought resilience for other companies was discussed in the session, and not found to influence this view.

Overall, our deliberative research found little support for Severn Trent to invest further in order to reduce the risk of requiring temporary use bans from the current level. Likewise there was no support to reduce the risk of requiring stand pipes.

Our WTP research also showed that reducing the risk of needing to use standpipes is a very low priority for customers, and in the budget game only 10% of customers selected an improved level of service for this.

Supply side options

Initially in the deliberative research supply side options weren't favoured, as they weren't felt to encourage the responsible use of water (from both consumers and the company). However, customers accepted that the overall package of solutions would be a combination of supply and demand side solutions.

Within our joint research on water trading we found that a minority of customers, with more technical knowledge, spontaneously mention supply solutions to address water scarcity. Overall, we find that the preference for supply solutions is drive by a number of personal and social beliefs and experiences, although customers are less certain about their preference for supply solutions compared to more familiar demand options. Customers want water companies to prioritise long term sustainability of supply when selecting the solutions to put in place. Overall though customers find it difficult to decide on the most appropriate supply solution and put their trust in water companies to choose for them.

"I would think that, looking to the future, they've got to maybe look at the recycling side of things, how they can provide more water that way" – Customer, Water trading research

Reservoir expansion could provide a long term and sustainable, and potentially straightforward (compared to options such as effluent reuse), solution. They also recognised the potential for wider environmental benefits such as creation of habitats for wildlife after the initial disruption of construction for the surrounding community.

Abstracting more water from rivers did cause some concerns about the environmental impacts, although customers were more reassured on learning that abstraction is regulated. This option was considered to be relatively simple and certain.

Effluent reuse was a divisive option, there was concern over the energy requirements, longer term sustainability and high running costs. A significant proportion of participants felt they might not wish to drink water from this source.

Water trading into the region created some concern about creating a dependence on external parties, even though the principle of sharing felt sensible. It was also seen as potentially costly and disruptive, and when customers were made aware of potential environmental concerns, such as the introduction of non-native species, this caused concern. In our joint research on this topic we find that 74% of customers agree that they would support water trading as part of the solution to water scarcity – it's logical and necessary to share resources. Despite this, multiple concerns emerge, relative to security of supply, environmental impacts and the financial cost. Those in donor regions are concerned as to whether water trading will negatively impact their own water supplies over time, and non-household customers are concerned about the impact of a perceived "unreliable" supply on their business.

"We've got to be careful that the basics are still on the table in terms of making sure that the region isn't starved of water as a result of over trading x amount of million to some other region" – Non household customer, water trading research

Part 2. Network Operation and Resilience

Interruptions to water supply

A continuous supply of tap water is considered to be a basic customer need, alongside ensuring the safety of drinking water. Having a reliable service is something that our customers expect and take for granted and when water is not available it has an almost immediate impact on daily life, or on the function of a business.

"It's really easy to underestimate how good our water supply is. It's just there and accessible and not really given a second thought" - Tap Chat – What matters most discussion

"If we had an interruption, it would be a disaster." – Non household customer, Choices research

According to our tracker survey, the loss of water service is a driver of dissatisfaction for our customers (as well as affecting perceptions of value for money and trust), whether the interruption is for a short period or a more significant period of time.

The loss of water supply will often drive customers to seek assurance from others that it is not an issue affecting only their home. This leads to an increase in social media conversations and contact directly to the company to confirm the issue, both of which are manifestations of dissatisfaction in the level of service.

In our customer needs research we talked to customers who had experienced an interruption to supply, and they told us about the inconvenience it causes to their daily schedule and how we need to do more during incidents to provide alternative supplies. Interruptions to supply might particularly affect those in vulnerable circumstances, from customers who might struggle to afford bottled water supplies within a limited budget, to those with mental health conditions who might struggle to cope with the disruption to their routine or feel too anxious to leave their homes to buy bottled water.

"Some people won't be able to get there [a water bottle drop-off point]. They need more help than I do." – Customer needs research

"With my depression, on a down day, I could really struggle to cope with that." – Strategic challenges, depth participant with health vulnerability

For example, during the incident in Castle Donington in 2016 a number of customers made their own arrangements when their tap water was not drinkable, ranging from purchasing bottled water or ready-made baby formula whilst the supply was unusable to making alternative arrangements for eating.

We have used revealed preference to quantify customer's avertive behaviour during supply interruptions. Supply interruptions are a non-market 'bad' which can be mitigated with the purchase of alternative market goods and services, such as bottled water, access to public shower facilities, or the use of launderette services. Therefore, avertive behaviour methods are a useful valuation tool for estimating the value of avoiding short term supply interruptions from the observed market behaviour of customers who have actually been affected by this service disruption. Our research told us that on average customers spent £19.56 on a range of avertive behaviours, ranging from purchasing bottled water, takeaways and travel.

Actions respondents undertook as a result of supply interruption

	% of all respondents
Bottled Water	
Bottled water to drink	55.3%
Bottled water for food preparation	35.5%
Bottled water for washing up	21.1%
Bottled water for flushing the toilet	25.0%
Bottled water for brushing your teeth	31.6%
Bottled water for ironing	0.0%
Bottled water for plants	1.3%
Bottled water for pets	22.4%
Food and Drink	
Tea / coffee	7.9%
Other drink	17.1%
Food that you would not otherwise have bought	10.5%
Restaurant meal	6.6%
Takeaway meal	25.0%
Disposable plates / cups / cutlery	2.6%
Other	
Bath elsewhere	10.5%
Shower elsewhere	27.6%
Toilet elsewhere	13.2%
Hygiene products e.g. sanitiser, wet-wipes.	14.5%
Laundry elsewhere	15.8%
Cleaning / housework products or services	0.0%
Electric heating	2.6%
Car wash	2.6%

Most respondents used or bought bottled water due to the interruption

In total, 59.4% of respondents bought some bottled water

A minority of customers needed to change their eating/drinking arrangements as a result of the disruption

Respondents also stated whether they took additional actions, eg. to clean or wash

Around a quarter of respondents (28.9%) reported incurring no costs at all

The research also revealed that 58% of respondents did not remember the 3-6 supply interruption and 53% did not remember the 6-12 hour interruption. Unprompted, research participants stated that reducing leakage and improving water pressure as key business plan priorities. When prompted with a list of eight possible priorities their clear priorities were reducing leakage and reducing interruptions. The majority of participants were however unwilling to have an increase on bills to reduce interruptions to supply, for a mix of reasons – some argued these events are rare and current service is acceptable, other felt current service is not acceptable but they shouldn't be asked to fund improvements.

Our WTP research does not identify reducing interruptions to supply as one of the top seven customer priorities, and the valuations for interruptions are noticeably lower compared to our PR14 research.

The budget game reveals a contradictory finding, with reducing 6-12 hour interruptions the fourth highest priority for customers. It is also the fourth highest priority in the customer tracker survey.

Across all these sources of evidence, and consistently with our historic research, reducing longer duration (6 to 12 hours) interruptions is considered to be a higher priority compared to shorter ones (3 to 6 hours). However, when converting the PR19 WTP valuations to a marginal WTP, the difference in the quantum of improvement means that shorter duration interruptions get a higher marginal benefit value. This is discussed in more detail in the ODI appendix.

Our choices research finds that water supply interruptions are not a top priority for customers (who see them as frustrating but a minor annoyance that most customers have never experienced), but they are a priority for water intensive business customers. However customers did tend to focus on the disruption caused by planned infrastructure maintenance and expected to be informed about such an outage.

Low pressure

Multiple research sources as well as customer contacts tells us that a reduction in water pressure is the most commonly experienced service failure, and as such we know it is a driver of dissatisfaction for our customers. 13% of customers (both household and non-household customers) in our WTP research told us they have experience a reduction in pressure, compared to 15% of customers in the budget game. In our customer tracker research between 14% and 18% of customers reported experiencing low pressure and it is the most common issue across 7 out of our 9 operational districts. Those who experience low pressure are more likely be dissatisfied with their service, but also to rate us lower for value for money, trust and affordability.

Of those experiencing low pressure around one third reported experiencing it often / all the time and 18% reported it having a big or very big impact on them. Most of those who say they have experienced low pressure in the last year blame Severn Trent. However, some believe it is due to the type of plumbing in their home, other taps being turned on in the home simultaneously or location (e.g. house on a hill).

> I would like our water pressure to be higher ..... Keep doing what you are doing but try not to raise the bill ..... It would be nice to hear what ST are doing in our local area.

> Give info on quality of water in area and how to increase pressure......showers are difficult

> Unhappy not having any water or heating due to the low water pressure for a couple of days but pleased that Severn Trent kept me updated with text messages

> Annoyed that pressure was low and couldn't use some of the things in home

> I am disappointed whenever there is a decrease in water pressure

> It's an irritation I've learnt to deal with, it's really not that big a deal in the scheme of things

> Seem to have low water pressure at peak times of the day such as 6pm to 8pm

> Shower wouldn't work so had to run baths, which were more expensive

> I did not know why pressure dropped, probably mains-supply works locally. I think you sometimes phone to notify of issues locally by automated voice message

> Can't get a new combi boiler because the water pressure is not good enough

> Would prefer it not to happen but realise at times of high demand it's unavoidable

In addition to these stated sources, our review of social media posts suggests that low pressure is a common issue although it suggests the issues are lower for Severn Trent than for other water companies.

Despite the high levels of reported experience of low pressure, there are conflicting views on how much of a priority reducing pressure is for our customers. Only 14% of customers in the tracker survey considered it a top priority, whilst in the WTP research and budget game it is the sixth and seventh highest priority respectively. In the choices research, low pressure was not viewed as a household customer priority but it was for business customers, particularly those with water intensive functions.

"I'm not sure about [low pressure being a high priority]. There can be a perception that pressure is low, when the issue is with the tap or something in the home" – Household customer, Choices research

"If there was a loss of pressure for any length of time it would mean I would quickly run out of water, so it could cause problems for me" – Non household customer, Choices research

Low pressure is discounted in the choices research for three main reasons: the customers taking part had not experienced issues, or even if they had, didn't feel it was a significant problem as they still had a water supply. The discussion also revealed a gap between the perception of low pressure and reality, meaning there was little consensus on whether to focus on education or infrastructure improvements.

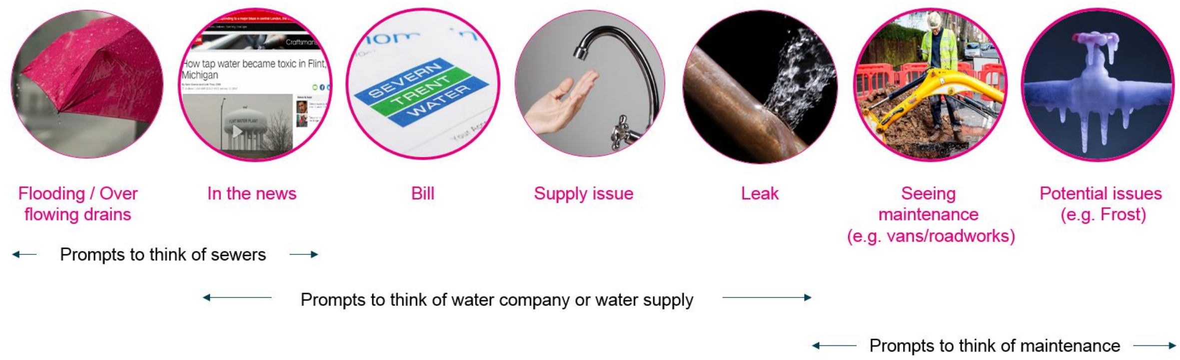
Within the WTP research the number of properties experiencing persistent low pressure is relatively small, at less than 250, and the proposed improvement was also small (40 properties). We infer that, given it is customers' most (perceived) experienced service failure, there is either an expectation that these 250 properties have significantly worse levels of service failure or that solving these issues will benefit the wider customer base in some way (or that respondents did not fully consider the quantum of improvement in the survey). We discuss the valuation of low pressure further in the ODI Appendix.

Mains bursts

In our choices research we spoke to customers about asset health and mains bursts. Maintaining asset health is seen as a core area for Severn Trent. Mains bursts are seen to link to other measures of performance, such as interruptions and leakage, and therefore investment in infrastructure is seen as a given in order to meet other commitments.

Because current levels of performance are above average, maintaining the current level is seen as sufficient. In the quantitative research we asked customers for their instinctive (rather than more considered) views on priorities for improvement, and reducing mains bursts emerged as a high priority.

We explored asset health with customers on Tap Chat, to try and understand further why mains bursts emerges as such a high priority in the choices research. We found that customers rarely think about water company assets, apart from when they are prompted to do so by external events.



However, customer assume sufficient maintenance happens and that issues such as mains bursts are "just one of those things" that happen occasionally.

"I imagine they already know which sections are most vulnerable - due to age/location/environmental factors and have schedules in place to routinely check and maintain them." – Customer, Tap Chat live chat

When informed about the number of mains bursts, and the age of water pipes, participants were surprised. On balance they placed a higher priority on not experiencing water supply disruption, but consistently with the choices research, they recognised a link between bursts, interruption and pressure.

"Fewer bursts definitely which will mean fewer interruptions of service and reduced pressure." – Customer, Tap Chat live chat

Water supply resilience

We conducted extensive qualitative and quantitative research on supply resilience at PR14, when we proposed a large investment scheme for Birmingham; this became known as the Birmingham Resilience Project (BRP). The key findings from this were that customers take their water supply for granted, and that they are more understanding of an interruption to water supply if the cause is natural, or out of Severn Trent's control. At PR14, almost half of respondents had never thought about back up supplies at all, but when prompted to think about it, more than half expected a backup supply to be in place.

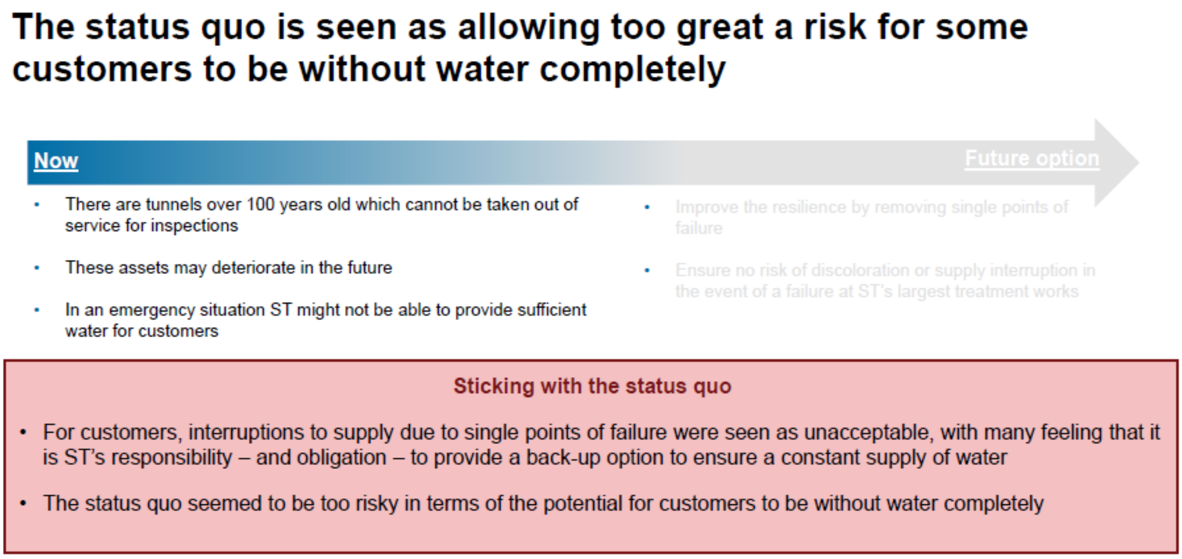
For PR19, bearing in mind our strategic research framework and the fact that resilience is not an aspect that customers consciously consider, we used deliberative research to understand customer views more deeply. We found that low levels of service disruption have given rise to high levels of confidence in the resilience of Severn Trent's service, and an assumption that there are plans in place for disruptive events.

Customer views of the acceptability of disruptive events are strongly linked to perceptions of responsibility. Severn Trent is held to be responsible for failure of its assets; events of these kind are therefore deemed unacceptable. In contrast, there is more tolerance for failure arising from natural disasters, which are seen as outside the company's control.

Duration is also key in determining acceptability; short to medium term interruptions (between a few hours and a day) to supply and discolouration are seen as inconvenient but acceptable if rare, and somewhat inevitable given the size of the network. For most customers these are considered manageable. Longer term interruptions (in excess of one day) are seen as unacceptable, because of the potential implications for customers. This level of service failure would cause major disruption to people's lives and also put health at risk. However, whatever their duration, any events that have serious long term implications for the environment, or for customers' health, raise concerns and are seen as unacceptable regardless of circumstances.

Most customers perceived that tap water discolouration would only ever be very short terms in duration, i.e. less than one hour, and this shaped their overall views towards it. All customers in the supply resilience workshop said they would feel uncomfortable using and drinking discoloured water, even if they were reassured over its safety, and so they would effectively be *without* water supply. However, due to its perceived fleeting duration, the impact of this interruption was seen as relatively minor. If necessary, most respondents thought that they would use bottled water or go to a friend's house.

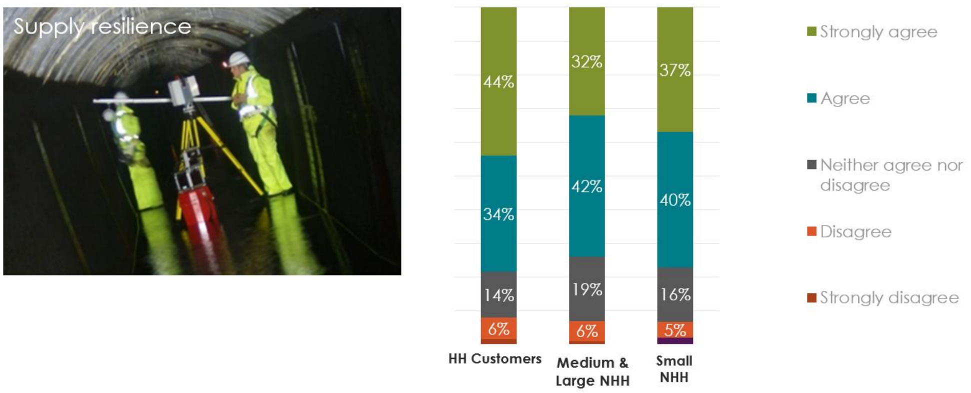
For customers, interruptions to supply due to single points of failure were seen as unacceptable, with many feeling that it is Severn Trent's responsibility, and obligation, to provide a back-up option to ensure a constant supply of water. The status quo seemed to be too risky in terms of the potential for customers to be without water completely, irrespective of the response plans we have in place. This preference for moving to this more resilient option was further confirmed when customers learned that it could cost an additional £2 per year on their bill, although it should be noted that this bill impact was tested in isolation from other potential activities.



In contrast, increasing the percentage of customers with alternative water supplies is not a high priority within the WTP research or the budget game, suggesting that possibly respondents did not fully understand the consequences of a failure if an alternative is not available. Evidence from the customer tracker survey also ranks reducing the number of properties without a backup water supply as a low priority with only 9% of those interviewed ranking it in the top three.

Within the choices research we asked customers about the investment in supply resilience in the context of the overall 2020-2025 bill. We found that customers are aware that essential infrastructure is old and therefore accept the need for investment. In fact there was some question on the timing of investment and why Severn Trent are not replacing these older assets as a matter of course. Overall the bill impact was considered small and therefore agreement appeared to be obvious.

78% of household customers, and a similar percentage of non-household customers, support investing in supply resilience, when made aware of the bill impact.



C1. To what extent do you agree that Severn Trent should invest in this performance area?
Domestic customers (2004) Small Business (125); Medium & Large Business (100);

Security resilience

Customers expect Severn Trent to be actively managing anything which might threaten the core service. We used deliberative research to talk to customers about two potential security threats: cyber security and terrorism.

"They need to be prepared for any failure, as you would expect in all industries" – Customer, Strategic challenges – resilience workshop

On the topic of Severn Trent's **cyber security**, customers expressed concern about their personal data being stolen or compromised, but struggled to make any further connections between cyber security and challenges to the water system. Customers tended to see this as a threat facing all major organisations, rather than something specific to their water company. They feel that Severn Trent should be taking all the necessary precautions to protect against it. Some see this as a risk that, unlike an 'act of God', can be avoided if given adequate investment and attention.

The **threat of terrorism** was a key concern for many people, due to recent terrorist attacks in the UK and across the globe. Once again, most customers in the workshop tended not to think about this in relation to the water system. When they did, contamination of the water supply was seen as the most worrying type of terrorist attack; this was seen as something that could affect everyone in a large area. Customers struggled to think of any other potential implications.

"When you think about it, there's an awful lot of damage a terrorist could do" – Customer, Strategic challenges – resilience workshop

While customers accept that it may not be possible to prevent all terrorist attacks, and would not necessarily attribute blame to Severn Trent in the event of an incident, customers expect Severn Trent to have appropriate anti-terrorism measures in place. These would include increasing security and restricting access at water treatment works, reservoirs and other sites.

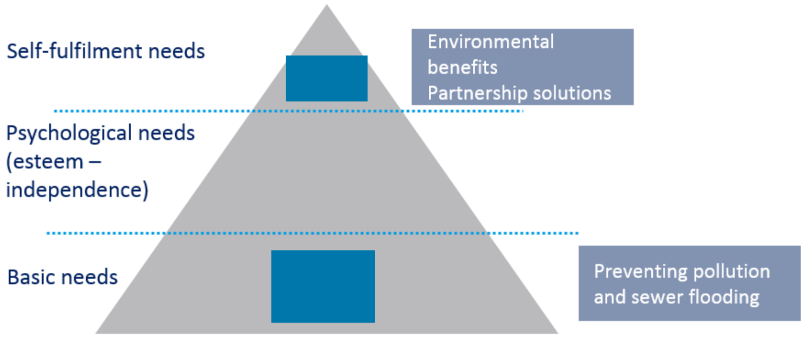
2.4 Wastewater safely taken away

We safely take wastewater away, ready to be made clean again

Safely taking wastewater away is a core area of service. Few customers give much thought to their wastewater services; they tend to "flush and forget". Anecdotal evidence even suggests that some customers are not even aware that we are responsible for wastewater treatment and disposal.

When the service fails, the impact is significant, often resulting in a discharge of sewage either to the environment or into customers' homes and gardens. This is a significant driver of dissatisfaction and distrust amongst our customers.

At the same time, customers recognise that other forms of flooding, such as highways flooding or river flooding, can impact on people's lives just as much. Customers consider that we have a part to play here and can lead initiatives that may benefit wider society and the environment in some way. Undertaking this work is outside of the traditional water company remit and can therefore help to drive improved trust and levels of satisfaction.



Whilst delivering the core service is a basic need for our customers, we have opportunities throughout this outcome to deliver wider benefits, for example through more sustainable solutions promoting green infrastructure. These could meet needs at the top of the hierarchy.

We have a rich evidence base on this outcome, including insight from social media scraping, valuation research and an understanding of relative priority from the Choices research.

We've used a range of insight to understand our customers' views, including

Approach	Purpose
Customer needs research	Improves our understanding of customers' needs especially when service failures occur and their level of understanding on what should or should not be disposed of in sinks and toilets
Social media scraping	Provides revealed insight about the conversations customers have about their interaction with the wider environment when unprompted
Operational insight	Expands our understanding of the causes of dissatisfaction using complaints and voice of the customer feedback
Valuation research	Quantifies the importance of reducing flooding risk in the context of other areas of our plan
Deliberative research	Allows detailed, informed discussion on important topics – in this case the extent to which we work with partner organisations, whether we extend our scope beyond sewer flooding and how we prioritise interventions
Choices research	Explore customers' prioritisation of improvements in different areas of service
Customer tracker	Quantifies changes in customer satisfaction, value for money and wider perception over time as well as capturing views on discrete issues

Based on our research we have triangulated our customer evidence to determine customer's relative priority for each of our performance commitments.

We have triangulated our evidence base to determine customers' relative priority

Performance commitment	Relative priority	Hierarchy of needs	Rationale
Internal sewer flooding	Very important	Basic	Reducing sewer flooding is one of our customers' top priorities, across multiple research projects
External sewer flooding	Very important	Basic	Reducing sewer flooding is one of our customers' top priorities, across multiple research projects
Public sewer flooding	Very important	Basic	Customers have told us this is of equal priority to external sewer flooding
Pollution incidents	Very important	Basic	Reducing pollution is a very important priority for customers – the environment is becoming increasingly important in their everyday lives
Risk of sewer flooding in a storm	Very important	Basic	No direct insight, priority considered the same as the other flooding measures
Sewer collapses	Important	Basic	Emerges as important on the basis of the choices research and the link to flooding and pollution
Sewer blockages	Important	Basic	Customers told us this is important - however they recognise there is a collective responsibility here in terms of changing customer behaviour
Green communities	Important	Fulfilment	In our deliberative research customers support sustainable drainage solutions and environmental benefits
Collaborative flood resilience	Important	Fulfilment	In our deliberative research customers support partnership working to address sewer flooding

Sewer flooding

A sewer flooding incident is the worst service failure that customers can experience. Whilst many customers have not had direct experience of flooding they do empathise with those that have, and reducing flooding has consistently (across time and multiple research projects) been a top priority for customers.

"It turns your whole life upside down. Your house is not yours anymore." - Depth participant, deliberative research on flooding

Our WTP research tells us that reducing internal flooding is the second highest prompted priority for customers. Our contextualised WTP with customers who had been affected by flooding shows that experience does affect WTP, with these respondents reporting higher valuations for both internal and external flooding. In the budget game reducing internal sewer flooding is the fifth highest priority for respondents, and in the choices research it is the 3rd highest priority.

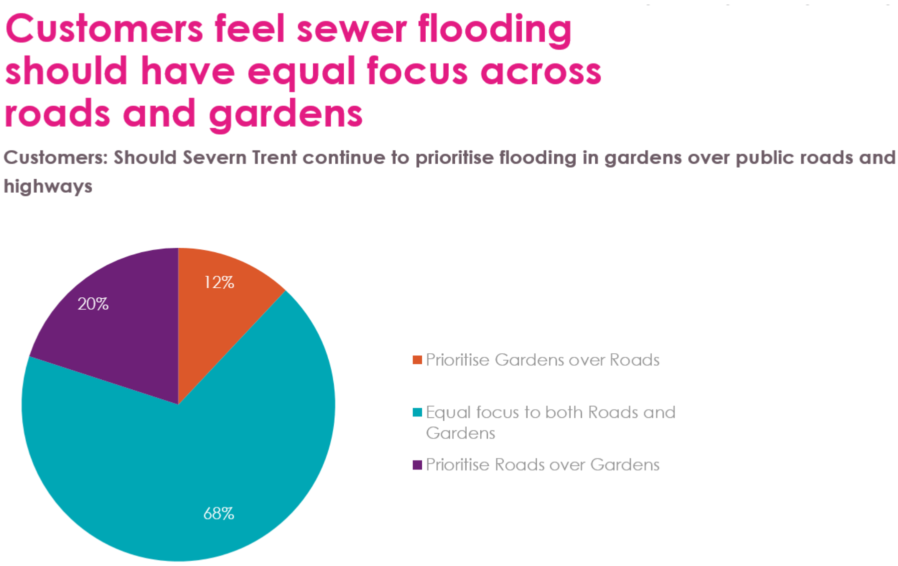
Within the WTP research we also asked customers whether they would be willing to pay a small amount each year to reduce the risk of *repeat* incidents. We found that 55% of customers supported paying to reduce the risk of repeats (and only 25% disagreed).

In our choices research, customers recognised that internal sewer flooding is rare, but potential “soul destroying” when it happens. It was prioritised for improvement based on the emotional reaction and the instinctive disgust of the aftermath and empathy for those affected. Customers also considered the health impacts of sewage and clean-up costs. We also found that businesses, where members of the public use the premises, are much more sensitive to any issues which might paint their business in a negative light (such as issues with the wastewater service). Given the importance of the issue, 87% of customers agreed with targeting upper quartile performance.

“Severn Trent are already doing a good job of it [preventing internal sewer flooding compared with other water companies]. It doesn’t happen often, but it’s got to be a priority because of the health element” – Customer, Choices research

In the choices research, external sewer flooding was also prioritised for improvement due to potential health risks and impact of sewage pollution, despite the low incidence of events across the customer base. Maintaining Severn Trent’s current position was supported due to the high impact when the issues occurs – 80% of household customers, and 77% of non-household customers agreed with the proposed target.

Until relatively recently, our focus had been to reduce internal sewer flooding and sewer flooding to homes and gardens. However, sewer flooding in roads and highways can also be highly disruptive and concerning for customers, and the majority of customers feel it should have equal focus to flooding in gardens.



As well as targeting a reduction in flooding, it is also important to consider how we respond to flooding incidents. As part of our customer needs research project, we talked to customers who had suffered from service failures, including sewer flooding. These customers were unsure whether the responsibility for their flooding incident was Severn Trent’s or the council’s and felt that communication surrounding the incident could have been improved.

INDIVIDUAL PEN PORTRAIT: Sewer Flooding

Jean* is in her 60s, is a retired shop assistant, and lives in a privately rented house with her 40 year old son, a gardener. She is an avid gardener herself with two water butts in the garden and more at her allotment. She is pagan in her beliefs, which means that taking care of the natural environment is particularly important to her, and she hates any form of waste. Family and friends are also important to Jean, and she is an active person who tries to help other people.

Jean has lived in the house for 38 years, but in the last three years they have **experienced a couple of incidents of flooding**, which have left the house with some water damage which still remains. This flooding was caused by excess rain, and Jean wonders if the impact could have been reduced if the street drains were cleaned more frequently. A number of properties were affected.

The main issue was of flooding on the street, which got into the house. This has happened twice, although **Jean doesn't blame Severn Trent, or indeed anyone for this – although wonders if it could have been helped by more regular cleaning of street drains.** The flooding on the road was so much that water got into the house through the front door and caused damage to the carpet and ruined a lot of books which needed to be thrown out. Whilst Jean doesn't think Severn Trent could necessarily have prevented it, there was some ambiguity about who was responsible for helping out after the flood, and whether this was Severn Trent or the council. As well as the inconvenience of the flooding, **the aftermath was a stressful time and more could perhaps have been done by Severn Trent to make it easier, as well as to acknowledge how distressing it was**. Although Jean felt sandbags and other defences should be provided by the council, she would have liked it it if Severn Trent had provided these. A neighbour did tell Jean that the council would provide a barrier for their door, this has never materialised and they have constructed their own, rendering the front door unusable.

After the flooding, town hall meetings were held where Severn Trent talked about what had happened and what they were doing to prevent it happening again. This was good, but tone of voice here is important, and **Severn Trent need to acknowledge that whilst the long-term is important, people are concerned about what is occurring right now**: " *They're obsessed with the long-term - not the immediate problem…*[it was] *a bit exasperating really - one of the ladies from Severn Trent…kept mentioning spreadsheets…we'd just been flooded and she kept going on about spreadsheets!"* By putting her name down at one of these meetings Severn Trent did deliver special flood bags for future use, but these only came to those who attended the meeting, so many of her neighbours didn't get them.

Despite not blaming Severn Trent for the situation, there is a sense from Jean that the company **could acknowledge what had happened and provide additional information and support**. There were a lot of things that Jean later found out that perhaps she could have been helped with - for example, that the ground was likely to be contaminated for 'x' number of days. A regular update on what is happening as it happens would be a benefit: "*sometimes it doesn't just affect you in the household - you may have an elderly neighbour…*". Jean did notice that Severn Trent was knocking on doors to talk about what had happened - but she was frustrated that no-one knocked her door.

"We're actually pagan in our beliefs so I am conscious of looking after the earth and the environment, that type of thing…"

[Many years ago the water was cut off in the area and] "…you do appreciate your water then when you're carrying it in a bucket – how much you actually use."

"I don't think people realise how upsetting it is, it's not rainwater…it's not nice is it to think that that's in your home."

Our research finds that customers who have experienced flooding want empathy, understanding and accessibility in their interactions with Severn Trent. They describe the experience as stressful and traumatic and want to be able to access personalised customer service quickly in the aftermath. Our best in class customer service research tells us that customers have high expectations for timescales for attendance (within 2 hours) and resolution of sewer flooding (within a day).

Pollution incidents

Our customers care about the environment, and reducing pollution incidents is an important priority. In our quarterly customer tracker survey this was the second highest ranked promoted priority (after leakage) and in the WTP budget game it was the third ranked priority (after leakage and improving the taste and smell of tap water).

Our PR14 WTP research identified a value per incident which was relatively high in comparison to the rest of the water industry. At PR14 we also conducted some further research to try and understand relative valuations for different severity incidents but had with mixed results. We concluded from the qualitative part of this research that customers struggle to understand the categorisation of pollution incidents and to make judgements about them.

Our PR19 WTP research continues to show that customers are willing to pay to reduce pollution, and, as with other attributes, the valuation is higher amongst participants of our deliberative workshop than amongst respondents who were less well informed.

"Yes the bills may go up [to help the environment], but at the rate they're talking, it's minimal, and it's all for the better" – Customer, Strategic challenges – environment and biodiversity workshop

Our WTP budget game research also shows that pollution is one of the attributes that respondents want us to improve. When given the opportunity to "build their own plan" 16% of respondents selected the first level of improvement and 12% the second level of improvement for pollution.

Our choices research contradicts these findings to some extent. Reducing pollution incidents is seen as important in this research, but is not thought to need a significant improvement in performance. It's worth noting however, that in this project, customers were presented with the context of current performance relative to the industry. In general, in the choices research, environmental measures were thought of as slightly less of a priority than measures which affect individuals directly (such as flooding incidents). Customers also perceived rivers to be clean (and much improved compared to a few decades ago) and therefore told us that significant improvement is not required. The majority of customers supported an upper quartile target.

"The impact on the environment is really important, it has a knock on effect on us all. It's good that they're already in the top [few companies] but it's still a priority." – Customer, Choices research

When discussing resolution timescales with customers in the best in class customer service project, expectations for attending and resolving pollution incidents were the lowest across the metrics discussed, possibly reflecting the fact that respondents prioritised those issues with a direct personal impact (e.g. flooding in your home / garden or no supply at your property) rather than an environmental one.

	Attendance i.e. Severn Trent on-site	Resolution i.e. issue repaired
SEWER FLOODING Dirty water from a sewer pipe is in your house/garden or on your land.	Within 2 hrs	Within 1 day
WATER SUPPLY ISSUES You have no water or poor supply at your property.	Within 2 hrs	Within 1 day
LEAKING PIPES You see a pool or running water on the road, verge/garden/field, which may be a burst water pipe.	1-2 days	3 days
DAMAGED TAPS AND LIDS Broken or noisy manholes in the road or broken stoptaps or lids in the footpath.	2-3 days	1 week
SEWER SMELL You notice foul smell coming from a sewer pipe or sewage treatment works.	1 week Depending on proximity to property	2 weeks Depending on proximity to property
POLLUTION REPORT You notice pollution in a river or reservoir (debris, sewer content).	1 week	One month/ Ongoing

Sewer collapses

Maintaining asset health is seen as a core area of service for Severn Trent, and therefore customers widely agree with the principle of investing to prevent future problems (choices research and strategic challenges research). Sewer collapses are seen to link to other measures, such as flooding, and therefore investment in the infrastructure is seen as necessary to meet other performance commitments.

Nevertheless, in the qualitative part of the choices research customers did not perceive sewer collapses to occur frequently and therefore maintaining sewers at the current level would be sufficient. Due to the potential health impact of sewer collapses, preventing these is seen as even more important than preventing water mains bursts.

Slightly contrasting results were found in the quantitative element of the choices research, in which customers were asked to prioritise areas for improvement and reducing sewer collapses emerged as a high priority. However in this exercise customers were not shown current performance and future targets.

Sewer blockages

Our social media scraping project shows that sewage flooding / pipe blockage is the second highest customer pain point in the water industry, and a driver of negative sentiment, although the relative size of conversations is lower for Severn Trent than for other water and wastewater companies. Uncertainty and confusion on what can be disposed of down sewers accounts for the majority (over 80%) of conversations on these pain points. Customers on Tap Chat also demonstrate this confusion, and want more specific information on what can be disposed.

"My main consideration revolves around disposing cooking oil. I know about fatbergs so know not to dispose of oil down the drain. But although I have heard that often I've not heard what to do instead…. What is the best and most environmentally responsible way to dispose of oil" – Tap Chat, What matters most discussion

Our experience and customer needs research also tells us that customers often don't understand what they should and should not dispose of down sinks and toilets, and the impact this can have. They are shocked and alarmed at the impact, number of and cost of clearing blockages, and feel quite passionately that we should be doing more to educate them about the impact their behaviours have. Further confusion can be caused by products such as wipes being marketed as "flushable" when they are not biodegradable. This highlights the need to work together with customers, businesses and manufacturers to solve the problem.

"That should be illegal to advertise them as flushable."- Customer needs research, future customer

In reflecting the diversity of our customer base, we have spoken to customers of different faiths and backgrounds. We found that some groups, such as first generation immigrants from Poland, have lower levels of knowledge around the water system and might require additional information on what not to flush. Local communities, such as the Polish church, could have a role in delivering these messages.

"When I moved over here no-one told me about this…When I had my baby no-one said I can't flush the wipes down the toilet." – Customer needs research, with ethnic and cultural groups

There are also customers who are aware of what should not be disposed of down sinks and toilets, but continue to do so. For example our tracker research tells us that 22% of customers dispose of cooking oils and fats down sinks, but only 6% think it is okay to dispose of fats and oils in this way.

We used co-creation to work with customers to design campaign messages around sewer misuse. To be impactful, customers told us that our messaging needs to quantify the problem (e.g. the percentage of blockages caused by customers) and use emotive language and visuals to deliver the right impact.

Customers have also told us we need to think about specific information for target groups at relevant life stages (for example talking to teenage girls about disposal of sanitary products, or including tailored messages in "Bounty packs" for new parents).

Our choices research also tells us that customers expect Severn Trent to play a part in changing public behaviour, primarily through education. Customers supported a modest improvement target in blockages, mainly due to the difficulty inherent in creating behaviour change. Overall reducing sewer blockages emerges as quite a strong priority in this research, with customers recognising links to issues such as smell and sewer flooding. Non household customers are also concerned about blockages, particularly when they might have a direct impact on the business.

"It's important that it doesn't affect businesses. I am concerned about the build-up if nothing is done, and whether it might affect my business in the future – so they need to manage the problem" – NHH customer, Choices research

"I see a tangible risk from lack of education in that people could put the wrong things down my toilets in the hotel." - NHH customer, Choices research

Community flooding initiatives and partnership working

Flooding can have a heavily detrimental effect on people's lives and community prosperity, and therefore is an extremely emotive issue. Our deliberative research found that there is confusion about who is responsible for flooding – local councils and the Environment Agency are more likely to be seen as bearing responsibility rather than Severn Trent. Further, the range of organisations involved in dealing with flooding also raises concerns about how effective action will be.

We used deliberative research to discuss our approach to prioritising flooding interventions with customers. We paired this with a series of in-depth interviews with customers who had suffered flooding, and those living in "at risk" areas. Personal experience of flooding was found to have a major bearing on how customers responded to the issue. Those with no personal experience felt the current risk-based approach feels intuitive and sensible, and there was little appetite for Severn Trent to do more in areas where other organisations are primarily responsible. However customers with personal experience felt that tackling flooding should be an urgent priority and were alarmed that Severn Trent might only focus on areas of highest risk.

Across our wider research programme, customers have supported working in partnership with other organisations to deliver benefits to customers. In the flooding space, customers also supported partnership working but did express concern over how it would work in practice; they are not opposed to Severn Trent doing more and taking additional responsibility but only in the context of other organisations doing their fair share.

"All these organisations should be accountable for what they're responsible for... it shouldn't all rest on Severn Trent's shoulders." – Flooding deliberative research, workshop participant

Our stakeholder research uncovered infrastructure capacity and flooding as two of the top three stakeholders felt would have the biggest impact on their organisations in the future (after health and wellbeing). Stakeholders are keen to see joint working continue and / or increase in scope and level of commitment during AMP7.

"Green and blue infrastructure have to be at the centre of all developments and planned in from the beginning to ensure the multiple benefits including flood water management, carbon sequestration, health benefits…" – Stakeholder response to survey

[Flooding continues] to be more frequent and severe, [yet we have] less resources to deal with and manage [it]. – Stakeholder response to survey

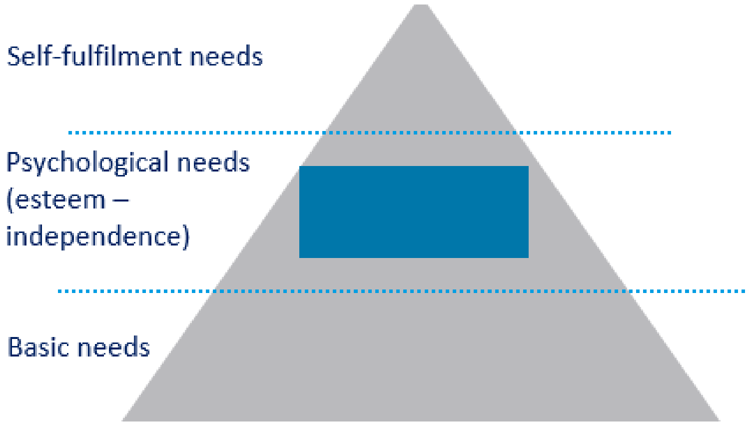
During the landbank initiative research we explored with customers the concept of using a proportion of the sale of land to invest in more altruistic initiatives. One of the potential solutions was to focus on alleviating wider flood risks to communities.

We further explored the type of solution that would be most acceptable, considering options such as rural/urban locations, support for more socially deprived areas or large scale proposals following the 'Copenhagen Cloudburst' example. In particular, customers felt that we should prioritise solutions that support the least advantaged areas of our region, as well as deliver a small number of larger schemes. Whilst the Copenhagen approach was supported, customers felt we should not undertake a single, flagship scheme, as this is likely to benefit a small group of customers.

2.5 A service for everyone

Everyone can access our service and enjoy its benefits, no matter what their circumstances

Although the majority of customers have no issues being able to access or afford our services, we recognise that this is not the case for everyone, and our customers expect us to help those for which this is not the case. For customers who are affected by such concerns, these may be a barrier to their basic needs being met. Supporting these customers, through our affordability and vulnerability measures, can help meet psychological needs by creating a sense of inclusion and empowerment.



We have explored customer views on both affordability and vulnerability. We have a rich body of customer evidence on how we support customers, in particular those who are struggling to pay their water bills, including bespoke research on the effectiveness of the current social tariff offering, and willingness to pay for the social tariff going forward. We have also done qualitative research on customer needs which allows us to develop a better understanding through in home depth interviews of those customers who circumstances could make them vulnerable.

We've used a range of insight to understand our customers' views, including:

Approach	Purpose
Customer needs research	Improves our understanding of customers' needs and the role that we play in meeting them (including customers whose circumstances could make them vulnerable)
Operational insight	SMS and emails surveys post incident (e.g. prolonged supply interruptions), contact and issue resolution to understand how well customers' needs were met by our response
Social media scraping	Provides revealed insight about the conversations customers have about their service when unprompted
Social tariff and debt management research and co-creation	Explore the needs of customers either already on our social tariff (or likely to qualify using index of multiple deprivation data) to understand effectiveness of our current scheme, and co-design future options
Social tariff cross subsidy research	Understand the acceptability of different levels of customer contributions to social tariff and attitudes in general towards providing support to customers in greater need
Choices research	Explore customers' prioritisation of improvements in different areas of service – including the extent of social tariff cross-subsidy
Customer tracker	Quantifies changes in customer satisfaction, value for money and wider perception, such as affordability and awareness of support options over time as well as capturing views on discrete issues

Based on our research we have triangulated our customer evidence to determine customer's relative priority for each of our performance commitments.

We have triangulated our evidence base to determine customers' relative priority

Performance commitment	Relative priority	Hierarchy of needs	Rationale
Help to pay when you need it	Important	Psychological	A majority of customers feel that it is important to support the 11% of our customers who are struggling to pay, and are willing to support through their bills
Supporting our Priority Service customers during an incident	Important	Psychological	Water is considered to be essential for all customers, and there is support for ensuring needs of those in vulnerable circumstances are met during incidents

Part 1: Affordability

Affordability for our customers

The majority of customer consider their water bills affordable. For example, across our customer tracker survey for 17/18 62% of customers agree they find their bills affordable or very affordable. We can compare this to CCWater research (Water Matters, 2017) in which 75% of customers said they found their water bill affordable.

When asked about preferences for future bills in our customer tracker, a majority of customers (79%) wanted bills and services stay the same (compared to a reduction in bills and service, or an increase in bills with service improvements).

In our customer needs research respondents were also broadly happy with the cost of their water bills, but would like to see more of a breakdown within them to show where their money goes. Customers were surprised by the breadth of water company operation, and increased awareness could increase engagement and satisfaction with water company service.

Whilst across all studies the majority of customers find their bills affordable, our customer tracker shows that between 10 and 11% of customers find their current bills unaffordable. Concerns over cost emerge in discussions on Tap Chat, and within our research programme, with customers expecting us to be mindful of the impact on bills.

"My main concern is price. I'm low income and constantly worrying about how much I am paying" - Tap Chat – What matters most discussion

Awareness of support

We also know there is little awareness of the support on offer. For example CCWater research (Water Matters, 2017) states that only 6% of customers were aware of the company's social tariff scheme, compared to 9% in our customer tracker. Whilst overall awareness is low, it is much higher amongst those customers who struggle to pay their bills – 24% of those who self-identified in this category were aware of the Severn Trent Trust Fund and of our social tariff scheme.

The same lack of general awareness is found within our customer needs research, but when told about the different assistance offerings, customers were surprised and pleased by the range of services available. It was felt to be important for the water company to be proactive in offering targeted support to those who need it, rather than wait for customers to ask.

"I could have received financial support [from Severn Trent], and I'm a little frustrated I didn't know about it [until today]" - Customer needs research, customer in vulnerable circumstances.

Our “social tariffs and debt management” research echoes this finding – amongst those not on a social tariff, without prompting, 6% were aware of the Big Difference Scheme. After prompting with a brief description, 12% of respondents confirmed they had heard of the scheme. This research also found that customers would prefer to find out about the help available from their water company, but in reality respondents who were on a social tariff had used a range of channels (such as advisors, Citizens Advice, friends, relatives and websites) to access help.

Customer groups who might need support

Our “social tariffs and debt management” research and customer needs research has helped us to identify four key customer groups who we need to provide support for in different ways, due to their different circumstances. A fifth group was identified through our expert workshops with stakeholders.

Segment	
Long Standing	This group is characterised by long term unemployment or very low and irregular income due to being in and out of work frequently. They are wholly or partly reliant on benefits, and might have possibly experienced “benefit sanctions”. They might also have a number of wider vulnerabilities such as poor numeracy, poor literacy skills, mental and/or physical health issues or disabilities or be a full/part time carer. Many in this group lead complex and chaotic lives and water debts are more likely to have escalated into the £1,000s rather £100s. Often they have been in water debt for more than five years and in some cases 10+ years. They are likely to experience severe financial difficulty and a hand to mouth existence.
Borderline	This group is employed but with low to average income – they are “just about managing”. A life event (such as job loss, ill health or family problems) may have caused a reduction in income for a short term period. They are infrequently in arrears with vendors, including their water company, and their general overall finances are tight but not severe. This group is more likely to face any debts head on and look for solutions.
Sudden and Severe	This group will have previously been employed and earning average or higher than average incomes, and previously not have missed a water payment. They have then experienced a serious and unexpected life event such as a major injury and been unable to work for weeks or months. The sudden loss or severe drop in income (particularly acute if self-employed) means they become immediately unable to pay a wide range of any bills including water. Injury might also mean they are limited in being able to engage / interact with creditors.
Struggles with finances	This group has a low to average household income, but often lead busy and chaotic lives. They find managing their finances and bills confusing and difficult. This could cause debts to accumulate and cause further anxiety.
New to country	Or for whom English is not their first language. These customers may have come from countries where they didn’t have to pay for water and therefore could get in to debt without realising. This group also might have difficulty engaging due to language barriers, may not have the same access to benefits and other support, and often believe that rent includes all bills – meaning there's a need to promote/advise via social/private landlords.

We have illustrated the four groups identified through the research through the following customer personas.

'LONG STANDING'
Bob, lives on his own

- Bob is 49 year old who lives on his own in a housing association property
- He has mobility issues and mental health issues
- Bob would love to work, but finds it hard to keep a job due to his mental health issues
- His income is therefore low, is largely reliant on benefits and can be unpredictable
- Bob has a range of debts with different companies and struggles to cope with the stress of this

'SUDDEN AND SEVERE'
Mike, married with children, sudden illness

- Mike is a 46 year old married father of two young boys
- The family has lived in their privately rented home for several years
- Mike has been diagnosed with cancer and is undergoing chemotherapy. He has been out of work since the diagnosis and plans to return to work after his recovery
- Before he was diagnosed, he was working various jobs. His wife is also currently unemployed
- One of his children has severe disabilities

'BORDERLINE'
Emma, single parent

- Emma is a 40 year old single mum of three older children
- In the past she has worked in a bank, but for the last ten years, since she and her partner split up, Emma has had a part-time job in a school
- Emma is studying for a degree with the Open University, with the aim of becoming a full-time teacher

'STRUGGLES WITH FINANCES'
Maria, married with children

- Maria is a 22 year old mother of two young children
- She has been a full-time homemaker since the birth of her first child. One day she hopes to continue her studies and become a mental health support worker or midwife
- Maria has struggled with mental health issues for a long time; when they were at their worst, she fell heavily into debt. Maria continues to struggle with household finances. She prioritises her energy bills over her water bill because she knows water cannot be cut off

Please note customer names have been changed to protect identities

In addition to this, our expert stakeholder workshop identified a fifth group, those new to the UK or for whom English is not the first language. These customers might have different attitudes to paying water bills or may have come from countries where they didn't have to pay for water and therefore could get in to debt without realising. This group:

- don't have the same access to benefits and support (public funds);
- might have difficulty engaging due to language barriers;
- might have difficulty setting up bills; and
- often believe that rent includes all bills – meaning there is a need to promote/advise via social/private landlords.

Views on our current social tariff

Our "social tariffs and debt management" research finds that 93% of those on BDS said it made a difference to the amount of money they had to live on each month and 91% customers on the BDS scheme find it makes a big difference to their long term financial situation. 66% said their wellbeing had improved as a result of being on the BDS.

There is however evidence from some customers on BDS that the current discount levels are more generous than needed. 72% of customers on BDS said that the amount of discount received was more than expected. Reducing the discount for some (not all) groups would enable us to provide more customers with a discount. However, it is clear that some customers would still require the greatest level of discount.

"Mine's [My water bill's] gone down to £35 [for the year because I'm on the Big Difference Scheme], I just paid the whole year [in one]… It was £39 a month. Very pleased." – Customer, Social tariffs and debt management research

Apart from the impact on their financial situation, customers in receipt of a discount also talk about other positive benefits, including improvements to their physical and mental health and their general well-being. It's also evident that receiving a social tariff improves how customers view their water company, with genuine appreciation for the help received.

The application process for BDS was seen as manageable, but support with the application process is crucial for many. For some a paper-based application is a barrier.

“There was about 8 pages to it [the form], like a booklet. Usually I’m quite good with paperwork but when you’ve got anxiety… It weren’t just a simple thing.” – Customer, Social tariffs and debt management research

Our “social tariffs and debt management” research also showed that, amongst those *‘Not on a social tariff’*, the majority of respondents (81%) felt that the respective tariffs would help them now or in the future highlighting that a degree of unfulfilled demand exists amongst customers.

We used co-creation to “re-design” the social tariff scheme with customers. Reducing the discount to 70% (from 90%) would enable more customers to be helped, but still be seen as a high impact scheme. Household circumstances are seen as a key factor in determining eligibility and there was a desire to avoid criteria that may be perceived as complicated.

For customers in general, the words they use to describe the BDS are positive. The following word cloud illustrates customer views in the social tariff cross subsidy research, after they were presented with a description of the BDS.

Debt management and clearing older arrears

Our “social tariffs and debt management” research finds that customers who are struggling want a human approach which gives them control and flexibility, tailored to their personal situation. We found that whilst water company staff were seen as quick to address payment plans for debtors, a personal, human touch and an ability to empathise are sometimes lacking.

Our social tariff schemes are designed to only help customers with their current in year water bill – they will not specifically help customers clear older water arrears and therefore may provide only temporary relief from financial challenges.

“You get one year of hassle-free living and then the following year it’s just back again.” – Customer, social tariffs and debt management research

In the research we tested brief descriptions of existing and possible future methods for helping customers facing problems paying their bills, and there was support amongst the majority of customers for all of these. In particular:

- phone calls and text messages from the water company were seen as attractive to customers;
- customers would like to see the water company working with those with water debt to set up bespoke payment plans which are manageable for them; and
- the majority of customers supported a payment matching scheme (with 89% of those on a social tariff supporting it and 81% of those not on a social tariff thinking their water company should offer it).

“I forget a lot of stuff, and that’s down to my depression. So yeah, I would have liked an email or a text [reminding me to pay my water bill]” – Customer, Social tariffs and debt management research.

We used co-creation to design a potential text message alert, which was considered a helpful reminder for most of the participants. Some felt that text message may not be appropriate for older generations and preferred the notion of being able to opt in to alerts. In line with the desire for a human approach, text messages should avoid blunt language and anonymity. Our co-creation workshop also found that many perceive the 0345 number to be an expensive premium number and that a local number or 0800 number would be preferred.

We also used co-creation to discuss the payment matching scheme with customers. We found that some customers found the payment matching scheme confusing, and therefore care would need to be taken to ensure it is accessible to those who need it. Overall though it was seen as a great way to clear arrears and an incentive to tackle debt.

Other assistance options

As well as our social tariff, we have a number of other offerings which support customers who are struggling to pay (such as Water Direct, WaterSure and flexible payment plans). However, customers are not always aware of these, for example CCWater research (Water Matters, 2017) found that only 7% of customers were aware of WaterSure.

Our best in class customer service research tells us that flexible payment timings seem to be more important than having numerous payment formats, particularly amongst less affluent customers. For example, customers might like the option to pay weekly on a day of their choice or payment holidays at expensive times of year.

Our customer needs research, with customers in financially vulnerable circumstances, found three ways in which Severn Trent could help customers save money:

- communicating more about what financial support is available;
- provide better education and communication to promote water saving; and
- provide a more flexible approach to billing.

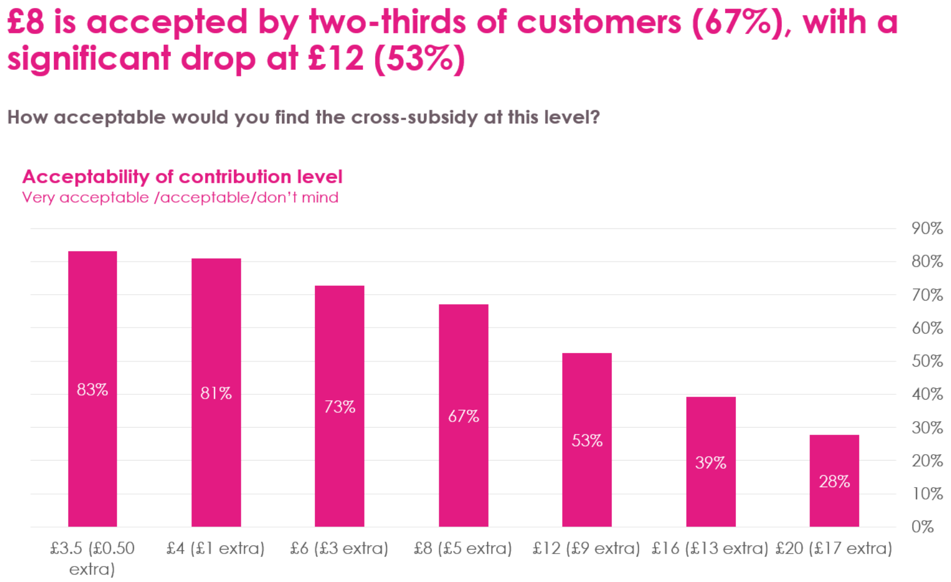
Direct debit remains is the most popular payment option for the majority of our customers. Our payment methods research tells us that the main reason for not using direct debit is habit, and in particular respondents hadn't been asked to change payment method, or were not aware of other options. Our best in class customer service research tells us that younger customers, C2DEs and the more financially vulnerable may be harder to shift. For customers who are struggling to make ends meet or those with stricter budgets, other methods may be helpful to avoid getting in to debt.

Of the respondents in the social tariffs and debt management research 41% paid their bill via Watercard or Paypoint, compared to 35% by direct debit. Watercards allow customers to be in control of when they pay, but can also make it easier to choose not to pay at any time so arrears are more likely. Direct debit was more common amongst those in less dire financial situation, because they tend to have a regular income. For very low income households however direct debit wasn't considered as suitable due to the threat and cost of bank charges if they go overdrawn.

Willingness to pay for cross subsidies

In the "social tariffs and debt management" research knowing that tariffs were paid for by others caused concern, a sense of guilt or unfairness. This tended to be because they didn't like the fact that other customers may have to subsidise them for being in a situation that was of their own making or unfortunate circumstance. For some, it seemed to add to the shame of being in debt and having to rely on others to help them get by. There were a small number of customers though who felt that having paid their way for many years that this was in some way fair as anyone could end up in financial trouble and may need help at any point.

Our qualitative research (choices research) initially suggested opinion may be divided on the issue of social tariffs. Some respondents were initially concerned about the scheme being abused and whether the money is reaching the right people. However, in both the choices quantitative research and in our social tariff cross subsidy research we found that the majority of customers are happy to increase their contribution to the Big Difference scheme. A significant majority (67%) are prepared to pay £8 per year.



Unacceptability is found to be attitudinally driven rather than linked to socio-economic grade or income, tying back to cultural perceptions of self-reliance and fairness.

"As a society we shouldn't mind paying a little extra to care for lower earners and vulnerable people" – Customer, Social tariff cross-subsidy research

Part 2: Vulnerability

Our customers have reminded us that they each have different circumstances, and individual needs. The support we offer needs to strike a balance between customers feeling included and empowered, but at the same time not differentiated due to their specific circumstances.

Lack of awareness of support services

Our research finds that there is limited knowledge of the support services available for customers, including the Priority Services Register (PSR), but when prompted customers expect these to be available.

CCWater research (Water Matters, 2017) shows that awareness of these services has been around 48% for the past four years. Our own tracker research still shows that some customers want more information about the services provided.

Our depths with customers in the customer needs research shows that customers expect their water company to provide support to those who might find themselves in vulnerable circumstances. When promoted, customers recognise that vulnerability is context specific and can change over time. For example, some customers require ongoing support (e.g. tailored bills, for example for those with visual impairments), whilst others might only require support in specific contexts, such as during service failure incidents. It was perceived that Severn Trent could be addressing the needs of those with mobility issues and mental health conditions better.

Within the depths there are mixed views about how much contact this audience would like from Severn Trent. Some welcome greater awareness of their needs, but others would see it as intrusive. In the main, if customers find themselves having specific needs, they would take it upon themselves to get in touch with Severn Trent directly.

Our customer needs research tells us that the PSR is seen very positively, but more proactive promotion is required, as well as a broader consideration of who should be captured, for example those with mental health conditions.

Vulnerability during incidents

All customers place a high priority on access to safe drinking water. Whatever their circumstances, our customers take their water supply for granted and an interruption would have an immediate impact on their routine. Some customers might be more vulnerable during a service disruption or incident. For example, some customers could face life threatening impacts if they had no access to water.

"I would struggle if the water was switched off for a time –I wouldn't be able to get out for water or anything else in the event of an incident. I don't have a store of bottled water in the house." - Customer needs research, customer in health and wellbeing vulnerable circumstances

Our customer needs research, and discussions on Tap Chat tell us that customers (whether in vulnerable circumstances or not) want to see that vulnerable customers are taken care of in event of service failure and are appropriately cared for.

"What would be useful is if [Severn Trent went] to each house with a vulnerable adult with free bottles of water" - Tap Chat – What matters most discussion

Tailored communications

Customers who do find themselves in vulnerable circumstances tell us that they do not see themselves as having specific needs, nor do they want to be treated differently. They want us to balance raising awareness of the services and support available, without appearing overly intrusive or condescending.

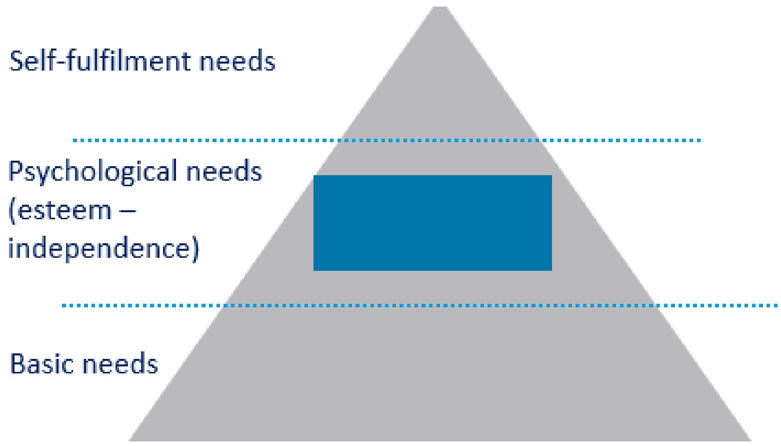
"[It's] intrusive -at the moment her health needs should just be between the doctor and her and me and her family...they [Severn Trent] don't need to know." – Customer, customer in health and wellbeing vulnerable circumstances

Communications need to be accessible, inclusive, not intrusive and take into account specific needs. Tailored communications and formats are required depending on different health needs – for example large print bills for those with visual impairments.

2.6 An outstanding experience

We consistently exceed our customers' expectations by delivering an outstanding experience

We believe customer service and experience sits in the middle layer of the hierarchy of needs. Whilst it is important that we meet customers' expectations of customer service, much of which is functional and transactional, this outcome also describes those elements which empower customers, and enable them to feel in control of their experience.



To deliver an outstanding experience we need to impress all our different customers groups, from residential customers, non-household customers through our wholesale services and through supporting business retailers, and developers and those who want to connect to our network.

For many of our residential customers, their experience of dealing with us is limited to the few times they are required to contact us to open accounts, pay bills or inform us of a change in circumstance, or when we undertake work in the community. For non-household customers the interaction is even more limited. The developers we spoke to appear to be fairly satisfied with our developer services, but nonetheless have specific areas for improvement they are keen to highlight.

We have explored customer views on customer service and experience primarily through multiple sources, including our customer needs project, bespoke research on customer service and experience, our customer tracker and insight from depth interviews with developers and retailers.

We've used a range of insight to understand our customers' views, including:

Approach	Purpose
Customer needs research and co-creation	To understand our customers' needs and the role that their experience of us plays in meeting those needs, including co-creation of future propositions such as metering
Social media scraping	Provides 'revealed' insight about the conversations customers have about their service when unprompted
Ethnography	Observe behaviours of customers in their home and how they use our product
Operational insight	Including complaints and voice of the customer feedback to understand the causes of satisfaction and dissatisfaction
Marketing plan research and best in class customer service and experience research	Understand what customers expect in terms of customer service and experience

Approach	Purpose
Research with developers and business retailers	Depth interviews with developers and retails to understand their needs from us and how to improve satisfaction and experience
Insight from employees	Understand how customer facing employees think we should improve customer service
Customer tracker	Quantifies changes in customer satisfaction, value for money and wider perception over time as well as capturing views on discrete issues

Based on our research we have triangulated our customer evidence to determine customer's relative priority for each of our performance commitments. For this outcome two of the performance commitments are mandated and defined by Ofwat (CMeX and DMeX) and we have not explored these specifically with customers, however our customers tell us through our research, interactions on social media, and contact that experience is of fundamental importance to them.

We have triangulated our evidence base to determine customers' relative priority

Performance commitment	Relative priority	Hierarchy of needs	Rationale
CMeX	Very Important	Psychological	Customer experience drives satisfaction and trust. Customers expect an outstanding experience every time they turn the tap on, or have to contact us
DMeX	Important	Psychological	Whilst developers tell us that service standards and the relationship with Severn Trent have improved recently, there is more to do to improve experience in some areas

Part 1 – Residential customers

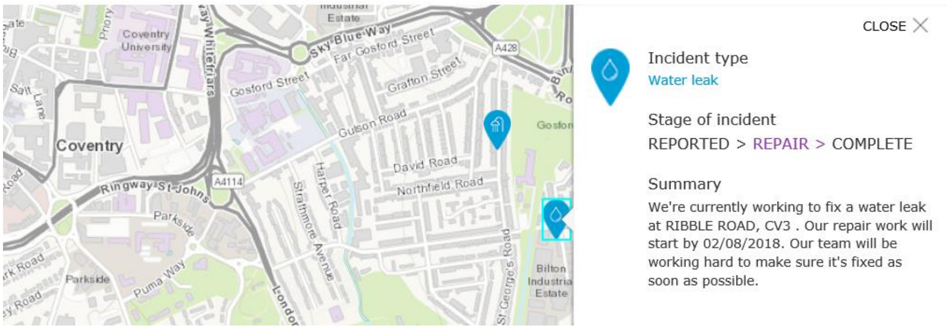
The range of insight tools we have used, as well as a review of operational insight, insight from our customer facing employees and social media, has revealed some key areas to focus on in order to deliver an outstanding customer experience:

- keep me informed;
- be realistic about resolution time;
- make it easy to get in touch;
- make it easy to pay my bills; and
- show you care.

Keep me informed

Our customer needs research and best in class service and experience research have reminded us that most customers don't know much about our core services beyond the provision of clean, safe water. Further, when we ran a simple engaging quiz about Severn Tent on our community panel, Tap Chat, only 6% of participants answered all ten questions correctly. Customers rarely think about the behind the scenes operations or the wider services we offer. However, our customers appear keen to know more and want us to talk more about what we do. When there are incidents, or during routine maintenance work, it's even more important that we keep customers informed. Our research with customer facing employees, and our customers on Tap Chat, tells that failing to do so is one of the key aspects of dissatisfaction with our service.

We are already trying to inform our customers more immediately during our operations. We have introduced 'In My Street' information on our website to show customers what activity is being undertaken across our region as well as providing live incident updates via social media where we are able to provide current information on how the progress of repairs.



"The most important thing is being kept informed of what's going on if there's an issue, so that I know what I can and can't do that day" – Customer, Best in class service and experience research

Customers can also use "Track my job" to instantly keep up to date with how their jobs are progressing. Customers are able to see live updates, with detailed status updates and dates such as when the job was raised, whether teams are on site, if the site is being resurfaced, and finally when the job is completed. This service is vital to meet growing customer expectations.

The customer tracker survey shows that in 17/18 66% of customers felt that Severn Trent is a trustworthy company. Perhaps not surprisingly, trust is much higher for those customers who have contacted us and the issue/ reason for contact has been resolved. Therefore, the need to continue to make regular contact with customers while their issue is being resolved is of paramount importance so they feel empowered. This is supported by our 'best-in-class' research, where customers told us that live issue tracking should be the norm, not a premium service.

Reviews of our response to incidents has shown that customer can easily be confused. Social media can be useful but in turn destructive. The review of a water quality incident in 2016 (Castle Donington research) showed that customers started to base their information on other customer comments or word of mouth stories, through platforms such as Twitter and Facebook. Clarity and regularity on the information we provide is critical so that customers trust the information they receive from us over other sources.

"I just assumed it was something that had been made up on Facebook, there's always hoaxes on Facebook…" - Castle Donington research, customer who, didn't receive letter

This incident research also noted that sometimes it is just as important to inform people when they are not affected by an issue. Some customers told us that organisations such as schools relay messages in an attempt to help, but this can be misleading as not all receiving the message may be affected. Whether it is due to an incident in our area where we need to also focus on neighbouring post-codes, or more general communications when issues arise at other water companies, a hosepipe ban for example, we need to always remain the first source of information for customers and be flexible to use the most appropriate channel for the individual.

"We actually got a text from the school telling us not to use the water but then we went onto the STW website and that confused me even more because if you put this postcode in it didn't say this was affected. There were some that were DE11's but not this one and I still don't know whether I should be using it or not!" - Castle Donington research, customer who, did receive letter

Be realistic about resolution times

When our service fails, our customers expect us to put things right. Customers have two distinct expectations here:

1. resolve the operational issue in an appropriate timescale (and get it right first time); and
2. be aware of customers' individual needs, as they may be different to those of everyone else.

On the first expectation, when prompted we often find that customers' expectations of how quickly we resolve an issue are less stretching than timescales we think they want. The table below, produced as part of our 'best in class' service and experience research from in depth qualitative interview with customers, demonstrates some representative times for attendance and resolution.

Expected attendance and resolution times (average across sample)

	Attendance	Resolution
SEWER FLOODING Dirty water from a sewer pipe is in your house/garden or on your land.	Within 2 hrs	Within 1 day
WATER SUPPLY ISSUES You have no water or poor supply at your property.	Within 2 hrs	Within 1 day
LEAKING PIPES You see a pool or running water on the road, verge/garden/field, which may be a burst water pipe.	1-2 days	3 days
DAMAGED TAPS AND LIDS Broken or noisy manholes in the road or broken stoptaps or lids in the footpath.	2-3 days	1 week
SEWER SMELL You notice foul smell coming from a sewer pipe or sewage treatment works.	1 week Depending on proximity to property	2 weeks Depending on proximity to property
POLLUTION REPORT You notice pollution in a river or reservoir (debris, sewer content).	1 week	One month/ Ongoing

Whilst it is important that we strive to resolve issues quickly, it is just as important to be realistic in the timescales we aim for and deliver a quality finish first time. Our customer facing employees tell us that failing to get it right "first time" is a key source of dissatisfaction for customers.

"@stwater Thank you for excellent service. Drains unblocked within hours of reporting problem. Workmen also very friendly #drain #severntrent" – Customer feedback on twitter, Social media scraping

Our customers draw parallels to live tracking of parcel delivery as a basic expectation, they expect us to be able to provide targeted and personal information about how we will respond to their personal needs.

"If DPD deliver a parcel, you get a text on the day giving you a specific one hour timeslot. That kind of service should be standard now" – Customer, Best in class service and experience research

Customers' second expectation is more personal; ensuring we understand their individual needs. During the Castle Donington incident research there is a strong sentiment that mitigation measures are not in place fast enough or the scope of measures is insufficient in the first few hours (e.g. quantity of water available in alternative supplies).

Customers expect us to be flexible and react quickly to minimise the impact on the individual customer's daily life. This doesn't necessarily mean resolving the end-to-end issue, but ensuring the right action for the individual. For some, the correct action may be regular proactive communications via text so they can adapt their plans accordingly. Others, such as those in vulnerable circumstances, may require a more personal service.

"We recently had no water due to the weather conditions causing damage to pipes and it really made me think about how much I rely on my water service…..it was great that you got me up and running quickly" – Tap Chat, What matters most discussion

"There's a different impact on us not having water because we've got two young children and they use a lot of water... We'd need a fair amount of bottled water quickly for the baby bottles, within a few hours." - Customer needs research

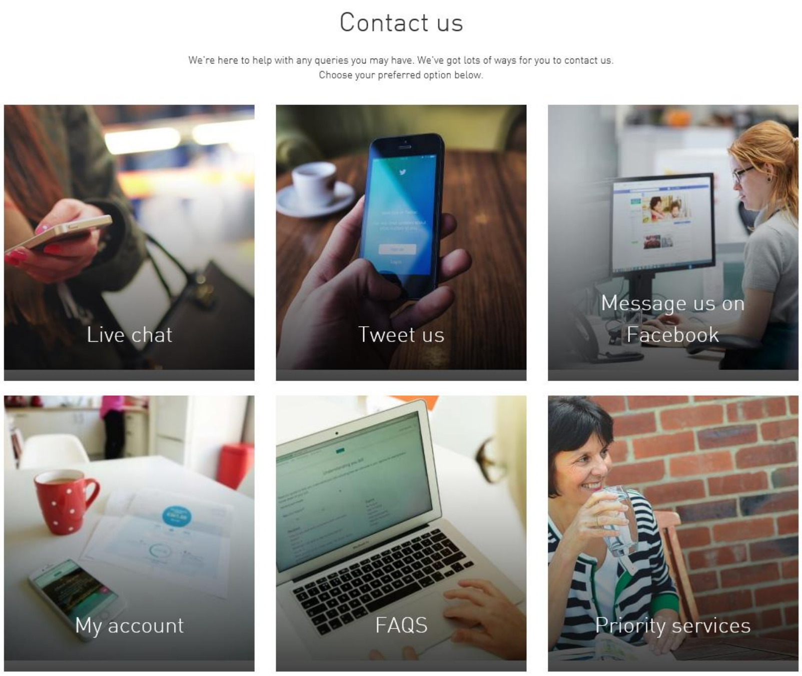
Make it easy for me to get in touch

Customers expect a great experience when they contact us, whether through our contact centre teams, field engineers or online. Our customers want to contact us via their preferred channel at a time which suits them, or to be able to self-serve digitally and enjoy a straight forward, speedy interaction. However, we know that customers aren't always aware of the options available to them, so we need to do more to promote these.

Customers have told us that in some circumstances they couldn't speak to a staff members at an appropriate time for them. Our social media scraping highlighted that most problems are identified at night, and can result in customers taking advice on internet forums such as Mumsnet. We initially extended the opening times of our call centres and have recently turned this in to a 24 hour operation meaning that we are able to communicate with and help customers no matter what time that they have a need to call us. We were the first water company to provide a 24/7 service for non-emergencies.

Customers also have a preference for contact type, and value being able to choose their preferred channel. In our Birmingham resilience comms project, our customers told us that the telephone was their number one choice for communicating with us for all reasons. Our best in class customer service research and marketing plan research also told us that telephone is the preferred contact channel, due to its immediacy. When personally affected by an urgent water or waste issue, the instinct is to call. The research found that few are aware of live chat and social channels, but both feel appropriate and relevant particularly for non-urgent queries, crisis updates and for customers to share poor customer service more publically. Our marketing plan research found that some customers are unaware that the live chat service is staffed by 'real', regular Severn Trent contact centre employees; some assume it is operated by a computer or by inexperienced staff, perhaps working remotely. Online account management is also appealing, but many are unaware of this.

We now maintain nine different customer communication channels, including live chat, twitter, facebook and web self-serve.



We have trialled and rolled out a webchat facility on our new look website. This has proved to be very successful and has also become a 24 hour operation. In fact, despite customers stating their preference is for telephone communications, our contact data suggests an increase in the use of internet channels to communicate with us and soon this will overtake telephone calls as the number one route of contact for customers. Webchat saw a 47% increase in traffic during the year, and we now interact with customers via 6,300 web chats on average a week. Of these, on average 70% would have previously called us, 23% emailed, 2% would have found the answer on the website themselves and 5% would have left the website without an answer.

Make it easy for me to pay my bill

Our customers expect their bill to be simple and easy to understand. We have co-designed a new bill with customers, making it more visual and easier to understand by using conversational English rather than regulatory jargon. We've used graphics and metaphors to make it easier for customers to understand their water usage. The launch resulted in a 17% reduction in unwanted customer contacts. During the 2018 main billing run, in February alone, there were 15k fewer calls from customers. Feedback on the improvements has been great.

"Out of all the bills I have coming in this is the first time I can look at my bill and actually see what I have used and the cost. Well done Severn Trent Water. Love your new Billing. Thank you" – Customer feedback on new bill

Payment channels also impact both cost to serve, as well as customer ease and satisfaction. In our payment methods research we found that the main reason for customers not using direct debit is habit, and the fact that we haven't *asked* them to change payment method since the account was set up, which may have been many years ago.

"[We pay our water bill by cheque] because we've never changed it. [Back then] there wasn't such a thing as a Direct Debit!" – Customer, Payment methods research

Some customers say they are not even aware of other payment methods which they may find more convenient than their current method. Direct debit is the alternative payment method most likely to be considered to be more convenient than the current payment method. Further, we found that many of those not paying their water bill by direct debit are already paying their *energy bills* this way. This suggests they could be persuaded to switch, we just need to ask them.

At the same time we know from our best in class service and experience research that younger customers, those in the C2DE socio-economic group and customers in financially vulnerable circumstances are least likely to be willing to switch to direct debit. This is because these customers are keen to retain the flexibility to pay a little less when finances are stretched – this was also a key finding in our social tariffs and debt management project.

In order to simplify the bill paying process further for customers (and reduce costs and bills) we have initiated a direct debit nudge campaign to encourage customers to switch their payment process to direct debit. We have used behavioural economics and customer segmentation to create a behavioural nudge campaign, targeting customers not currently paying by direct debit. We want to make customers aware of the best bill payment options for them in order to make their payment "journey" as easy as possible. We used a range of sources, from ACORN data to customer research, to understand how to target customers which the most relevant and effective communication method. Our campaign this year has seen an uplift of over 1.7% in customers switching to direct debit.

Show you care

Our customers have told us that more immediate, targeted and empathetic communications are important to them. Our customer facing employees tell us that being prompt, courteous, helpful and caring are important to customers, and would show improved customer experience. For example, if a large family moved into a metered home we could show we cared by proactively providing all available help to keep bills manageable. Or we could ensure payment plans are not cancelled if a customer misses just one payment.

In our social tariffs and debt management research many customers told us that the language in our arrears letters could be more supportive and empathetic, and that the call centre agents can lack a human touch. Within the co-creation, customers told us that text messages can be a great, relatively informal way of reminding people about missing payments before more formal arrears letters are required.

"Final bit of advice for Severn Trent? Be that person on the other side, not a machine, and not invisible" – Customer, Best in class service and experience research

Part 2 – Non-household retailers

Through an independent research agency, we have conducted a series of depth interviews with business retailers (business retailer research). Our audience is diverse in terms of number of customers in our region, ranging from Water Plus, with up to 180,000 customers, to retailers focusing on providing a bespoke service to a smaller number of customers. Most of those we spoke to are satisfied with the service they receive, however some would prefer more personal contact and communication.

"We are satisfied but the contact needs to be more formalised. We have a small estate at the minute but we want to grow so I'd like more consistency in the communication" – Retailer

"**They were one of the first to interact with retailers, I went to one of their early sessions, they were proactive and set the scene"** - Retailer

The research revealed that the top priorities for retailers are:

- good account management;
- the provision of accurate data; and
- improvements to the portal, the information hub between retailer and wholesaler.

In general, the issues that the retailers identified were common across the wholesale industry, with accuracy, consistency and speed emerging as the key challenges.

We also discussed water efficiency and links to the water resource management plan with retailers. These results are reported in the Water always there outcome section.

Part 3 – Developers

In addition to the regular engagement carried out by the Developer Services team, we have conducted in depth interviews with larger developers to understand their levels of satisfaction with Severn Trent, and how we could improve their customer experience. Most of those we spoke to are fairly satisfied with our Developer Service, and feel that service standards and the relationship with Severn Trent have improved recently.

"You have just given us the ability to look at your online sewer and network records, which is fantastic!" – Developer, depth interviews

However, there are a number of areas of improvement, in particular:

- making service more customer focused, rather than process-oriented;
- improve speed of delivery;
- fill gaps in account management; and
- have more resource to deal with developer needs.

“Severn Trent needs to make sure there’s sufficient resource for the new connections team to meet agreed dates for works. There’s nothing worse than having water connections scheduled in, and then find out the team have disappeared to attend a leak the other side of the city.” – Developer, depth interviews

Despite this, most felt that the quality of the developer services they get from other water companies is comparable to ours.

Some developers would like the option of paying a premium to expedite various aspects of service delivery, including a more bespoke service, although others disagree and feel they already pay for a service which is sometimes sub-optimal.

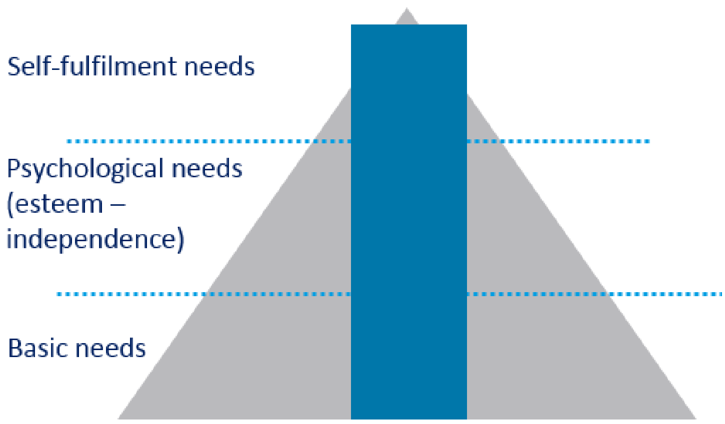
Our infrastructure charges has considerable commercial appeal to developers, and it’s considered to be innovative and easy to access. Most developers say house-buyers don’t mind water efficient fittings and SuDS ponds, although some buying larger homes to sometimes object to smaller bathroom fittings and flow restrictors, and they recognise that SuDS can work better in leafier neighbourhoods. If the requirements were tightened, for example to include grey water recycling, then they would expect a more generous discount.

“Obviously that [scheme has] been a massive win for us developers, it’s nearly £700 per plot that we’re not paying now that we used to [pay], if we conform. That’s a lot of money!” - Developer, depth interviews

2.7 Thriving environment

We safeguard the natural resources we use, and we work to improve the rivers and habitats that provide them.

Our research consistently shows that customers value the natural environment. The environment runs through all levels of the hierarchy, reflecting the fact that some of our activities deliver a basic need (such as complying with statutory obligations) and other activities, such as enhancing biodiversity, can create opportunities for wider fulfilment. Our plans looks for opportunities for solutions which deliver value at each level, for example by delivering wider benefits.



We have a rich evidence base of customer’s views on the environment, with a range of techniques and sources from our deliberative research, through to understanding the relative priority through valuation and our choices research.

We've used a range of insight to understand our customers' views, including:

Approach	Purpose
Customer needs research	Improves our understanding of customers' needs and the role that a having access to local green spaces and sustainable wider environment plays in meeting those needs
Social media scraping	Provides revealed insight about the conversations customers have about their interaction with the wider environment when unprompted
Valuation research	Quantifies the importance of improving river water quality and biodiversity improvements in the context of other areas of our plan
Deliberative research	Allows detailed, informed discussion on important topics – in this case the impact of our activities on biodiversity and pace of delivering the Water Framework Directive outcomes, and how we deal with uncertainty
Choices research	Explores customers' prioritisation of improvements in different areas of service
Customer tracker	Quantifies changes in customer satisfaction, value for money and wider perception over time as well as capturing views on discrete issues

Based on our research we have triangulated our customer evidence to determine customer's relative priority for each of our performance commitments. For this outcome two of the performance commitments represent compliance measures that we have no direct customer evidence on. Nonetheless we know that customers expect us to be compliant with standards, and trust us to maintain our assets in order to do so.

We have triangulated our evidence base to determine customers' relative priority

Performance commitment	Relative priority	Hierarchy of needs	Rationale
Improvements in WFD criteria	Important	Basic	Important - customers value the natural environment but this doesn't emerge as a high priority compared to measures which touch customers more personally (e.g. in their homes). Poor aesthetic river water quality can also lead to dissatisfaction.
Biodiversity	Important	Fulfilment	Customers are interested in knowing more about what we are doing to improve the biodiversity of our region, and value improvements in this area
Treatment works compliance	Low importance	Basic	Inferred insight - this is predominantly a compliance measure – customers have a fundamental expectation that compliance standards will be met but there is no specific customer driver to improve this
Satisfactory sludge use and disposal	Low importance	Basic	

Valuing the natural environment

When talking to customers about the natural environment in a deliberative setting, we see two distinct viewpoints emerging: their appreciation of their personal interactions with local green spaces and concern for the wider global environment.

Local green spaces allow escapism and relaxation, enhance health and wellbeing, and are sites for quality time with friends and family. The customers we spoke to in our customer needs project who were highly engaged with their local river cared deeply about their local natural habitat and were concerned that Severn Trent does not adversely affect it in any way.

"If I couldn't go [to my local river], I would lose my sanity. My neighbours have loads of children; it's always noise, music, barbecues. I have to go elsewhere to get any peace and sanity" – Customer, Strategic challenges – Environment and biodiversity workshop

"I think they should do [environmental activity]. I didn't know about any of these things before today, but I'm glad they're doing them" – Customer, Strategic challenges – Environment and biodiversity workshop

Customers did express concern for wider environmental issues, but this does not necessarily translate into taking steps in their day to day lives to mitigate environmental impact.

Despite valuing the local environment and green spaces, the environmental impact of our activities can be far from the conscious understanding of customers. When considering the environment, climate change, environmental damage and pollution are the front-of-mind issues that customers discuss, both on a global and local level. Spontaneous associations between Severn Trent's activities and the environment are limited; for many customers in our deliberative research it was initially unclear that our actions would have any impact on the environment at all.

"[The environment] is so important! What do we have if the earth is dead? . . . I hadn't even thought about how using water could harm things but obviously we need to do more to save it." – Customer needs research

"I haven't really thought much about ST and what they are doing with the environment. I don't really know."- Depth participant, Strategic challenges, environment

However, during the deliberative research, as customers became more aware of how central the environment is to Severn Trent's activities they were more likely to feel Severn Trent should be prioritising the environment and ensuring it is protected (customer needs research). Safeguarding the environment also emerges as a key theme in discussions on Tap Chat – our customers care about the environment and want to know that Severn Trent is thinking about the sustainability of water and the environment.

"I would like to know more about the environment protection work that Severn Trent are doing. I understand they do some, but I don't know much about it!" – Tap Chat, What matters most discussion

Within the Choices research we spoke to small, medium and large non-household customers, and heard some mixed messages on the importance of the natural environment compared to other service areas. In the depth interviews with large non-household customers we found that the environment, biodiversity and community impact are important themes. These larger NHH customers see themselves as part of the wider community, and have an ethical standpoint they want to see reflected in supplier relationships. Smaller businesses on the other hand see environmental improvements as having a smaller impact on themselves.

"We want to be a sustainable trust, so want our suppliers to be sustainable too. We're interested in holistic health outcomes – so biodiversity and green spaces are important to us" – Large NHH Customer, Choices research

"As a father and a grandfather, we all want the country to be lovely, but as a businessman, that's Severn Trent's problem". – Small / Medium NHH Customer, Choices research

Our social media scraping project shows that customers can also be aware of other impacts on the environment, such as construction. Customers demonstrate negative sentiment towards water companies who are considered to have an impact on land and wildlife due to construction.

In our deliberative research, customers felt that Severn Trent should be seeking to do as much as possible to protect and improve the environment, and were not concerned about the distinction between legal requirements and additional action, which felt to be largely artificial. We found that customers have five key principles with respect to the environment:

- work in partnerships to tackle environmental issues and improve the environment;
- seek to tackle problems upstream as opposed to resolving issues after they happen;
- take further action in protecting and improving the environment as much as possible, even on sites that they don't own or that customers don't have access to;
- balance initial cost concerns by ensuring that profits are fair and that partner organisations share part of the responsibility; and
- raise awareness and educate customers on their environmental activities, as well as providing reassurance and communicating how their money will be invested.

Delivering the Water Framework Directive

Delivering our commitments to meet the Water Framework Directive (WFD) is a statutory obligation, however, customers can shape *the pace* at which we deliver this commitment. In our willingness to pay (WTP) research we found that customers do value river water quality improvements, although the monetised benefits need to be compared to the cost of improvement in order to determine a cost beneficial programme. In terms of general priorities, improving river water quality fairly consistently emerges as a medium level priority for improvement. It was the fifth highest prompted priority in the WTP research, the seventh highest in the WTP budget game, sixth highest in the customer tracker survey, and seventh in the choices research.

Customers do not spontaneously associate our actions with causing an impact on river water quality and are not aware of the legislative requirements to improve treatment standards to deliver the WFD. When discussing the environment, customers often focus on the aesthetic issues surrounding rivers, such as litter and visible pollution. We used deliberative research to explore how we should deliver the WFD in more depth.

Pace and priority

Within the deliberative research we talked to customers about pace and priority of WFD improvements. The aspiration of going *above and beyond* legal obligations was seen as very positive in principle, but there are concerns about costs to be borne by customers and concerns about 'rushing it'. Without further details on timeframes and potential cost implications, few offered definitive judgments one way or the other.

"I don't think they should increase the pace because they'd be rushing it. It's got to be an on-going plan." – Depth participant, Strategic challenges, environment

Within the choices research, in which a lot less context was presented to customers, most participants did not see the need for faster progress, but agreed with Severn Trent achieving statutory requirements. There was a perception that river water quality has less direct impact on customers' lives than other outcomes. There is also a perception that river water quality is already fairly good, despite being informed of the current status in the research. For non-household improving river water quality was a medium / low priority, with some customers concerned about the impact on their business costs.

"I want a clean river for the children of the future, but as a businessman, again, I doesn't want to put the costs onto business." – NHH customers, Choices research

When prompted to think about which rivers Severn Trent should prioritise, customers feel strongly that we should tackle the most polluted rivers first. It felt intuitive to customers that Severn Trent should start with the places where the problem is most acute.

"To me, it should be tackling the worst rivers first. They'll flow into all the other river sources." - Depth participant, Strategic challenges, environment

In addition, customers consider that Severn Trent should prioritise locations which will affect the greatest number of customers. For some, this meant focusing on urban rivers rather than rural rivers, although there was also a sense that there should be a fair balance of investment across the whole region. There was very little sense that areas of natural beauty should be prioritised per se.

Type of solutions

Customers are supportive of partnership solutions. For complex issues that affect multiple organisations then working in partnership is seen as a practical response, which could also have lower costs and environmental impacts than conventional solutions.

However customers do also express concern about how effective they might be in practice, for example if other parties have different priorities to deal with, and therefore feel that an "all options" approach should be adopted.

Approaching uncertainty

More than 75% of the wastewater quality programme is set at "amber" status in WINEP3, with final confirmation scheduled for late 2021.This means there is a degree of uncertainty about whether or not the investment will proceed. We have engaged customers on how we should manage this risk, both through our online community and through deliberative research (uncertainty research).

We found that in principle customers supported only focusing on confirmed "green" schemes. When the bill impact of the different options was shown most customers considered that all green and amber schemes should be addressed, reinforcing the need to support the environment. Around 800 customer completed our poll on Tap Chat on the topic, followed by a discussion on the topic. 76% of respondents expressed support for not funding the uncertain schemes until they are confirmed and instead finding a middle ground.

"Definitely not in favour of refunded bills at a later date [if schemes do not go ahead]- what if you move or die!" – Tap Chat, customer feedback on uncertainty.

"I think there is a middle ground where you try to make an informed calculation as to how many Amber schemes will be confirmed, and cover those rather than each extreme, as this is likely to be nearer the actual situation, and reduce the level of possible refund/additional charge" – Tap Chat, customer feedback on uncertainty.

Biodiversity

Spontaneously, biodiversity is not a front-of-mind issue for customers and they often struggle to see how Severn Trent's activities might relate to it. Biodiversity tends to be associated with areas of natural beauty and the link to declining species numbers in the UK is not necessarily made. Customers do not spontaneously consider this to be Severn Trent's responsibility.

Within our WTP research, improving biodiversity does not emerge as a top prompted priority, whilst in the customer tracker, improving biodiversity is ranked as the 7th highest prompted priority. However, despite not emerging as a priority our research does show that customers are willing to pay for improvements in biodiversity.

In the choices research customers agreed with the principle of improving biodiversity and considered it to be important, but again struggled to link it directly to Severn Trent and our remit. A step-change in performance was seen as an ambitious goal, but there was some concern that it might be taking funds from other types of investment.

"[Biodiversity is] very important. I want to know [Severn Trent] are doing their bit, but they don't have to massively improve" – Customer, Choices research

Within the deliberative research, information about biodiversity and Severn Trent's involvement and activities was received very positively and there was a clear stated desire for further communications and awareness on this topic. It resonates with instinctive beliefs about the importance of protecting the environment for future generations. When prompted and given information within the deliberative workshops, customers support a biodiversity strategy which enables us to deliver more than the statutory minimum, and which could include work on both publically accessible sites and those which are not accessible to the public

We directly sought customers' opinions on whether we should follow a 'core' approach (similar to that included in AMP6), or a more stretching approach that includes working with wildlife trusts, additional work on our own sites and incentivising farmers and land owners to change behaviour. The high levels of support seen with regards to Severn Trent taking further action in biodiversity are linked to spontaneous beliefs regarding the importance of the environment. Participants support a more stretching strategy in this space, given the importance of the issue once they have taken the time to reflect on this, and felt that the bill impact (of a few pounds) of the stretching strategy was broadly acceptable (this wasn't in the context of other changes to bills).

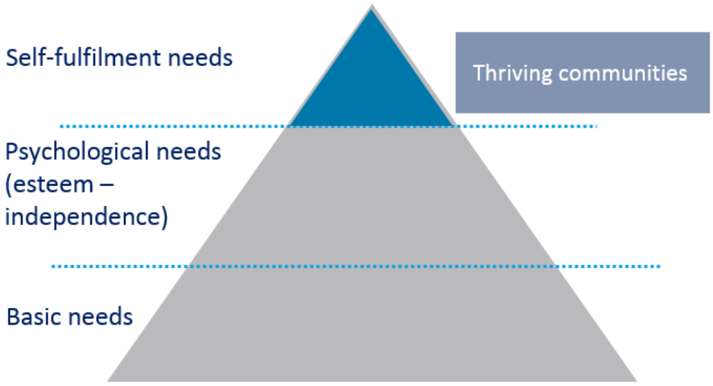
In the deliberative research, there was an overall sense that Severn Trent should prioritise its own sites, but that it should also promote biodiversity elsewhere if this was achievable. This was also widened to taking action on land as well as in water. Participants said they would be content for Severn Trent to improve biodiversity of sites where they themselves would not have access (e.g. operational sewage treatment works sites) and therefore would not be able to see the results.

Partnerships with NGOs and wildlife trusts were welcomed and seen as pragmatic. It was felt that we would be more effective in promoting biodiversity if we worked in partnership with experts.

2.8 A positive difference in the community

While we focus on providing a consistent, reliable and affordable service to customers, we know our ability to positively impact our communities extends much further.

The difference we make to our communities, and whether this is seen as positive, and a driver of satisfaction, relies heavily on the way in which we deliver many of our core services. If we get things right it can help drive satisfaction levels and build a level of trust between us and our customers. As such, this outcome sits firmly at the top of the hierarchy, however customers are clear that they expect us to deliver the core "day job" and for anything additional not to cause any detriment to that.



The importance of our role in the community is a theme which runs across our insight programme, emerging in multiple research projects, including revealed insight from social media as well spontaneous feedback in our deliberative workshops and on Tap Chat.

We've used a range of insight to understand our customers' views, including

Approach	Purpose
Customer needs research	Improves our understanding of customers' needs and the role that we play in meeting them
Social media scraping	Provides revealed insight about the conversations customers have about their service when unprompted
Deliberative research	Allows detailed, informed discussion on important topics – in this case our broader role in society, towards the environment, and the benefits of working in partnership
Co-creation	Co-design with teachers and school children the core components of our new education programme, and co-design principles of engagement with customers
Social tariffs and debt management research	Understand the acceptability of different levels of customer contributions to social tariff and attitudes in general towards providing support to customers in greater need
Best in class customer service and experience research	Explore customer views on current and future customer service as well as wider experience, including visitor centres
Choices research	Explore customers' prioritisation of improvements in different areas of service
Customer tracker	Quantifies changes in customer satisfaction, value for money and wider perception over time as well as capturing views on discrete issues

Based on our research we have triangulated our customer evidence to determine customer's relative priority for the performance commitments under the outcome.

We have triangulated our evidence base to determine customers' relative priority

Performance commitment	Relative priority	Hierarchy of needs	Rationale
Inspiring customers to use water wisely	Very important	Fulfilment	A clear signal from across our insight programme is that customers want us to do more to education, inform and engage them. This is also recognised as an important lever to change behaviours.

There are four areas discussed as part of this outcome: education, working in partnership, visitor sites and corporate social responsibility. Each of these links to a number of other measures from across the suite of outcomes and, as such, the findings discussed here influence the way in which we deliver outcomes rather than what should be delivered.

Education and engagement

For many customers, their understanding of our function is limited. Some only associate us with the provision of water and are unaware we're also responsible for removing and treating wastewater. Even fewer have an understanding of the scale of our business or some of the more diverse areas of work we are involved in. Insight from our social media scraping demonstrates this – there are four main topics driving conversation, with customer pain points dominating followed closely by the desire for more information and education.

Across our research programme one common theme emerging is that our customers expect us to be more proactive in our communications to inform and educate them, and their children and grandchildren. It is clear that, for many customers, as a company we are expected to operate 'at arm's length' on a day-to-day basis but we can do more to target them with the right information, at the right time, to benefit their lives.

Within our customer needs research our customers told us they wanted us to provide them with more information on:

- how to save water;
- prevent sewer mis-use;
- the options available to help customers struggling with bills or in vulnerable circumstances;
- what we do to enhance the environment; and
- wider services, such as our recreation sites.

The customer tracker corroborates this insight, the top categories that customers wish to know more about are free water saving products, the Big Difference Scheme and our visitor sites. Awareness of these three is low, with 25% aware of free water saving products, 8% aware of the Big Difference Scheme and 16% aware of our visitor sites.

Our best in class customer service research also presents a consistent picture with information on reducing water consumption being the aspect respondents are most interested in, followed by information about service improvements in their local area, offers on plumbing services and information on visitor sites.

We also asked our employees for ideas which could transform our services and the role we play in customers' lives (Employee engagement – Bike on a Boat tour). Better awareness and education was the top idea, alongside universal metering.

Members on Tap Chat are also looking for more information, around a third of comments on our initial what matters discussion were seeking clarity on topics such as current and future bills, what their money is spent on and water meters.

"I don't know how [water meters] work. I wish someone explained the pros and cons to me" - Tap Chat – What matters most discussion.

Our choices research tells us that customers view education as highly important, and that it is a key component of driving behaviour change which influences other measures (e.g. sewer blockages, average consumption). As a principle, it resonates strongly and may be a way to demonstrate Severn Trent's commitment to helping customers to become more responsible.

"It's important to get to kids when they're young and teach them to look after our water. I think this needs to be extended to adults too though" - Customer, Choices research

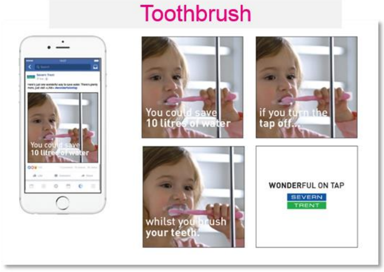
"I see a tangible risk from lack of education in that people could put the wrong things down my toilets in the hotel" – Non household customer, Choices research

We have used co-creation to work with customers on these topics, in order to truly understand the messages which would resonate with them and the channels we should use. Customers identified the following key principles for effective communication going forward:

Principles for effective communication - co-created with customers	
Ensure we maximise touchpoints with customers	Customers want us to ensure we are making use of all existing touchpoints, such as bills, the website and face to face interactions (e.g. when fitting a water meter) before communicating in other ways
Use partners to amplify and spread messages	Customers listed a number of organisations they are involved with (e.g. schools, places of worship, charities) which would be well placed as partners to spread messages
Ensure communications are relevant	Customers want communications which are targeted to them as individuals. The message needs to be responsive to who they are (e.g. where they live, their household composition) but also what is happening to them at that point in their lives (e.g. changes in circumstances, such as moving home or having a child)
Talk in customers' language	Most customers have generally low levels of knowledge on the specifics of their water usage or the water system more generally, and communications should reflect this. For example using tangible measurements rather than technical ones (e.g. amounts of water in terms of bathtubs or ££s cost, rather than litres).

We worked alongside customers to create example campaigns for some of the areas identified and to understand their views on target audience, barriers to participation, key messages and hooks, language and tone and relevant channels and touchpoints, and we have used our online community, Tap Chat, to test water efficiency creatives with customers.

Toothbrush



First thoughts

- Shock at 10 litres of water being used
- Easy to understand and shows that small changes can make a difference

Comments

- Need to clarify the 10 litre loss **happens in 2 minutes** to have full effect

"simple easy efficient- you don't have to make big sacrifices to save water"
Female, 24-34, DE

"easy to understand and straight to the point"
Female 55-64, AB

"very clear, simple message, to the point, unambiguous"
Female, 44-54, DE

"Great advice for children - but also adults in our family guilty of same!"
Male, 55-64, C1

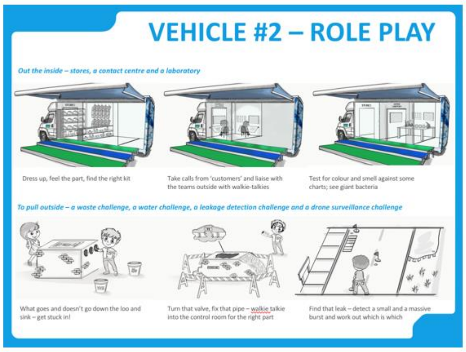
Engaging children is seen as particularly important as they are perceived to be much more amenable to change, and also because messages can reach adults via their children. However there is also a role for educating adults. We have used co-creation to design a new schools programme with teachers.

"The activities look really immersive, and the problem-solving aspect is really great." – Co-creation workshop, Teacher

"Visits like these have to provide the children with something we can't, and this is definitely something we can't do which is great!" – Co-creation workshop, Teacher

What they loved...

- ✓ Teachers liked the role play focus of this vehicle and felt that students respond very positively to this kind of activity
- ✓ Teachers also acknowledged that students will not have been inside a science laboratory before and would therefore find it exciting and engaging
- ✓ Teachers valued the fact their students would get a clear understanding of local employment opportunities available to them



Important considerations...

- Teachers recommended approximately two students per activity at any one time
- Teachers wanted there to be an adequate back-up plan for outside activities in case of wet weather
- Again, teachers stressed the importance of ensuring each activity has enough space
- Teachers recommended that all clothing had Velcro fastenings to ensure ease of taking on and off
- Some suggested that perhaps the clothing compartment could be stored more efficiently outside, to ensure more space for the call-centre and laboratories

One of the messages in our education programme and campaigns going forward will be about the health benefits of drinking tap water. This receives strong support from both stakeholders and customers. Stakeholders have told us that they are very aware of the health and wellbeing challenges faced by people, ranging from obesity to mental health, and we have an opportunity to have an impact in this space. They recognise that health and wellbeing is a key enabler for all aspects of life, and that the absence of it can trigger a spiral of problems, including financial difficulties.

For customers promoting tap water resonated as both a healthy alternative (e.g. to fizzy drinks) and as an environmentally friendly option (reducing bottled water usage). The environment is intrinsically linked to health and wellbeing, with local green spaces providing much valued opportunities to relax, unwind, and enjoy time with friends and family.

Working in partnership

Working in partnership was a key theme from our stakeholders at PR14, but not something we specifically debated with customers. We recognise that, when informed with appropriate and engaging information, customers definitely have a view on the subject. More specifically, we have talked to customers about working with farmers to improve raw water quality (catchment management), working with NGOs and other organisations to improve the environment (biodiversity) and working with multiple stakeholders to reduce flooding impacts in the community. We have found that our customers support working in partnership, as long as we are mindful of doing our fair share and take steps to ensure the successful delivery of core service outcomes.

"In an ideal world, everyone, including farmers, should all do their bit, working together to come up with a better solution" – Customer, Strategic challenges – environment and biodiversity workshop

Catchment management is the area of partnership working where we have the most direct experience during AMP6. Through our deliberative research we gained explicit support from our customers to work with and incentivise farmers to change their practices to improve raw water quality.

We also received support from customers to work with environmental groups and NGOs to deliver benefits for the natural environment and protect vulnerable species. Participants in the deliberative research favoured a more stretching approach to biodiversity that encouraged us to work with partners, such as wildlife trusts, to improve our wider landholdings as well as protected areas.

The landbank initiative research and our deliberative workshop and depth interviews on flooding are key sources of insight to understand views of partnerships to alleviate flooding. Initially there were mixed reactions to a partnership approach, although many recognise that improvements would be difficult to implement in isolation. Ultimately, customers would expect to see clarity of the role for each partner in the approach to tackle flooding, understand the scope of the project and the financial and other resources brought by each partner to ensure the success of any project.

"That's what it's all about...working together. Rather than 'that's not my responsibility, that's yours'. It's got to be better to work together." – Customer, depth interviews, no flooding experience

Visitor sites

We know that customers are not always aware of our visitor site offering. Our most recent customer tracker wave (Q1, 2018/19) tells us that only 22% of customers are aware of our visitor sites, and many of the customers we spoke to in the qualitative part of our best in class customer service project were unaware of this offering.

"I've never even heard of the visitor sites. I'd definitely go, it's a good, cheap day out where we could get some peace and quiet." – Customer, Best in class service and experience research

In some cases, respondents were aware of reservoirs but didn't make the connection back to Severn Trent. Raising awareness of visitor sites, which receive around 4 million visitors per year, is an opportunity to increase positive engagement, enabling us to:

- give something back to customers – providing family days out and opportunities to support health and well-being;
- educate and engage on key messages; and
- work in partnership with local groups, community volunteers and charities.

Corporate social responsibility

Within the deliberative research we talked to customers about areas of wider Corporate Social Responsibility (CSR) in which we could take action.

Improving skills in the ST region

Supporting customers' health and wellbeing

Further action on the environment

In support of WaterAid

Improving access for everyone

On the whole, we found that participants were pleasantly surprised to hear about these areas of our work, because it demonstrates Severn Trent is a responsible and caring organisation. All of these areas were seen to have merit, and further action was supported in each of them. However, customers were clear that this should not be at the expense of the core service, and that excessive bill increases would not be supported. Priorities for areas of action were varied, largely depending on participants' personal priorities.

"They need to look after customers first and make sure they keep them healthy. This is the most important thing." - Workshop participant

Supporting customers' health and wellbeing receives strong support from many customers. In particular promoting the benefits of tap water resonated with customers, as it was seen to have a positive impact on the environment and on health.

Going further on the environment was seen as important, and a continuation of Severn Trent's existing activities.

Reactions to improving skills in the region were enthusiastic, particularly amongst stakeholders. For some customers this was felt to be less of a priority, as it was not necessarily considered to be within the role of the water company. However, giving opportunities to young people and engaging them in apprenticeships was seen to meet a pressing need in our region. Conversations on social media support this importance of Severn Trent providing apprenticeships and job opportunities, and are an opportunities to drive positive engagement in our brand.

"For me, it's about pushing science and engineering [apprenticeships]. There's a lot of skills that are being lost in those areas." - Workshop participant

Improving access to clean, safe drinking water for everyone in the world, through supporting the charity WaterAid was felt to have fewer benefits for customers, however some were supportive.

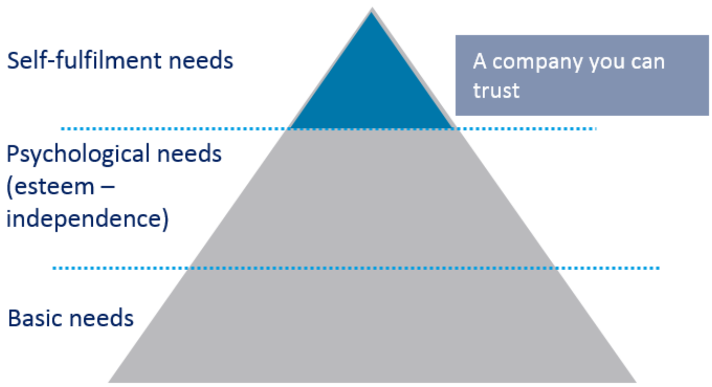
2.9 A company you can trust

Because a better service and lower bills alone aren't enough

Our customers expect more than just great service: they expect us to treat them as individuals, especially when things go wrong, and to do more for their local communities and society. To truly gain customer trust and confidence in what we do we need to do even more than this – customers need, and want, to know more about us to believe we are being fair and responsible.

“I think that Severn Trent takes its responsibilities much further than just delivering water and dealing with sewerage” - Customer needs research

This outcome sits firmly at the top of the hierarchy, however customers are clear that they expect us to deliver the core “day job” and for anything additional not to cause any detriment to that.



The importance of being a company which customers can trust runs across our insight programme, emerging in multiple research projects, including revealed insight from social media as well spontaneous feedback in our deliberative workshops and on Tap Chat.

We’ve used a range of insight to understand our customers’ views, including

Approach	Purpose
Social purpose research	Provides insight about the role customers think we should have in society, including views on nationalisation of water companies
Deliberative research	Allows detailed, informed discussion on important topics – in this case our broader role in society
Customer tracker	Quantifies changes in customer satisfaction, value for money and wider perception over time as well as capturing views on discrete issues

For the past 8 years we have been tracking customer perceptions in our customer tracker, including the following metrics:

- trustworthiness – how trustworthy we are to our customers;
- trust in drinking water – the extent to which customers trust the drinking water we provide;
- value for money – how customers rate the water and sewerage services they receive in terms of value for money;
- affordability – the extent to which customers agree that their water and sewerage bill is affordable; and
- overall satisfaction with Severn Trent.

From this research we know that in 17/18 66% of customers agree we are a trustworthy company. From our insight programme we have learnt that customers largely trust us to be making appropriate infrastructure decisions to manage the network in the short and medium term. While customers do not necessarily want to have an opinion on engineering detail, they value long term / sustainable options rather than short term fixes. However, when we move beyond the basic provision of water and wastewater services, there is more to do to show customers we are listening to them and that we create goodwill in the community – only 54% of customers agree we are listening to them and taking account of their point of view, and only 46% agree we create goodwill in the community.

In our deliberative research, and in discussions with members of our online community, Tap Chat, it becomes apparent that most customers know very little about us and the services and support we provide, or the contribution we make to their community and environment. As they become informed through the engagement, their perspective of us shifts markedly.

"I now see it from a different point of view" – Customer, deliberative workshop participant

"[I was surprised by] just how much Severn Trent does for our country and economy" – Customer, deliberative workshop participant

"If we had known about all of these things that they do, then I would have definitely put Severn Trent down as a company that I respect and admire" – Customer, social purpose research

Whilst customers tell us they want to know more about what we do, they don't want to be bombarded by communications. They want tailored information, at the right time, in a way that works for them. We have co-designed some principles for communication, which we discuss in the insight summary for the outcome "A positive difference in the community".

Being a responsible company

We know that for customers to trust us it's important that we are open, responsible and transparent in the way we act, and what we say.

"Trustworthy companies should be open with customers, employees and shareholders and react to concerns, topics, questions in an open and professional way at all times." - Customer needs research

Our customer tracker tells us that 70% of customers agree Severn Trent is a responsible company, and whilst this is a positive result we have probed this further in our social purpose research. We have found that bad customer experiences are front of mind when thinking of irresponsible companies, and being seen to prioritise profits above all else are a key factor in determining whether a company is seen as irresponsible at a wider level. Customers identify a number of actions which would lead them to believe a company is irresponsible:

- misleading customers;
- high executive pay;
- tax evasion;
- mistreating staff; and
- harming the environment.

In our research we find that customers are starting from a position where they ae unlikely to say that Severn Trent is irresponsible, but they are also unlikely to call Severn Trent responsible, because they know little about what they do.

In our research, and on Tap Chat, some customers spontaneously bring up executive pay as an issue. Many assume that Severn Trent's executives would be paid "unjustifiably" high salaries and further information does little to address concerns. Despite this, in our research Liv is seen as an asset to Severn Trent's public face, with many reacting positively to her biography.

Having a social purpose

Our customers are all starting with at least some level of cynicism towards private businesses, and particularly large ones. Whilst for most customers this cynicism plays a limited role in how they think about Severn Trent (because most customers are relatively happy with the service they receive and trust us because they haven't experience any issues) there are some latent concerns.

"I would give Severn Trent a 9 [out of 10 on trust]. They haven't given me any reason not to trust them. But they can't be perfect" – Customer, social purpose research

Many feel that on reflection it is odd that profit is made out of water, which is seen as a basic "human right".

"It's a basic human right to receive clean running water on demand, at a price that is affordable to all in society and not something I pay too much thought to." – Tap Chat, What matters most discussion

Current initiatives around helping customers in vulnerable circumstances and supporting the local community are supported and speak to some of these latent concerns. For example, support for customers in vulnerable circumstances is seen as an example of Severn Trent not prioritising profit above all else.

Community dividend

We asked customers for their views on the community dividend proposal. Like current initiatives, this received positive feedback as it chimes with people's ideas of what "acting with social purpose could mean for Severn Trent". Some customers are impressed by the proposal of a fixed annual portion of profits being directed back to the community, though others feel the impact is undermined by the reminder that the company makes a large amount of profit and 1% feels like a small amount. This helps underscore the need to better explain other mechanisms and benefits sharing with customers, along with our new community dividend.

An important unique feature of the community dividend is the customer advisory board. This presents an opportunity for customers to feel more involved and closer to the company, and takes the measure beyond more typical corporate schemes.

Renationalisation

Our research finds that the renationalisation debate is not front of mind for customers, although a small number of Tap Chat members have started a vibrant discussion on the topic.

"I've not heard about it. It might be good, you might get more help from the government. But then again, it's also "if it ain't broke, don't fix it"". – Customer, social purpose research

"The thing that concerns me most is that our water supply is provided by a private sector company. Wrong, wrong, wrong in my view" –Tap Chat, What matters most discussion

When prompted, there is some support for the idea in theory but little actual support in practice. In our acceptability research we find that only 30% are in favour of renationalisation, whilst 51% say they would not trust the Government to take over the running of their water company. These attitudes do have an impact on customer perceptions of our plan, which levels of acceptability being lower for those that favour renationalisation.

"I can't even trust the government to run our country, so I don't think they should be thinking about this as well" – Customer, social purpose research

Customers broadly report having positive experience with their water service and feel bills are reasonable compared to other utilities. Therefore the idea of renationalisation meets with some indifference. When prompted, customers tend to become firmer in their belief that Severn Trent should not be nationalised, mainly driven by two arguments:

- belief that the Government wouldn't be able to sufficiently prioritise or invest in the water industry, meaning water services would be better off in private hands; and
- details of the improvements water companies have made to services since privatisation tend to resonate in the context of customer's own experience of a broadly positive service.

PART 3: INDIVIDUAL RESEARCH SUMMARIES

In this section we present summaries of each of the key evidence sources. We have ordered these by the layers in the hierarchy, however it is worth noting that the findings from a number of projects cut across different layers.

	The lowest possible bills	Good to drink	Water always there	Wastewater safely taken away	A service for everyone	An outstanding experience	A thriving environment	A positive difference in the	A company you can trust
Wider fulfilment research									
Customer needs research and co-creation		●	●	●	●	●	●	●	●
Big Bus education co-creation with teachers								●	
Strategic challenges – the environment		●					●	●	
Customer priorities research	●	●	●	●	●	●	●	●	●
Tap Chat – what matters to you	●	●	●	●	●	●	●	●	●
Understanding our social purpose research									●
Reinvestment of proceeds from land sales				●				●	
Stakeholder research				●				●	
Employee engagement – Bike on a Boat tour			●					●	
Birmingham Resilience Project - comms		●				●			
Birmingham Resilience sensory experiment		●							
Marketing plan focus groups			●	●		●			
Psychological needs research									
Social tariffs and debt management research					●	●		●	
Social tariffs cross subsidy research					●				
Best in class customer service and experience			●	●	●	●		●	
Social media scraping		●	●	●	●	●	●	●	
Payment methods research					●	●			
Customer tracker	●	●	●	●	●	●	●	●	●
Needs of large developers						●			
Needs of non-household retailers			●			●			
Insight from customer facing employees						●			
Basic needs research									
PR19 willingness to pay research		●	●	●			●		
Revealed preference research			●						
Strategic challenges – supply and demand			●						
Water trading research			●						
Strategic challenges – resilience			●						
Strategic challenges – flooding				●				●	
Choices research	●	●	●	●	●		●	●	
Tap Chat – water efficiency campaign			●						
Tap Chat – asset health and maintenance			●	●					
Tap Chat – lead free schools and ODI design	●	●							
Real options approach	●		●				●		
Acceptability research	●								
ODI uncapping research	●								
A fair balance of charges	●								
Customer contact and complaint data		●	●	●	●	●			
Castle Donington incident review		●				●			

3.1 Wider fulfilment research

Customer needs research and co-creation – overall summary and “general” customers

Supplier	Britain Thinks
Fieldwork completed	October to December 2017
Aim of the research	To understand : • our customers’ needs and priorities as they relate to water • their current views and experiences of Severn Trent; and • how well we meeting customers’ needs, and where we could do more to improve their services
Demographics	• Consumers (not necessarily bill-payers) in England and Wales, reflecting the demographics of our customer base. • Specific groups consulted were: o ‘General’ customers o Customers in financially vulnerable circumstances o Customers in vulnerable circumstances due to health and wellbeing issues o Future bill-payers (aged 19-24) o Customers with a high engagement with waterways o Customers from our biggest faith and cultural groups (Muslim, Hindu and Polish) o Customers who have suffered service failures o Shared and indirect bill-payers • Fieldwork took place in Leicester, Coventry, Stourport-on-Severn, Shropshire, Birmingham, Wolverhampton, Tenbury Wells, Nuneaton, Nottingham, Lutterworth, Derby and Telford. • There are separate summaries for the specific groups **TOTAL CUSTOMERS CONSULTED (including all customer groups and co-creation): 178**
Research approach	• 2-week online communities • In-home depth interviews with vulnerable customers and those who have suffered service failures • Deliberative workshops (full day and half day) • Co-creation workshops (full day) • In all of these approaches, customers were ‘taken on a journey’. This meant we could explore their unprompted views, then give them information, before exploring in depth their *informed* views.
What did the research tell us that was new?	• Customers broadly share the same experiences, behaviours and views, with some important distinctions. • Respondents’ top priorities in life tend to be their family, good health, enjoying life, money and finances and the environment. Their lowest prompted priorities are giving back to society and the wider world. • In a service failure incident, customers want the company to resolve issues as quickly as possible. They want us to offer appropriate support to the right people, and communicate appropriately to everyone affected. • Most customers are not actively saving water, but many do take steps not to waste water. Only a small proportion are environmentally motivated; many on water meters are motivated by the financial saving. • Some customers who have dual flush toilets don’t know which button to press to save water. • Many customers had visited local reservoirs, but some had not been aware that they are owned by Severn Trent.

	• Respondents want the company to do more to identify and assist more customers in vulnerable circumstances. • Customers feel strongly that there should be more communication and more education from Severn Trent - particularly proactive promotion of the need for water saving, and of free water-saving devices provided by the company. • Many customers say they don't dispose of fat or oil down the sink; most do this to prevent sink and drain blockages. • Respondents are shocked at the number of sewer blockages in the region which are caused by customers disposing of the wrong things down the toilet and sink. They feel that Severn Trent should educate customers 'what not to flush'. • Customers don't want to be *bombarded* by communications, but want tailored information via their choice of channel at the right time. • Not everyone who considers themselves to be vulnerable in an incident is on the Priority Services Register – or is even aware that this exists.
What did we already know that the research validated?	• Water is a low saliency issue for customers – but, this shouldn't be seen as a problem. They trust the company to get on with the core day job. Some did not know that Severn Trent takes away and treats waste water. • Respondents are highly satisfied with the service they get from Severn Trent. Bills are perceived to be reasonable and few have experienced a problem. • The company is seen to respond well to service failure incidents. • Customers don't know much about the water cycle or about what we do outside of our core service - but they really engage with the issues when prompted. • Respondents felt much more positive about the company after finding out more about its work – especially the size of the region, the amount invested, services for customers in vulnerable circumstances and visitor sites. • When prompted about the work Severn Trent does to protect the environment, respondents see this as important. • There are mixed views on the value of water meters – more is needed to promote their benefits and dispel myths. Some feel that current 'dumb' meters do not meet expectations, compared with energy smart meters. Many are not aware that they can return to unmetered bills within two years of having a meter installed. • Few customers engage with water saving from an environmental perspective but are generally motivated by saving money. • If we get the response to service failures right, this can build positive sentiment. Even more honesty and transparency would build customers' trust in the company. • In communications, respondents want Severn Trent to use language which reflects their knowledge and language (e.g. using tangible measurements rather than technical ones, such as demonstrating amounts of water in terms of number of bathtubs or ££s cost, rather than mega litres).
Did the research contradict any other findings?	n/a

Customer needs - those in financially vulnerable circumstances

Supplier	Britain Thinks
Fieldwork completed	October 2017
Aim of the research	• To understand the specific needs of customers in financially vulnerable circumstances • To understand how they use and experience water • To understand their views of and experiences of Severn Trent • To understand the priorities for improvement of this group
Demographics	• Customers who are in financially vulnerable circumstances – i.e. in receipt of benefits and/or have low household incomes. A few are on a social tariff • Mix of other demographics • Locations included Birmingham, Leicester, Nottingham • One respondent was digitally disenfranchised
Research approach	In-home depth interviews (each up to three hours in length)
What did the research tell us that was new?	• In many ways, customers in financially vulnerable circumstances are no different from 'general' customers. • Like other customers, family is their top priority in life, followed by improving their lives and health and wellbeing. Despite relatively lower incomes, few spontaneously mention finances as being among their top priorities. None of these customers mentioned their career, the local community, giving back to society or the wider world as a priority. • While they may need and welcome financial support, they don't want to be made to feel 'different' from other customers. • These customers are broadly very happy with the service Severn Trent provides. Even in instances of service failure, the company's response has been praised. • Some customers are more restricted that 'general' customers in introducing water-saving measures due to living in rented housing. • Service priorities for these customers reinforce Severn Trent's hierarchy of needs. Understandably, this group places more importance on water affordability – although they acknowledge that their water bills represent good value. • These customers feel strongly that their water company should do more to inform them about ways they could save money. • Amongst these respondents, awareness of financial assistance schemes of their water company is low; few are making use of assistance schemes. In contrast, other utility companies such as British Gas and npower highlight the support they offer prominently on their bills. • Like other customers consulted in the project, these customers do not think they use water excessively. • These customers would welcome more information about the role of water meters and water-saving devices when these are likely to save them money. • These customers want more flexibility around billing – and to be made aware of the flexibility which is already available. Many want to tailor what they pay to their circumstances at any given time; some of these customers fall in and out of financial vulnerability.
What did we already know that the research validated?	On other topics, customers in this group had similar views and behaviours to 'general' customers.
Did the research contradict any other findings?	n/a
Any other information	n/a

Customer needs – those who have a high level of engagement with waterways

Supplier	Britain Thinks
Fieldwork completed	October 2017
Aim of the research	• To understand the needs of customers who have a high level of engagement with waterways • To understand how they use and experience water • To understand their views of and experiences of Severn Trent • To understand the priorities for improvement of this group
Demographics	• 12 customers who have a high level of engagement with waterways – anglers, rowers, lives on a houseboat, lives near the river. • Mix of other demographics
Research approach	2-week online community and a deliberative workshop in Stourport-upon-Severn
What did the research tell us that was new?	• These customers tend to be have a particularly strong connection to their local environment, and to the waterways they use most, in particular. • This group wants Severn Trent to focus its activities on protecting the *local* environment. For them, the wider environment is not necessarily a more important priority than it is for other customers. • These customers feel deeply about the natural habitats of local wildlife, about water scarcity affecting the waterway they use, and about Severn Trent not adversely affecting this waterway.
What did we already know that the research validated?	On other topics, customers in this group had similar views and behaviours to 'general' customers.
Did the research contradict any other findings?	n/a
Any other information	n/a

Customer needs – those from the region's largest faith and cultural groups

Supplier	Britain Thinks
Fieldwork completed	October 2017
Aim of the research	• To understand the needs of customers from the region's largest faith and cultural groups • To understand how they use and experience water • To understand their views of and experiences of Severn Trent • To understand the priorities for improvement of this group
Demographics	• 29 customers from Severn Trent's largest faith and cultural communities – Muslim, Hindu and Polish communities. • Fieldwork was conducted in Leicester • Mix of other demographics
Research approach	2-week online community, 4 deliberative workshops with customers from the Muslim, Hindu and Polish communities, 2-hour in-home depth interviews with two 'harder to reach' customers from faith and cultural groups
What did the research tell us that was new?	• These customers tend to have high levels of engagement with specific local cultural and religious community groups. They feel Severn Trent could be doing more to partner with these organisations when communicating with them as customers.

	• Muslim customers expressed high levels of concern about the impact of water meters on their bills, because they believe their water usage is higher than the typical customer, due to religious practices such as wudhu, washing before prayer, and because they typically have larger households. • Polish customers said that many from their community are first generation immigrants to the UK, so levels of knowledge around the water system were generally lower than those of other customers. For example, they would like Severn Trent to provide information to them about which items should not be disposed of down toilets and sinks, and about how they can save water. English language skills are lower for this group too, so respondents would like tailored information in Polish. • These respondents suggested that Severn Trent could communicate with them very effectively via local community organisations such as mosques, temples, the Polish community centre, schools, charities and local councils.
What did we already know that the research validated?	On other topics, customers in this group had similar views and behaviours to 'general' customers.
Did the research contradict any other findings?	n/a
Any other information	n/a

Customer needs – those in vulnerable circumstances due to health and wellbeing issues)

Supplier	Britain Thinks
Fieldwork completed	October 2017
Aim of the research	• To understand the needs of customers in vulnerable circumstances due to health and wellbeing issues • To understand how they use and experience water • To understand their views of and experiences of Severn Trent • To understand the priorities for improvement of this group
Demographics	• 20 customers who are living in vulnerable circumstances due to health and wellbeing issues. • Customers with a very wide range of disabilities and health conditions were consulted • Mix of other demographics. • Fieldwork was conducted in Coventry, Birmingham, Leicester and Nottingham
Research approach	In-home depth interviews, each lasting up to three hours
What did the research tell us that was new?	• Those we spoke to are very happy with the service provided by Severn Trent and trust the company to good job and for the most part, these customers do not see themselves as having specific needs with respect to their water and waste water service. • As such, their priorities are very similar to those of other customers. They do not want to be made to feel 'different' due to their vulnerable circumstances. • There is a consensus that Severn Trent doesn't fully understand the needs of these customers, but there is also no expectation that they should. Many respondents did not see themselves as being any more vulnerable than other customers. • Respondents see older people as potentially needing more support from Severn Trent. Many talked about concerns they have for their own parents, and how they might benefit from the valuable support services from the company which they were not necessarily aware of prior to the interview.

	• Some would find any enquiry from Severn Trent about their health too intrusive, and would rather keep information private. For this reason, some suggested that any request for support should come from the customer, rather than from the company. It could potentially upset customers if they thought Severn Trent saw them as more vulnerable or 'needy' than they see themselves. • That said, Severn Trent could communicate much more effectively with this group to offer support proactively. For example, very few respondents were aware of the Priority Services Register and there is limited awareness of the option for alternative format bills. • These respondents would be fairly happy if their health information were shared between Severn Trent and other trusted organisations, provided they are informed how it is being shared, and with whom. They expect such information to be shared sensitively and in a way that does not result in cold-calling. • Specific needs which Severn Trent could be addressing better include ensuring that all customers with mobility issues are provided with bottled water in an incident. • Customers also wanted to see more understanding and support for people with mental health conditions, especially around paying bills. We heard that customers with depression can ignore bills, and that Severn Trent should be aware this can be a reason for non-payment. In these circumstances, debt management contact may be more successful by phone than letter. • Customers with visual impairments would like bills in large print, but the request for this should come from the customer. • Some customers struggle with reading and digesting large amounts of text, and would prefer a phone call or very concise and engaging written information.
What did we already know that the research validated?	• Preferences for communication vary between customers, depending on health conditions, age and life-stage • Most customers use water services in the same way as other customers. The exception is those with certain long-term health conditions. For example, it is important for diabetes patients to stay hydrated, which means they are drinking and flushing the toilet more than others. Those on dialysis need water as part of their treatment. Many respondents mentioned that they need water to take their medication. • Those with physical disabilities might be more vulnerable in the event of a supply interruption if they can't leave the house to get bottled water; this caused some concern. However, some keep bottled water in reserve, for this eventuality.
Did the research contradict any other findings?	n/a
Any other information	n/a

Customer needs – future customers and shared / indirect bill-payers

Research Piece	**Customer needs – future customers and shared / indirect bill-payers**
Supplier	Britain Thinks
Fieldwork completed	October 2017
Aim of the research	• To understand the needs of future customers and shared bill-payers • To understand how they use and experience water • To understand their views of and experiences of Severn Trent • To understand the priorities for improvement of this group
Demographics	• 8 future customers (aged 19-24, live in the Severn Trent region, but do not pay bills). • 8 shared or indirect bill-payers (pay via a housemate or family member).

	• Fieldwork was conducted in Coventry and Birmingham. • Mix of other demographics.
Research approach	Future customers took part in a 2-week online community and a half-day deliberative workshop. Shared bill-payers took part in a half-day deliberative workshop
What did the research tell us that was new?	• These respondents know that water is an essential part of their lives, but it is one they rarely think about. • These audiences do not have the 'citizen' perspective seen in other customer groups. Their friends, family, enjoying life, career and finances are all important to them, whereas their local community and the environment are less front of mind. • These customers generally report higher water usage and fewer environmentally friendly behaviours relative to other customers. They are not particularly environmentally engaged, nor motivated by financial gains, to save water. • Many respondents say that having long baths is one of their luxuries in life; they are reluctant to change their behaviour, either in the interests of protecting the environment or saving money, even if their home has a water meter. • Having a water meter is of little interest to these groups. The shared bill-payers in particular like the predictability of unmetered bills. Having a meter would make it more difficult to split the water bill, and may cause arguments between housemates. • As non-bill-payers, their engagement with Severn Trent is low, but they are fairly positive about the organisation. At this point in their lives, Severn Trent is just not important to them. • An area that does interest them is knowing what they should not flush down the toilet in order to prevent blockages and fatbergs. They are also interested to know what unexpected items had been found in the sewers. Respondents say that promoted social media posts, humorous communications in public toilets are the best way to communicate these messages. • They would also like neighbourhoods and companies which create the worst sewer blockages to be named and shamed. • They also suggest Severn Trent contributes to a documentary about fatbergs. • Most respondents said they did not know that moist wipes should not be flushed down the toilet. They feel strongly that the packaging on such wipes ought to make this much clearer. • The main opportunity for engaging with these audiences is when they become named bill-payers and homeowners. These respondents believe at that point they will become more receptive to Severn Trent's wider work, how to save water and so on. At this point, respondents suggest that Severn Trent works with estate agents to provide new home owners with key facts about reducing water consumption to save money and how to prevent sewer blockages. • All of these respondents use social media, but none were aware that Severn Trent uses these channels. A service failure would cause them to seek updates online. • Those intending to buy a home in the future said they might follow Severn Trent at that point, in order to be kept updated if there were issues in their local area.
What did we already know that the research validated?	n/a
Did the research contradict any other findings?	No, but this research has challenged perceptions that younger consumers are likely to be more motivated to do their bit for the environment and to be financially motivated to save water. We have found the opposite to be true.
Any other information	n/a

Customer needs – those who have experienced service failures

Research Piece	**Customer needs – those who have experienced service failures**
Supplier	Britain Thinks
Fieldwork completed	October and November 2017
Aim of the research	• To explore customers' experience of service failure and perceptions of the way it is handled by Severn Trent • To understand the needs of customers who have experienced service failures • To understand how they use and experience water • To understand their views of and experiences of Severn Trent • To understand the priorities for improvement of this group
Demographics	• 24 customers who have suffered one or more service failure in the last two years. • Service failures included: low water pressure (x5), Do Not Drink notice, leakage, sewer flooding, unplanned supply interruption, overrun works. • Included 3 customers who are digitally disenfranchised. • Mix of other demographics
Research approach	24 in-home deliberative depth interviews (each up to 3 hours) in nine locations: Derby, Birmingham, Lutterworth, Telford, Nottingham, Nuneaton, Tenbury Wells, Wolverhampton and Shropshire
What did the research tell us that was new?	• Customers view some types of service failure as 'unavoidable' and are more understanding of them, e.g. a weather incident which leads to a supply interruption. Conversely, other kinds of service failure are seen as being 'avoidable' meaning customers can be less understanding, e.g. a worker accidentally drilling through a water supply pipe, causing a supply interruption. • Four of the five customers who have experienced **low water pressure** (especially in upstairs bathrooms) say this issue is ongoing. Three experienced complete supply interruptions as a result of low pressure. Two of these customers have had to install pumps for their showers and/or to boost the water pressure in upstairs bathrooms. None of these customers had contacted Severn Trent about their low water pressure. • Five respondents had had a **Do Not Drink notice**. One of these was not notified by Severn Trent. Some felt they should have been alerted more quickly. Some would have liked a text twice a day until service was resumed. Where bottled water was supplied, this was well received. Some would have liked more communication from Severn Trent, especially in the early stages of the incident. In one case, the lack of information meant that false rumours spread, which made customers more anxious. • Severn respondents had experienced **leakage** near their homes. They felt the company responded quickly to their initial phone calls. In a few cases, the leak took several days to fix. Three of these customers have water meters and were very worried about the effect of the leak on their bills. One customer, whose leak had been ongoing for more than a year, was angry and upset that it was taking so long to resolve, and that the company had not suspected a leak when the customer's water bill was extremely high. • Three customers had experienced **sewer flooding**; in each case this was caused by high volumes of rainwater overwhelming sewers. All wanted more information from Severn Trent. There was some confusion about whether the problem was the responsibility of the water company or the council. • Where incidents are perceived to have been dealt with well, this raises customers' levels of trust in Severn Trent. In particular, effective communication during incidents contributes substantially to customers' overall satisfaction with the company. • In the event of a service failure, customers expect to be notified quickly, and to receive regular updates telling them how long the disruption is likely to last. Customers also want *proactive* communication from Severn Trent; they do not want

	to have to chase the company themselves. Not all of the respondents received this level of service. • Customers tend to expect compensation only in the most disruptive service failure incidents, e.g. unexpected supply interruption for an extended period (6 hours +) • During an incident, customers want to know whether their water is safe to drink. • Many of these customers knew that bottled water would be distributed during an incident; they either had personal experience of this, or had seen it on the local news when there had been incidents in the region.
What did we already know that the research validated?	• These customers expect Severn Trent to rectify service failures as soon as possible. • During their service failure incident, many respondents reported some disruption to their daily routines. As such, some had thought more about water, and about how and when they use it compared with other customers consulted in this project. • Despite experiencing service failures, these customers are generally happy with Severn Trent. They trust the company to supply drinkable water on a continuous basis and feel the service is good value. • Key areas for improvement are better communication about service failures, and providing more information on Severn Trent's role.
Did the research contradict any other findings?	n/a
Any other information	n/a

Big Bus - co-creation with teachers on customer education proposals

Supplier	Britain Thinks
Fieldwork completed	January 2018

Aim of the research	• After consulting with experiential experts on how to best engage with children, Severn Trent have devised a mobile and digital education solution which is both inspirational and educational: The big bus
	• Severn Trent then commissioned BritainThinks to conduct research with teachers in Coventry and Shelton to test the idea and develop it further
	• Specific objectives included :
	  o Understanding how ST should make contact with schools about the big bus
	  o Identifying the best way for ST to book the visit in with schools
	  o Understanding the logistics of the visits from the teachers' perspective
	  o Exploring responses to the draft vehicle content

Demographics	Teachers and former teachers in the Severn Trent region
Research approach	• Four focus groups with 24 current and former teachers in January 2018 • 2x groups in Coventry • 2x groups in Shelton • Teachers were recruited with the help of Severn Trent's educational team, and included teachers from a range of schools
What did the research tell us that was new?	• Overall, teachers reacted positively to the idea which is felt to be different from anything they have seen before. They were convinced children would love the immersive, hands on and stimulating nature of the vehicles, and were also enthusiastic from an educational perspective • Teachers had a number of practical concerns that they shared

	• Teachers worked through the "journey" of the visit, from the initial contact through to planning and logistics and advance materials, to the visit itself and the post visit review. • Teachers had general feedback on the activities and vehicles, including stressing ability variability due to special needs and language skills and clear educational objectives • An accreditation scheme was felt to be the best way to engage schools and demonstrate the impact of the buses To work for schools, the Big Bus will need to have the following characteristics ○ Inspirational and educational for children ○ Flexible and customised to enable adaptation to school' needs (physical space requirements, languages and disabilities) ○ Direct and explicit links to the curriculum across a range of subjects ○ Easy for teachers and schools to organise (one lead contact to arrange visit, pro forma health and safety forms)
What did we already know that the research validated?	
Did the research contradict any other findings?	n/a

Strategic challenges – the environment

Supplier	Britain Thinks
Fieldwork completed	October 2017
Aim of the research	Understand how the environment fits with other concerns spontaneously, both personally for customers and as a priority for action for Severn Trent Understand customer views in particular on catchment management, the water framework directive and biodiversity
Demographics	One full day deliberative workshop with 24 customers Ten in home depth interviews with customers in vulnerable circumstances TOTAL CUSTOMERS CONSULTED: 34
Research approach	The research took a deliberative approach - participants were taken on a 'journey' so that we could explore the things that matter most to them and their priorities (both spontaneous and when informed about Severn Trent's activities). This approach allowed us to provide information, building participants' knowledge so that they were able to make an informed decision about different options and priorities.
What did the research tell us that was new?	• Severn Trent should take further action in protecting and improving the environment as much as possible, even on sites that they don't own or that customers don't have access to • Respondents were not concerned about the distinction between legal requirements and going beyond these with further action – this was felt to be a largely artificial distinction • Severn Trent should raise awareness and educate customers on their environmental activities, as well as providing reassurance and communicating how customers' money is invested • Severn Trent should work in partnership to tackle environmental issues and improve the environment • Customers supported working in partnership with farmers to tackle pollution of water sources, but wanted treatment solutions to be the fall back. They wanted

	reassurance on how Severn Trent would ensure the success of catchment management solutions • Customers supported a faster pace on water framework directive improvements, provided it didn't impact the quality of delivery. In terms of prioritisation, customers felt that the worst rivers should be tackled first and those which benefit the greatest number of customers • Biodiversity isn't a front of mind issue and respondents struggled to see how their company's actions related to it. However, further information was received very positively and resonates with instinctive beliefs about the importance of protecting the environment for the future
What did we already know that the research validated?	• Customers care significantly about the environment, and in particular derive enjoyment from personal interactions with their local green spaces. • They recognise the importance of protecting it and ensuring that it is there for future generations, however in day to day life few take steps to mitigate their environmental impact
Did the research contradict any other findings?	

Customer priorities research

Supplier	Future Thinking
Fieldwork completed	August and September 2016
Aim of the research	The objective of the research was to understand: • What matters to people, communities and society as a whole. • What Severn Trent should be doing both now and in the future to be more aligned with the goals of customers, communities and society.
Demographics	Consumers in England and Wales, reflecting both the demographics and more specialised groups. Specific groups consulted were: • "General" customers • Specialist needs/interests. For example: farmers, anglers, ramblers. TOTAL CUSTOMERS CONSULTED: 68
Research approach	The research was qualitative and contained elements of deliberative and co-creative research. • 9 workshops of 3 hours each. 5-9 participants per workshop. These focused on the 'general customer' (i.e.: those without specialist interests/needs) • 12 specialist depth interviews with farmers, anglers, ramblers, birdwatchers etc. • Online community panel. Recruited from participants in the workshops, 20 customers took part exploring themes in more detail. The research approach was different from previous work, focusing on people's lives rather than 'water industry themes'. Only after understanding what mattered to people's lives did any exploration of where Severn Trent did or could make any impact.
What did the research tell us that was new?	• Severn Trent already has a significant positive contribution to people's everyday lives, albeit mostly invisibly and outside peoples conscious thought. In addition, there are many opportunities to strengthen and add to activities that fulfil customer needs at every part of Maslow's hierarchy. • 7 themes were revealed: • The Desire to Enjoy Life: doing those things which maximise the pleasure and enjoyment of life and removing the obstacles, barriers and irritations. Examples include creating opportunities for relaxation, providing the context for family to

	spend time together, minimising disruption and providing certainties we can depend upon. • Society & Giving back: having stable, functioning communities that have a shared sense of values is important. Being an active member of society and helping others (especially those who are vulnerable) is seen as vital for individuals and corporations alike. • The Environment: making a positive difference to the environment through activities that are sustainable is also important for business and individuals alike. For many, the themes included minimising waste, doing more for less, encouraging flourishing ecosystems, recycling and the use of increased renewable energy sources. • Money & Finance: are seen as integral to quality of life. The ability to pay for everyday bills plus extras such as childcare or even caring for elderly relatives was cited. Having something left over for treats and fun times directly feeds in to the first theme of enjoying life. • Work: integral to many people's lives is a means to provide for themselves and their family and to derive a sense of self-worth and satisfaction. Work occupies such a large portion of people's lives that the right work life balance is vital in order that the other important things in life can be enjoyed. • Health: mental and physical wellbeing, having a reasonable level of fitness and ageing well are all a priority. Doing things to stay healthy matter to many people. • The Wider World: people are concerned about global and political events, especially where these create instability and fear. A concern about the economy, terrorism, inequality, religious fundamentalism, immigration and corruption are all significant issues.
What did we already know that the research validated?	• Water and our industry is largely something people do not think of unless there is a problem or the media brings it to customers' attention. However, the impact of Severn Trent's activities already makes a big difference to people's lives.
Did the research contradict any other findings?	No. This research seeks to understand the bigger picture; it is not framed in terms of water industry themes, at least to begin with.
Any other information	Our research looked to the person first and then the customer. Viewpoints obtained in this way are informed by a more holistic understanding of people and communities and then understanding how we can make a positive contribution. In this way our research shows that needs and motivations drive and informs the choices that people make every day. These needs range from basic, for example the need for water, food and shelter, through to psychological needs such as friendship and finally, those things which give people a sense of purpose and add meaning to their lives. When seen from the customer's perspective it's easier to appreciate why water seems to be taken for granted: it is a basic need that, once met is not given much thought. With that need met, concern can be given to other needs. Giving customers information and choice means more psychological needs are met, for example through proactive customer service that alleviates worry and uncertainty or by giving customers the tools to reduce their bills through water efficiency. Customers and their families can also benefit from our public access sites such as reservoirs. These can provide the opportunities for people to meet many different needs. For example, public access sites enable important yet basic needs to be met in terms of health and wellbeing, whilst providing people with opportunities for self-fulfilment through nature and recreation.

Tap Chat – What matters to you discussion

Supplier	Join the Dots
Fieldwork completed	March to May 2018
Aim of the research	• To get our new community chatting and engaging with each other. • To understand what interests, needs, concerns and questions customers have around their water and waste services now and in the future.
Demographics	• All Tap Chat members were eligible to participate. • 476 panel members participated in the discussion. • A total of 1,119 comments were left. This was Join the Dots' most active discussion thread for any client, ever! TOTAL CUSTOMERS CONSULTED: 476
Research approach	Open-ended discussion (bulletin-board style). Participants could access the discussion at any time to read, post and respond to the questions and comments of others. Discussion was moderated by Join the Dots.
What did the research tell us that was new?	• n/a
What did we already know that the research validated?	Discussion topics tended to fall into one of the following categories: • Customers want reassurance from Severn Trent that their water supply is reliable, of high quality and safe to drink (free of chemicals, pollutants and plastics). Customers expect no taste/ odour/ discolouration, and express concerns about hard water. • Customers care about the environment and want to know that Severn Trent is thinking about the sustainability of water. • Customers want more transparency clear and easily accessible information about bills, price increases, how their money is spent, water meter technology and the extent of their responsibility for pipes. Some customers are unaware that they can choose the frequency of their bill payments. • There were mixed reviews about Severn Trent's customer service. Some expressed a desire for the flexibility to choose their supplier. • Customers want more information, particularly about what Severn Trent does, about the need to save water, about how they can do so, and about how the company plans to manage the impact of population growth and climate change. • Low water pressure is an area of frustration for some customers, particularly at peak times or when more than one water outlet is in use in their home (e.g. downstairs tap and upstairs shower).
Did the research contradict any other findings?	n/a
Any other information	n/a

Understanding our social purpose

Supplier	Britain Thinks
Fieldwork completed	16 – 25 July 2018
Aim of the research	• Explore consumer perceptions of responsible and irresponsible businesses, and Severn Trent's own relationship with responsibility • Understand how Severn Trent's broader role as a corporate citizen is seen by customers, in the context of their views towards other businesses; including views of Severn Trent's CEO, and in the context of views towards company leadership in general • Understand customer views about a range of corporate social responsibility (CSR) initiatives that are proposed or currently on-going. These include a new concept for a community dividend with a customer advisory board and ongoing initiatives; these include the Severn Trent Trust Fund, support for vulnerable customers, employee volunteering and WaterAid support • Gauge customer reactions to work-in-progress messages about the company's activities and current position within the water industry • Explore what Severn Trent could do to be seen as a business driven by a positive social purpose • Understand customer views of the re-nationalisation of the water industry
Demographics	• Research was conducted in four locations: Nottingham, Coventry, North Shropshire and Mansfield • Mix of age, gender, ethnicity, life-stage, SEG and meter status • In Mansfield, half of respondents believe the water industry should be re-nationalised. • In North Shropshire, all participants live in a rural or semi-rural location • Of the 62 participants, just over half said they voted Leave in the Brexit referendum (32). 22 said they had voted Remain and 8 said they did not vote in the referendum. TOTAL CUSTOMERS CONSULTED: 62
Research approach	• 8 focus groups with household customers (56 participants) • 6 depth interviews with customers in vulnerable circumstances (financially vulnerable, health and wellbeing vulnerable, or both)
What did the research tell us that was new?	• Customers have at least some level of cynicism towards private business – particularly large businesses. They believe irresponsible businesses try to maximise profit at the expense of all else e.g. customers, service, staff etc. For most, this means that they are cautious and sceptical about large private businesses' motivations. Amongst a small number, there is little or no trust in private businesses. • For most customers, this cynicism towards private business plays a limited role in how they think about Severn Trent. Most customers are starting from a position where they are relatively happy with Severn Trent and are likely to say that because they have not experienced service failures, they broadly trust Severn Trent. On reflection though, many do feel it is odd that profit is made out of water, which is seen as a "public good" or a basic "human right". • There is some support for re-nationalisation *in theory*, however, this support diminishes greatly when customers consider what this would mean *in practice.* When prompted with arguments for and against nationalisation, customers tend to conclude that the water industry shouldn't be nationalised, with the argument that Government wouldn't be able to give the sector sufficient attention or investment. • Severn Trent's current CSR initiatives are unlikely to impact on the attitudes of the small number strongly in favour of nationalisation. However, they are broadly well received by most other audiences, and speak to some of the latent concerns customers have about a private company delivering water services. Support for vulnerable customers who cannot pay their bill is seen as an example of Severn Trent not prioritising all else above profit.

	• The community dividend concept received similarly positive feedback to Severn Trent's other initiatives, and the advisory board element presents an opportunity to make customers feel more involved with the company. The dividend concept chimes with people's ideas of what 'acting with social purpose' could mean for Severn Trent. • The fixed annual portion of profits being directed back to the community impresses some customers, but for others, it is a reminder that the company makes a large amount of profit and this could undermine its impact. The more unique selling point is the customer advisory board. By indicating that customers will be given a voice in the process takes the measure beyond more typical corporate schemes. • While Liv Garfield's pay is seen as problematic, she is also seen as an asset to Severn Trent's public face, with many reacting positively to Liv's biography. Some customers spontaneously bring up executive pay as an issue and when prompted many assume that Severn Trent's executives would be paid 'unjustifiably' high salaries. Information about Liv's salary does little to address customers' concerns. • However, information about Liv's background is seen as impressive and gives a human face to the company's activities - she has 'worked her way up' and juggles life as a mum with work, so comes across as more relatable and less elitist than a typical CEO. The female participants found her success fairly inspiring and a minority found the charitable initiatives more credible when attached to her presence in the company. • Nationalisation is not front of mind and the best 'insurance' against this issue is Severn Trent doing what it does as well as it can. • The greatest vulnerability to nationalisation is excessive profit and executive pay. The former is best addressed by striving to offer customers value and advise them on how their bills can be reduced, as well as talking about investments made in future infrastructure.
What did we already know that the research validated?	• Despite a backdrop of growing cynicism in the UK towards institutions and companies, Severn Trent is trusted to do a good job by its customers. There is, however, an opportunity to remind people about the scope and scale of Severn Trent's core activity, as well as to talk more about how much Severn Trent prioritises 'social purpose', especially by 'giving back' to the community. • Most customers are unaware of Severn Trent's current initiatives around helping vulnerable customers, supporting charities and the local community. Once informed about these, customers are broadly supportive and say that they are in line with what they would expect from a water company which acted with social purpose.
Did the research contradict any other findings?	In our acceptability research we find that 30% want water companies to be renationalised, however this is a prompted response.
Any other information	n/a

Reinvestment of proceeds from land sales research

Supplier	Future Thinking
Fieldwork completed	August 2016
Aim of the research	To determine what customers would like Severn Trent to do with the customer share of any proceeds from the sale of land that is deemed to be surplus to our requirements. To understand: • Given a choice of bill reductions or investments in activities such as flood defence, what are customer views? How do those views change depending upon the magnitude of investment or bill reduction? • What type of flood defence schemes, with their different benefits and costs, do customers favour?
Demographics	For the quantitative research a representative mix of customers TOTAL CUSTOMERS CONSULTED: 1,300
Research approach	Online survey and deliberative workshops and focus groups 2 phases of quantitative research – 1,045 online surveys primary followed by 200 secondary survey varying the value of the land sale Qualitative – 2 deliberative workshops and 3 deliberative focus groups across Nottingham, Birmingham, Gloucester and Shrewsbury
What did the research tell us that was new?	• Where small bill reductions are concerned, most customers prefer Severn Trent to invest rather than reduce bills. • There is a second factor at work: a customer desire that money (especially if the amount is considered negligible to them) is best used to benefit the greater good. Thus investment in small schemes is preferred to a single/few large schemes. • Overall customer preferred investment in local schemes rather than a reduction in the bill • Around a third still expected the money to offset future bills • Customers felt that any investment should benefit more than just a select few • Less than one third felt that it was important to help the local business community • The most important idea was considered to be helping socially deprived areas that are most exposed to flood risk.
What did we already know that the research validated?	• Where the bill reduction is seen to be meaningful (typically £20-£50) then the preference would be for all customers to see a reduction in their bill. • That small bill reductions (less than £10 per annum) are generally not noticed nor considered important by customers.
Did the research contradict any other findings?	No

Stakeholder research

Supplier	In-House
Fieldwork completed	December 2017
Aim of the research	• To understand the medium-term and longer-term priorities, opportunities and challenges of our stakeholders. • To provide insight into the ways in which Severn Trent can align its activities with stakeholder needs. In particular, we wanted to: • Identify the issues that stakeholders believe will have the biggest impact on their organisation over the next 25 years. • Identify which of the UN's 17 Sustainable Development Goals they think are most relevant to what their organisation is seeking to achieve in our region. • Explore opportunities for Severn Trent and stakeholders to collaborate in areas of mutual interest and concern.
Demographics	• Stakeholders of Severn Trent – the survey was sent via email to approximately 600 Severn Trent stakeholders across England and Wales • Sample is 'self-selected', no quotas or formal sampling framework was applied. • Almost half of respondents (49%) work in local government. 16% work for an environmental non-governmental organisation (NGO) and 7% represent a water industry regulator or policy maker. 6% work for a business organisation, 6% for a customer support or advisory body and 3% for a rural organisation. 13% describe their organisation in another way, for example, a charity, a department of national government and a local resilience forum. Other organisations that respondents work for include a police service, a union and a university. SAMPLE SIZE: 100
Research approach	• Self-completion, written questionnaire containing ten questions.
What did the research tell us that was new?	Stakeholders were asked to select up to five prompted issues which, over the next 25 years, they think will have the biggest impact on their organisation. The issues most commonly selected from the list by respondents were: health and wellbeing (56%), infrastructure provision and capacity (54%), flooding (50%), climate change (48%) and resilient, sustainable and green urban areas (41%). Among the issues of medium magnitude for this group of stakeholders were: workforce and skill availability (36%), future employment and education opportunities (34%) and affordable, reliable and secure water (30%). Poverty and social inequality (29%), biodiversity loss (29%), affordable, reliable and secure energy (21%) also fall into this group. The issue least commonly thought likely to have a big impact was security (9%). The following themes were uncovered from the verbatim responses: • Profound appreciation for the health and wellbeing challenges faced by people, ranging from obesity to mental health. • The connection between the provision of access to outdoor spaces that are enjoyable and reducing these problems is seen as well known. • The absence of health and wellbeing is seen to place financial and other strains on services and infrastructure leading to a spiral of problems. • Increased city dwelling, population growth and urbanisation (especially 'concreting over' natural drainage) are seen as challenges both for wellbeing and the management of flooding. • Whilst there is the need for solutions, pressure on governmental/local authority funding means stakeholders are looking to other solutions, including private companies as well as individual behaviour change. • There is a need to leave a lasting and better legacy of infrastructure for future generations. This infrastructure needs to effectively help with flooding, climate change and be capable of meeting the changing demographic challenges envisaged for the future.

	Respondents were also asked to describe, in their own words, other issues which impact their organisation. The issues mentioned most often include:
	• Uncertainty around Brexit, particularly in respect of:
	  ○ skills shortages
	  ○ changes in markets
	  ○ changes in agriculture and payments to farmers
	  ○ possible weakening of regulations and environmental protections
	• Political uncertainty, changes of government and possible renationalisation of privatised industries
	• Continued austerity and cuts to public service budgets
	• Welfare reform, particularly the rollout of Universal Credit
	• Demographic changes
	• Economic growth, including around HS2 and new large housing developments
	• The need for affordable housing
	• Impact of new technology in all areas of our lives
	• The need for repair and maintenance of Severn Trent's infrastructure

What did we already know that the research validated?	• Stakeholder research was conducted at the last price review with a greater focus on Severn Trent's business plan. • This research shows the importance of some key 'higher-order' challenges such as health and wellbeing are also important for many stakeholder organisations. • Private (rather than government) approaches to tackle society's challenges are seen in much of our research to be vital in the future. • Many stakeholders commented that the company already collaborates effectively with their organisation. Many would like to see this joint working continue and / or increase in scope and level of commitment.
Did the research contradict any other findings?	No
Any other information	n/a

Employee engagement (Bike on a Boat tour)

Supplier	QA
Fieldwork completed	November 2017
Aim of the research	To explore and synthesise the ideas generated by employees as a result of the "Bike on a Boat" Tour, in which four questions were put to employees: 1. What's the one thing that we know that we should be doing for our customers that we are currently not? 2. One big idea could transform our services and the role we play in our customers' lives – what's your big idea? 3. How could we get our customers more excited and interested about water (and waste)? 4. We need to revolutionise our thinking, really innovate, if we're going to achieve a 15% leakage challenge, and 50% water saving challenge. We want your big, bold ideas!
Demographics	• Severn Trent employees • Sample is 'self-selected', no quotas or formal sampling framework was applied. SAMPLE SIZE: 3,549
Research approach	• Self-completion, written questionnaire containing four open ended (text) questions. • Responses were thematically coded and analysed using a mixture of quantitative and qualitative techniques.
What did the research tell us that was new?	• Employees considered getting the basics of customer service right consistently as the key area to improve upon. • Initiatives that change behaviour through both increased metering penetration and education are important. • Employees see increased metering as crucial to the future of Severn Trent. • Many staff discussed smart meters as a way to engage customers with their water consumption, as well as offering data collection and supply monitoring potential. • Education and engagement was also seen to be a key way get customers more excited and interested in water and waste.
What did we already know that the research validated?	• Getting the basics right in terms of customer service is crucial and a key expectation. • Customers also, in general, support increased metering and see the need for greater education.
Did the research contradict any other findings?	No
Any other information	n/a

Birmingham Resilience Project (BRP) - communications

Supplier	Consumer InSight (Ci)
Fieldwork completed	March to May 2017
Aim of the research	To understand: • Customer perceptions of current water quality in the Birmingham area and explore knowledge and understanding of current water source and of the BRP, including reactions to a potential change • Can people discern a difference in the taste/smell/appearance of the current water supply and the alternative supply • What kinds of customers will react to a change, what this reaction will be, and strength of response • How habits and usage might change with the new water supply • The most effective manner of communicating about change in water source
Demographics	Mix of location across the specific area affected by the BRP change in supply. Mix of age, life stage, ethnicity, SEG, gender, metered vs unmetered.
Research approach	• 500 taste tests (current source vs new source) (hall tests) • 6 x focus groups • 600 telephone interviews • Workshop with 25 customer-facing Severn Trent employees • TOTAL CUSTOMERS CONSULTED: 1,148
What did the research tell us that was new?	• Differences between hard and soft are not well known. And knowledge about the Elan Valley Aqueduct as source is common only amongst older age-groups. • A proportion of customers are likely to notice the change if we change their supply source. Taste was perhaps one of the less prominent issues, but 8 out of 10 respondents in the halls noticed a difference. Whilst this is almost certainly higher than we could expect of 'true life' (due to the research effect), we have to assume that a significant proportion of customers will notice the difference in their water • Customers want to be forewarned about the change so they do not worry • We should not include too much detail, but to have detail available for those who want it. Customers want the reasons behind the change, alongside light detail on 'what' is actually taking place and the ongoing role of BRP. • In comms, highlighting that the new supply source is 'harder' than the current source could be problematic, resulting in customers assuming hard water (limescale) will ruin their appliances. There is also a concern that this change may result in poorer quality water permanently. • For initial communication about the change/project, a physical letter is preferred • Customers had both operational and water concerns. Both will need to be tackled in initial comms; either by minimising or highlighting certain areas of concern
What did we already know that the research validated?	• The Birmingham area is perceived by many as having the best water quality in the country. The fact that the water is 'soft' is an oft-cited reason why. • Severn Trent is very much seen as a service, rather than a brand • Severn Trent is a trusted – if silent – supplier of wholesome drinking water • Water is not 'front of mind' for customers - in part, due to extreme trust in the safety of water supplied
Did the research contradict any other findings?	8/10 of customers noticed a difference in the hall tests, compared to the sensory research in which there was no noticeable change in views. However the sensory research was a real experiment of a blend of new water, rather than 100% new source.

Birmingham resilience sensory experiment (alternative raw water sources)

Supplier	DJS
Fieldwork completed	August 2016
Aim of the research	The aim of the research was to determine to what extent, if any, customers could notice a change to their water supplies corresponding to the kinds of raw water source variations to be expected when the Birmingham resilience scheme is in operation.
Demographics	• Broadly representative of the Severn Trent customer base. • Conducted amongst customers in Birmingham and surrounding areas only. TOTAL CUSTOMERS CONSULTED: 310
Research approach	• Randomised Controlled Trial (RCT) quantitative research • A technical trial in which water supplies were temporarily changed from pure Elan Valley source to a mix containing 30% river water was taking place. • Those affected by the water source change (treatment group) were interviewed using a questionnaire format. • At the same time a matched demographic control group was given the same interview but did not experience any change in water supply. • Neither group of customers was told in advance about either the reason for the study (other than about tap water) nor that there would be a change taking place. • Thus experiment is designed to exclude factors such as confirmation/expectation bias.
What did the research tell us that was new?	A change of water to the 30% mix used in this trial cannot be detected by customers. The experiment showed no statistically significant difference between either groups on any parameter relating to the sensory properties of the water. In addition, no evidence was found that this change caused any difference in customer propensity to seek information, worry or contact Severn Trent.
What did we already know that the research validated?	Previous taste and odour work has demonstrated that: • Small changes are detectable using experimental designs and RCT approaches. • Whilst customers will say that they don't want such changes, in practice this level of change passes unnoticed. • We should not rely on purely what customers say. Although this was 'stated preference', using an experimental design removes the biases most often levelled at stated approaches.
Did the research contradict any other findings?	No
Any other information	Findings are only applicable for a water change of exactly this type lasting for around 2-3 weeks.

Marketing plan focus groups

Fieldwork completed	February 2017
Aim of the research	To help Severn Trent develop a customer insight driven marketing strategy and more targeted campaigns, by exploring perceptions of the Severn Trent brand, customer needs and priorities, our communications and customers' usage and attitudes around water efficiency and sewer use.
Demographics	Mix of age, life-stage, gender, SEG, metered vs non-metered and paper bills vs paperless bills. Mix of environmental consciousness and online savvy-ness. TOTAL CUSTOMERS CONSULTED: 48
Research approach	6 x focus groups in Solihull, Stoke, Coventry and Nottingham.
What did the research tell us that was new?	• More advertising and comms may help to build trust between customers and Severn Trent • Customers are conscious that they could be doing more to save water. What stops them is subconscious habit or lack of knowledge/desire. Providing more information on how to save water, associated bill impacts (for metered customers) and education are key in tackling this • Customers propensity to 'go digital' is low for communications that require a quick response. This is largely driven by the desire to 'speak to someone' and feel as though they understand the issue. There is scope for more digital usage for transactional types of communication • Digital channels (live chat and email) can become 'more human' however through ensuring quick, knowledgeable responses are given when communicating via these means • For a minority, live online chat appeals as a contact method because it is instant and easy to use. For others however, there is a misconception that the service is not operated by human staff, or is operated by staff unable to deal with more complex issues.
What did we already know that the research validated?	• The continuous supply of clean, safe drinking water along with (once prompted) the safe disposal of waste is a core expectation. Not doing so can destroy trust. • There is strong awareness of the Severn Trent brand with associations being a behind the scenes ever present big company that just gets on with things • Activities relate to the standard services of any water company although some growing awareness of environmental activities • Severn Trent is subconsciously trusted by customers and can grow this by going above and beyond in its customer service • There is a high level of ignorance around what should and should not be put down the sink/toilet. Sewer misuse is also caused by ignorance/habit, laziness or wanting to dispose of 'yucky' things quickly and hygienically. There is also a confusing message space operating here with some products masquerading as flushable
Did the research contradict any other findings?	n/a
Any other information	n/a

3.2 Psychological needs research

Social tariffs and debt management

We have entered this project for a Market Research Society Award, in the public policy/social research category.

Supplier	Qa Research
Fieldwork completed	October to December 2017
Aim of the research	• Understand how Severn Trent's social tariff schemes, the Big Difference Scheme (BDS) is viewed by recipients • Establish how customers find out what help is available • Determine the appeal of BDS amongst non-recipients • Explore the circumstances that lead to arrears; how customers view playing water bills; how they view the debt management approach of Severn Trent • Explore views on possible approaches to preventing arrears and encouraging the paying back of debts • Co-creation tasks: refine and develop: 1) BDS eligibility criteria and discount amount, 2) a text message to remind customers they have missed a payment, and 3) a 'payment matching' scheme
Demographics	• Mix of customers in Severn Trent • Mix of customers on a social tariff and not on a social tariff (but likely to be eligible) • Mix of age, gender, ethnicity etc. • Mix of water debt profile (i.e. size and age of debt) TOTAL CUSTOMERS CONSULTED: 431
Research approach	• 12 in-depth interviews with customers in water debt • 2 focus groups: 1) customers who have received a grant or other support from the Severn Trent Trust Fund and 2) customers on the Big Difference Scheme • Telephone interviews with 400 customers • Co-creation workshop
What did the research tell us that was new?	• Customers in water debt tend to fall into one of three typologies: 'Long standing', 'Borderline' and 'Sudden and Severe'. Each may need a different approach. • Those likely to be eligible for social tariffs would like us to let them know about it, or promote it more widely. • The majority of those not currently on a tariff feel it would help them, but awareness is low • Clear suggestion that BDS may be surprisingly generous • Few on BDS offered any real criticism or suggested obvious improvements, although it's important to recognise that the application form is off-putting for some. • Intuitively, customers expect to find out about support available from their water company - in reality, few would contact directly if there was a problem • A range of channels were mentioned by those not on a tariff as the way they found out about it (and water company not actually the way most find out there is help available) • Although most felt that the application process was fine, half applying for BDS sought help with their application
Co-creation key findings	• Big Difference Scheme highest level of generosity (90%) could be reduced to 70% as still seen as impactful but would significantly increase number helped • Text alerts to be sent the day after payment is missed, using customer's fist name, signposting support if struggling, with freephone number. If another reminder needed then repeat 24 hrs later if low level arrears but after one week if severe arrears

	• Eligibility to consider customer circumstances rather than purely based on income. Expenditure details plus circumstances are important factors to take in to account • When communicating eligibility important for Severn Trent to make potential applicants aware of the factors that will be considered when assessing customer circumstances so they can decide whether to apply • The 3 staged match payment scheme seen as very positive but complicated. Key to its success will be the upfront and ongoing dialogue • Match payment scheme best as a 'one off' but important to understand whether exited customer can afford
What did we already know that the research validated?	• Financial support provided improves customers short and long-term financial situation and improves general wellbeing • Journey to water debt is complex but typically relates to health issues, unemployment or income reduction and significant life events. Many are trapped in a spiral of poverty and find it difficult to get out. • There was a low awareness of support schemes with few recalling any prompt from Severn Trent • Many are in vulnerable circumstances, so likely to need a more specialised and considered approach during the arrears communications • Customers who are struggling the most are often unwilling to move to direct debit because they may not have the money in their bank account, which leads to bank charges.

Social tariffs cross subsidy research

Supplier	Truth
Fieldwork completed	March 2018
Aim of the research	• To understand how much extra (above the current £3) customers are willing to cross-subsidise, i.e. contribute via their bills, to the Big Difference Scheme (BDS). • To understand *why* customers are willing to contribute more or not. • To explore customer perceptions of the BDS
Demographics	• Severn Trent bill-payers • Quotas were set on age, gender, SEG, income and meter status • Weighting was also applied to ensure the data were representative of the Severn Trent region. TOTAL: 1,066 household customers
Research approach	• 15 minute online survey • Approach complies with specific guidance from Defra on this type of research and methodology and survey design were developed in conjunction with CCWater. • Gabor Granger pricing approach to understand acceptability of a range of prompted contribution amounts. All respondents were shown £8 per year (£5 more than currently) as a starting point. If they considered this acceptable, they were shown a higher price point. If they considered £8 unacceptable, they were shown a lower price point. This was repeated until respondents reached an upper or lower limit of acceptability/unacceptability, or been shown all price points. • At each price point, respondents were shown in words, and via an infographic, the percentage of struggling customers who could be helped by the BDS.
What did the research tell us that was new?	• The BDS is seen as strongly beneficial. Having read some information about the scheme and when asked for one word that describes it, the most common answers were: ‘good’, ‘helpful’, ‘fair’ and ‘interesting’. • Almost all customers interviewed are happy to pay a cross-subsidy of £4 per year (£1 more than currently). • Older respondents are more likely to be willing to contribute. • Perceptions of unacceptability are not driven by having a low income. There is also little difference in acceptability between SEGs. • Respondents in the JAM group (‘Just about managing financially’) have similar perceptions of acceptability as those who never struggle to pay their bills. • 67% are prepared to pay £8 per year (£5 more than currently) and more than half are willing to pay £12 per year (£9 per year more than currently). • 14% of respondents do not wish to contribute to the BDS at all; their opposition is driven strongly by view that it is not fair that people should pay for the water bills of other customers. • After respondents had told us the amount they were willing to contribute, they were asked what, if anything, would make them want to contribute *more* to the BDS via their bill. The most common answers were: If Severn Trent also contributed funds to the BDS (46%), and if the donation were voluntary (36%). • One third of customers said they would consider contributing more if Severn Trent told customers about the difference that BDS makes to the lives of recipients (34%). A similar proportion would consider contributing more if Severn Trent promoted the scheme more widely (31%). • Broadly, the concept of cross-subsidisation in everyday life is seen as acceptable. For example, the majority of respondents find it acceptable that older people get free bus travel, that certain groups get free NHS prescriptions, and that the price of a stamp is the same regardless of how far it is being posted. • Cross-subsidies in the water industry are considered less acceptable. 18% find it unacceptable that water companies ensure that customers in rural areas don’t pay

	higher bills when it costs the company more to serve them. 41% find it unacceptable that customers subsidise recovery of debt from people who can't or won't pay their water bill. 76% find it unacceptable that they should eventually subsidise writing off the water debts of people who don't pay.
What did we already know that the research validated?	• The concept of supporting struggling customers *before* they get into water debt is agreed with, and seen as part of a social contract. • Respondents perceive a difference between the deserving and the undeserving; the deserving pay in before taking out, access help only when in need, and are responsible with their money. The undeserving are seen to game the system, take without contributing and are irresponsible with money. • Therefore customers want reassurance that the money they are contributing is being used responsibly, and going to deserving customers in genuine financial difficulty.
Did the research contradict any other findings?	In this project, customers' willingness to contribute to the Big Difference Scheme was higher than seen in the 'Choices research'. This is because in that project, the methodology was different; the social tariff was explored amongst other bill impacts, not in isolation (as required by CCWater). However, both studies concur that most customers are happy to increase their contribution to the Big Difference Scheme.
Any other information	n/a

Best in class customer service and experience

Supplier	Sparkler
Fieldwork completed	October to December 2017
Aim of the research	To understand the customer service offerings and innovations that customers expect Severn Trent to offer now and in the future, including communication channels, payment options, technology and wholesale SLAs.
Demographics	• Mix of customers in Severn Trent England • Mix of age, life stage, gender, metered/non-metered, ethnicity, housing tenure, rural vs urban etc. • Some had experienced service disruption • Some had visited a Severn Trent visitor site. • Some financially vulnerable, some 'just about managing' • Some 'health and wellbeing vulnerable' • Some 'digitally disenfranchised'.
Research approach	• Market landscaping – desk research exploring what cutting edge companies offer in terms of great customer service • Co-creation with 8 customers in Coventry (ideas factory) • 'Research road trip', 20 x 2-hour in-home depth interviews across the region • 20-minute online survey across the region. Sample size 1,997 • TOTAL CUSTOMERS CONSULTED: 2,025
What did the research tell us that was new?	• Customer services expectations of Severn Trent are comparable to digital and telecomms brands - deliver services seamlessly with minimal hassle for the customer • Attributes of great service are seamlessness, personalisation, awareness, transparency and a human tone of voice. • For Severn Trent, key to developing a more engaging brand is continuing to deliver functional benefits but packaged in a slightly more emotionally engaging way – 'offering a helping hand' • Flexible payment timings seems more important than numerous payment methods • One third of (unmetered) customers would consider a water meter

	• Data sharing is a difficult subject for consumers right now – privacy and data breaches are top of mind. Severn Trent would have to be very careful with whatever services they offered related to data sharing. Potential partners are local councils or energy companies • Groups that can see a direct and tangible benefit to data sharing e.g. financially or physically vulnerable, are more open to data partnerships with sensitive data • The four ideas presented in the survey are all interesting to consumers. They are 'Staying in Control', 'Digital signs at roadworks', 'Welcome to Severn Trent' and 'Useful info from Severn Trent'. • The idea that stood out when consumers were asked to pick one was 'Staying in Control' – that focused on water consumption and controlling usage
What did we already know that the research validated?	• Severn Trent delivers services that customers value and are in large part satisfied with. • Whilst customers have a positive view of Severn Trent and the service it provides, it is seen as a utility, rather than a brand with a personality and presence in their lives. • Some of the additional services, like visitor centres, that Severn Trent offer, were seen very positively, although awareness of them needs to be raised • Five principles to elevate Severn Trent's customer service: Keep the customer informed, don't overpromise, ensure customers know of the resources available to them, have a clear system for when issues arise and show you care. • Telephone as the most direct mode of communication is preferred over online methods, particularly for issues or faults with water supply. For more straight-forward enquiries the popularity of online methods is growing • Making communications efficient, seamless and result focused is the key to delivering more value for customers • Much like communications, payment options are all about ease, speed and efficiency. The most popular being direct debit, which reduces the interactions between Severn Trent and customers • The key hurdle to getting customers onto water meters is that there is uncertainty as to whether it will increase or decrease the cost of their water bill
Did the research contradict any other findings?	n/a

Social media scraping

Supplier	Kantar TNS
Fieldwork complete	January 2017
Aim of the research	To understand what customers said on social media over the last twelve months (unprompted by Severn Trent) about: • the water industry; • how they perceive Severn Trent - focussing on customer experience and brand perception; and • what Severn Trent could do better.
Demographics	n/a
Research approach	• 7.3 million social media conversations were analysed. • 55,000+ of the conversations were about Severn Trent • Conversations were scraped from Facebook, Twitter, Google, Instagram, News sites, blogs and forums, YouTube etc. TOTAL CUSTOMERS CONSULTED: n/a

What did the research tell us that was new?	• Women are more likely to post on social media about Severn Trent, and often at night time – suggesting our contact centre should have longer opening hours • Customer sentiment about Severn Trent is 60% positive. Customer service is generally perceived to be prompt and effective • Hotspots of conversation centre around incidents, particularly the chlorination incident of March 2016 • 80% of 'customer pain point' conversations concern uncertainty. E.g. customers are unclear what should not be disposed of down sewers. Customers want to know how much water is used by washing machines, dishwashers etc. • Severn Trent apprenticeships and community initiatives help drive brand advocacy • Customers like personalised approach from Severn Trent
What did we already know that the research validated?	Four themes drive conversations around the water industry: • Customer pain points (water quality, billing, roadworks, slow resolution of work such as bursts, lack of support during incidents etc.) • The need for more education and information (e.g. water meters, what not to flush, water industry regulatory bodies, billing, pipe insurance, visiting reservoirs) • Importance of environment and community • Innovation in the water industry
Did the research contradict any other findings?	n/a
Any other information	n/a

Payment methods research

Supplier	DJS Research, with analysis and reporting in-house
Fieldwork completed	August 2016
Aim of the research	• To understand why customers use payment methods other than direct debit. • Determine who would be prepared to switch to lower-cost-to-serve payment methods and what will be needed to get customers to switch to direct debit. • Understand how customers feel about Severn Trent applying fees to higher-cost-to-serve payment methods.
Demographics	Mix of customers paying their water bill by methods other than direct debit: cheque, online, paying through bank, Paypoint, Watercard, paying by phone. Customers were randomly selected, no quotas were applied. Mix of age, gender and SEG.
Research approach	Telephone survey. TOTAL CUSTOMERS CONSULTED: 460
What did the research tell us that was new?	• The main reason for not using direct debit is habit/we haven't ASKED them to change payment method since the account was set up. Some are not aware of other payment methods. • Other reasons include perceived convenience, the whole bill being affordable in one or two payments, it being quick and easy to pay by phone, and the fact that some customers don't trust banks. • Other payment methods also help customers who are struggling to pay through flexibly – i.e. when they receive their income. This enables them to pay as late as possible/feel in control and avoid bank charges. • Many of those not paying their water bill by direct debit are already paying their energy bills this way. This suggests they could be persuaded to switch –just need to ask them.

	• Direct debit is the alternative payment method most likely to be considered to be more convenient than the respondent's current payment method. • Lower income customers, those with lower levels of education, those not paid monthly and those paying by Watercard are least likely to be willing to switch to lower-cost-to-serve methods.

Customer tracker – approach and objectives for all waves

Supplier	Future Thinking
Aim of the research	• Track and understand drivers of satisfaction, trust, affordability and value for money • Understand what is important to customers • Explore attitudes towards water usage, water efficiency, sewer use etc. • Explore ad hoc topics, such as experience of service failure
Demographics	• 1,000 Severn Trent customers are surveyed each quarter. • Respondent profile is very similar profile to previous waves and representative of customer base. Quotas on age, gender, SEG and metered vs unmetered. • Every other quarter, we also extend the survey to 1,500 customers across the UK TOTAL CUSTOMERS CONSULTED: 1,000 every quarter
Research approach	Online survey

Customer satisfaction tracker survey (Q2 2017/18: July to September)

Fieldwork completed	July – August 2017
What did the research tell us that was new?	• Overall satisfaction is at an all-time high (83%), as is trust (65%) • Satisfaction and trust levels would improve if customers saw greater transparency, fixing leaks quickly, providing more than the basic service and cheaper bills. • Customers' top three priorities for Severn Trent are to reduce leakage, followed by river pollution and reducing the number of incidents of internal sewer flooding • Customers are interested in finding out more about Severn Trent and our activities – particularly free products to help reduce water consumption, and our visitor sites • Customers are interested in saving water • Just under a quarter of respondents admit to disposing of FOG (24%) and moist wipes (22%) down sewers • Customers aged 18-34 are most likely to dispose of the wrong things down sewers
What did we already know that the research validated?	• Value for money has remained at 59% throughout 2017 • Affordability is at 62%, the same as the previous quarter • Metered customers rate us higher across all KPIs • We can be trusted to deliver continuous water and waste services (72% agree/strongly agree) • We provide a reliable service that customers trust and value (70% agree/strongly agree) • We can be trusted to supply water to today's customers as well as future generations (69% agree/strongly agree) • Customers feel more positive about Severn Trent if they recall media stories about us. Recall of stories about us is relatively low (12%) • Customers are generally satisfied with our bills – results are similar to previous quarters
Did the research contradict any other findings?	

Customer satisfaction tracker survey (Q3 2017/18: October to December)

Fieldwork completed	November 2017
What did the research tell us that was new?	• Overall satisfaction has seen a significant decline this quarter; it falls 7% to 76% from 83% last quarter. • Although trust also experiences a decline, it is not significant (61%). • Value for money (VFM) rating drops in Q4 from 59% to 55%. This is also not a significant drop. • Customers who give the lowest VFM ratings are those who say they don't know much about Severn Trent, those who have experienced a service failure, those not on a water meter, C2DEs, those aged under 44 and those who don't drink unfiltered tap water. • Severn Trent taking account of customers' views, being easy to deal with and caring about and understanding customers are areas which correlate strongly with VFM. • Affordability has seen a slight decline this quarter, however, it remains in line with this period last year (both 60%). • One potential reason for the significant decrease in KPIs this quarter is the trio of incidents which happened just before fieldwork took place (Telford, Tenbury Wells and Cheltenham). • Experiencing a service failure increases dissatisfaction levels across all KPIs. • The 9% who recall hearing of Severn Trent in the media in Q4 '17 rate VFM and Affordability KPIs higher. • Almost 9 in 10 customers surveyed do not know that the Severn Trent combined bill is the lowest in England and Wales (87%). • 91% of customers surveyed feel that it is important for Severn Trent to continue to have the lowest bills. Approaching a fifth (17%) of customers were interested in increasing their bill to improve the service they receive. 5% were looking to decrease their bills, and in turn see the service deteriorate. • Low pressure is the most commonly reported service failure amongst respondents in 7 out of the 9 Severn Trent counties. 17% of all respondents say they have experienced low pressure in the last twelve months. • Two thirds of customers feel they know about Severn Trent and what they do (66%). • Just over half (58%) are happy that Severn Trent is their water company.
What did we already know that the research validated?	• When customers' problems are resolved by Severn Trent, KPI scores are more likely to increase. When customers experience issues (such as interruption to water, discoloured water, flooding), they rate KPIs lower. • Customers' main priority for Severn Trent is to reduce leaks followed by reducing the number of river pollution incidents per year, identical to last quarter. • 17% of customers' surveyed do not drink unfiltered tap water. The proportion has stayed static across 2017. • Customers are interested in knowing more about the Big Difference Scheme, free products and our visitor sites. • Customers' perception of leakage remains consistent over 2017. The largest proportion perceive that the level of leakage has stayed the same over the last five years (61%). 31% believe there is less leakage and 8% believe there is more leakage. • Customers are generally satisfied with our bills and results are similar to previous quarters. • Customers aged 18-34 years old continue to be most likely to be sewer misuse 'offenders'.

Customer satisfaction tracker survey (Q4 2017/18: January to March 2018)

Fieldwork completed	February 2018
What did the research tell us that was new?	• All KPIs have seen an improvement since last quarter. Overall satisfaction is at 86%, Trust is at 74%. Value for money and affordability are both at 65%. • Customers who regularly drink bottled water at home rate KPIs less favourably • 42% of the Severn Trent customers surveyed are 'Just about managing' financially – they say they sometimes struggle to pay household bills, but usually manage it. 11% say they always or sometimes struggle to pay their household bills and are nearly always behind on their payments. • Over half of our least affluent respondents agree that their water bill is affordable (51%), whilst just over one fifth disagree (21%). • Most respondents were not aware of any additional support that Severn Trent provides to customers due to accessibility, health and/or well-being reasons (68%) • Over half were unaware of assistance schemes for those struggling to pay their bill (56%). 9% are aware of the Big Difference Scheme. • 10% of those who have experienced low pressure in the last year say they experience it 'all the time'. 24% experience it 'very rarely'. • More than three quarters of those who have experienced low pressure in the last year say it has a 'small impact' or 'very small impact' on their lives (77%). 22% say it has a 'big impact' or 'very big' impact on their lives. • Over half of those who have experienced low pressure say their upstairs taps are affected (53%). 51% say downstairs taps are affected. 44% say their shower is affected and 14% say their central heating boiler is affected. • The majority of respondents blame their low pressure on Severn Trent (41%). 35% blame lack of water in the pipes at peak times. 27% blame the type of plumbing in their home. One quarter blame taps being turned on elsewhere in the home (21%). 7% attribute their low pressure to their home being located on a hill. • Only 5% of respondents are concerned that Severn Trent won't have enough water to fulfil customer demand in ten years' time. Only 6% are concerned for 20 years' time. Over one quarter agreed that: 'Right now, there's no real need for people to reduce water consumption in order to conserve water supplies'. • 77% say if Severn Trent asked them to use less water, they would try to do so. The same proportion would do so if asked by the government. • 37% say their household would find it very difficult to use less water.
What did we already know that the research validated?	• Scottish Water is the only water company performing consistently better across all KPIs than Severn Trent. • Only one quarter of respondents know that Severn Trent has the lowest combined bill in England and Wales. • Low water pressure is still the service failure respondents are most likely to have suffered in the last twelve months (18%). • More than half of respondents are unaware of any of our CSR initiatives (54%) When informed of the CSR initiatives, 43% say their impression of Severn Trent has improved. • The initiatives that respondents most want to know about are free water-saving devices (23%) and the Big Difference Scheme (20%).
Did the research contradict any other findings?	n/a
Any other information	n/a

Customer satisfaction tracker survey (Q1 2018/19: April to May 2018)

Fieldwork completed	May 2018
What did the research tell us that was new?	• KPI performance is consistent with the previous wave. YTD scores remain high • Overall satisfaction remains at 86% (a record high) • Affordability sees an increase of 2%, rising from 65% to 67% • Trust scores remain high, especially agreement with 'They can be trusted to deliver continuous water and waste services' (77%), 'They can be trusted to supply water to today's customers as well as for future generations' (76%) and ratings of trust in the drinking water (73%). • Awareness of financial assistance schemes is much higher amongst respondents who say they struggle to pay their bills than those who don't • Almost one third of respondents are aware that Severn Trent has the lowest bills in England and Wales (31%), up from 26% last wave • This wave, a slightly higher proportion of customers than last wave believe that Severn Trent will not have enough water to meet demand in ten years' time (7%) and twenty years' time (10%). • 7% do not trust the drinking water, for most of these, this is due to dislike of the taste • We asked customers, if water was becoming scarcer, and Severn Trent needed customers to use less water all year round, which organisations or personalities would get the message across most effectively. The most common answers were: Severn Trent themselves (10%), the government (6%) and TV adverts (4%). David Attenborough was mentioned by 3%. • 77% of respondents said they would try to use less water if asked to do so by Severn Trent, or by the government. However, 37% say it would be 'very difficult' for their household to use less water, and 63% disagree that their household uses more water than others of a similar size • More than a quarter (26%) agree with the statement, 'Right now, there is no real need for people to reduce their water consumption in order to conserve the region's water supplies. • Low pressure continues to be the service issue most often experienced (14%). The majority who have low pressure say it has a small or very small impact on them. Only 7% say they suffer low pressure all the time. 39% don't blame Severn Trent for their low pressure, instead they attribute it to another reason, their plumbing, the fact that they live on a hill, for example. • Respondents indicate that a supply interruption is more acceptable if caused by freezing temperatures followed by a rapid thaw (52% very/fairly acceptable) than if caused by deterioration of old pipes (24% very/fairly acceptable) • The CSR activities that customers are most likely to be aware of are free water saving products, visitor sites and educational visits to schools. • This wave there has been a slight increase in the proportion of respondents believing that 'there is more leakage now than there was five years ago' (11%, compared with 8% last wave).
What did we already know that the research validated?	n/a
Did the research contradict any other findings?	n/a
Any other information	n/a

Needs of large developers

Supplier	Research conducted and analysed in-house at Severn Trent
Fieldwork completed	May 2018
Aim of the research	• To understand the perceptions of large developers of Severn Trent's Large Developer services. • To understand ways in which developers would like the service to evolve over the next AMP.
Demographics	• Nine representatives of large housebuilder who use Severn Trent's developer services. • Participants work for seven different housebuilders. • Job titles comprised Technical Director, Technical Manager, Senior Engineer, Engineering Manager and Development Co-ordinator. TOTAL CUSTOMERS CONSULTED: 9
Research approach	Nine telephone depth interviews were conducted. Interview appointments were made by the participants' key contact at Severn Trent. Interviews were conducted and analysed by Susie Price, Senior Customer Insight Researcher, Severn Trent. Interviews lasted around 25 minutes each. Interviews were audio-recorded with the participants' permission. Interviews were transcribed and analysed.
What did the research tell us that was new?	• Most of the developers consulted are reasonably satisfied with Severn Trent's Developer Services. Most commented that service standards and the relationship with Severn Trent have improved over the last year or so. • However, there is dissatisfaction in a number of areas, particularly: o Services are sometimes perceived as process-oriented, rather than customer-orientated. o Speed of delivery on several aspects of service is sometimes frustratingly slow (e.g. tech approvals, adoption of sewers and SuDS ponds, sampling and testing) – and they feel unable to influence this. o Gaps in account management mean the company does not always respond to the developer's needs. o Severn Trent teams they deal with are perceived to be insufficiently resourced. • Most feel the quality of the developer services they get from the other water companies is comparable with Severn Trent's – although some best practice we could learn from was identified. • Some developers would like the option to be able to pay a premium to expedite various aspects of service delivery from Severn Trent. A more bespoke service would certainly be attractive for some developers and for certain sites. • There is *some* willingness to share formally possible locations for future housing development with Severn Trent, but some of the developers feel the onus should be on the company to source this information directly from local authorities' local plans. Some developers already have meetings, albeit of irregular frequency, to discuss their future plans. Some feel sharing of this information may not always be possible, as they don't want to alert competitors to plans which are particularly commercially sensitive. Some sites are planned at short notice, so simply cannot be forecast. • Most say the majority of their sites are greenfield sites, as these tend to be the easiest to develop and allow fastest return on investment. Almost all expect this trend to continue in the next few years. • Our Infrastructure Charges Discount Scheme (which gives developers up to 100% discount on the clean water and sewerage infrastructure charges if they build to Severn Trent's qualifying conditions) has considerable commercial appeal to developers – and is considered likely to be utilised more in future, once they become more accustomed to it.

	• A few comment that house-buyers purchasing larger house types sometimes object to water-saving fittings such as smaller baths, smaller sinks and flow restrictors.
	• Despite being very engaged with the scheme, none of the participants were familiar with the term, 'Water Resources Management Plan'. Some recalled something about it once explained, but none felt it had any bearing on their day-to-day work.
	• These developers are using a mix of Severn Trent and self-lay companies to lay pipes at new housing developments. All respondents say they would consider using Severn Trent, rather than, or as well as, self-lay companies in future. There is no single key driver for this. Developers are looking for combination of low cost, sufficient resources, timeliness, a low admin burden and a strong working relationship.
	• Key things developers want are:
	    o Stronger and longer-lasting working relationships with Severn Trent. They would like to see a larger, more stable, and more experienced team to deliver what they need.
	    o Consistent decisions
	    o Account management, with a specific named account manager and face-to-face meetings, perhaps 2-4 times per year.
	    o Guaranteed time period for work to be delivered.
	    o Regular feedback on status of proposals and design work.
	    o Notification of any delays.
	    o Online access to network and sewer records – not all have this currently.
	    o Faster tech approvals, onsite inspections, sampling and testing and adoption of sewers and SuDS ponds.
	    o A modern approach – e.g. remove requirement to pay by cheque, offer an online portal for section 104 submissions.
	    o Better clarity of Severn Trent strategy to developers.
	    o To invoice work on completion, rather than being required to pay in advance.

What did we already know that the research validated?	n/a
Did the research contradict any other findings?	n/a
Any other information	n/a

Needs of non-household retailers

Supplier	DJS Research
Fieldwork completed	June and July 2018
Aim of the research	• To understand retailers' perceptions of current service provision from Severn Trent • To identify current and future challenges for retailers, and what Severn Trent can do to help • To understand retailers' plans for future growth and investment in the Severn Trent region • To explore how Severn Trent can support retailers in providing the best service to their customers • To understand the extent to which retailers are supporting customers with water efficiency initiatives • To understand retailers' thoughts on which areas Severn Trent should be investing in for AMP7

<table>
<tr><td>Demographics</td><td>

- DJS tried to secure interviews with all retailers with a contract in the region.
- Nine retailers were interviewed, ranging from Water Plus with over 100,000 customers to retailers with only a handful.

TOTAL CUSTOMERS CONSULTED: 9</td></tr>
<tr><td>Research approach</td><td>Qualitative telephone depth interviews, each lasting 30 – 40 minutes</td></tr>
<tr><td>What did the research tell us that was new?</td><td>

- The majority of retailers have a passive or functional relationship with ST, especially those with few ST customers.
- Retailers either have a Severn Trent account manager, or they have a relatively ad hoc relationship with the company
- The majority are satisfied with the service they receive. However, this can often be quite light touch, when some would prefer more personal contact and communication.
- Some feel that Severn Trent’s wholesale team is sometimes slow to respond to them. Data accuracy and provision of data are seen as issues across the industry, not just with Severn Trent.
- Opinions of Severn Trent are on the whole positive, with a consensus that the company is on a par with other wholesalers.
- The top three priorities for retailers are:
    - Good account management, keeping information flowing between retailers and wholesalers.
    - The provision of accurate data
    - The portal, the information hub between retailer and wholesaler
- There is a feeling that processes and policies need to be aligned across wholesalers; retailers say they are struggling with wholesalers’ different ways of working.
- All of the retailers point out that the market has been a difficult place to navigate and operate since market opening. Most are cautiously optimistic about the next 12 – 18 months, but a number of significant challenges remain:
    - Engaging customers – some still consider customers to be unaware of the new market
    - Credit terms – an issue for smaller companies and new entrants
    - Understanding the penalties coming into effect.
    - Bigger savings – retailers are finding it a challenge to provide bigger savings to their customers, as they are unlikely to switch for a small sum.
    - Metering – retailers want to provide data loggers on all meters, and would like Severn Trent to offer metering services
- Retailers are aware the network is aging, particularly the sewerage system, and feel ST (and other wholesalers) should be working to keep these well maintained to reduce contacts.
- Retailers would like wholesalers’ portals to be standardised. They would like incident forms to be blank, so retailers don’t have to report incidents on unsuitable forms. They would also like notifications in their inboxes to reduce the burden of checking. They feel both wholesalers and retailers need educating on how each other operate, in order to speed up responsiveness to queries.
- All of the main challenges and issues raised by retailers are seen as issues across the industry. Three concerns stand out: accuracy, consistency and speed.
- Only a couple of retailers have ongoing water efficiency activity or specific plans in the pipeline – and even then they are general plans, rather than anything targeted specifically at customers in the ST region.
- Retailers don’t feel the need to notify ST about any water efficiency activity they are/may be undertaking with their customers.
- Those with ongoing/planned water efficiency activity tend to be focussing on: generally promoting water efficiency, providing information packs/education. Some provide water audits, data loggers and smart meters and weekly meter readings
</td></tr>
</table>

	• Most mention that interest in, and understanding of, the new market is low among customers. Where there is demand though, this tends to come from customers. Retailers will do what they can to offer them water efficient services, sometimes providing weekly meter reading or going to external suppliers for water efficiency gadgets for example. At the moment it's not a top of mind service – although it is an area that most retailers are looking to focus more on in the future. • Several retailers are open to partnering with ST to look at how they can be providing their customers with ways to save water. • Sewer misuse is not top of mind for retailers with all but one preferring to concentrate on fresh water services at present • Retailers don't believe there will be a change in demand for water efficiency products and services from their existing customers. • Retailers aren't specifically targeting ST as a growth area. National tenders for restaurants and retailers, hotels and leisure centres etc. are all going to be competed for, but not specifically within the Midlands. If retailers do have specific regional plans they are usually focussed in regions where the retailer has a legacy presence. • Retailers' priorities for focus and investment are linked to service areas where they receive a larger volume of contacts, particularly supply interruptions, leakage and speed of response to leakage. Wastewater services are considered lower priority, but of these, sewer blockages and internal sewer flooding are the most important. • Retailers are happy to work with or partner with ST on water efficiency plans, sewer misuse and meeting customer demand changes in the future. They feel it is important to work together. • Retailers want ST to be as transparent as possible in communicating AMP7 charges once decided, so they can communicate this correctly to their customers. • Whilst retailers are pleased ST perform well (compared to the industry) in some of the performance areas, it is not essential from their point of view.

Qualitative research with customer facing employees

Supplier	Research conducted and analysed in-house
Fieldwork completed	September 2017 to January 2018.
Aim of the research	To understand the views of Severn Trent employees who have regular customer-facing experience: • What aspects of our service are customers dissatisfied with? • In what sorts of ways are customers' expectations changing? How will our services need to change in 2020-25? • How can Severn Trent improve customer experience? i.e. what should the company focus on or invest more in, in order to improve our service?
Demographics	• Employees from the following departments of Severn Trent: Asset Creation, Asset protection, Billing, Communications, Group Commercial – Estates, Public Health Standards (water quality). • Mix of seniority and length of service. • Employees based at the following Severn Trent sites: Severn Trent Centre (Coventry), Pride Park (Derby), Shifnal (Shropshire) and Tettenhall (Wolverhampton). • Respondents deal with customers in a variety of ways: face-to-face, by phone, email and written correspondence. TOTAL EMPLOYEES CONSULTED: 20. Almost all are also Severn Trent customers.

Research approach	• 20 Severn Trent employees were consulted. The research comprised:
	  o Two focus groups
	  o Two paired depth interviews

	○ Four individual depth interviews • The research was conducted and analysed by Susie Price, Strategic Insight Lead • Interviews lasted around 30 minutes each. Focus groups lasted around 90 minutes each.
What did the research tell us that was new?	Employees say that customers are most dissatisfied with the following aspects of our service: • Failing to keep our promises (e.g. not calling them back, failing to adhere to service level agreement timescales). • Failing to keep customers informed – especially due to contractors (e.g. gangs arrive unannounced, work is re-scheduled without informing the customer). • Not solving customers' problems 'right first time'. • Not taking ownership of the problem and having to chase. • Having to repeat their problem/history each time they contact us. • Sewer records not showing every pipe. • Perception that because we are a privatised company, we must be making immense profits at customers' expense. Customers' expectations are changing in the following ways: • They becoming less tolerant of poor service. They expect services to be as slick, fast and professional as those in other areas of their lives, and provide value for money. • They are increasingly keen to complain and demand compensation where we fail to deliver. • They expect all our services to be digitally accessible. • Many expect water meters to be smart meters, like they can have for energy. We can improve customer experience in the following ways: • Be prompt, courteous and treat customers fairly. • Be more visible in the community, more honest and transparent. • Be accountable. • Be more helpful and caring – e.g. don't cancel payment plans when a customer misses just one payment. If a large family moves into a metered home, provide them will all available help to keep their payments manageable. • Provide more information, including advertising and social media on how to save water and what not to flush; at roadworks (e.g. digital signs that can be updated in real time with the reason for the work and expected completion date); explanation of billing including rateable value vs metered • Introduce slicker processes and better communication between Severn Trent teams, departments and contractors. • Offer a freephone telephone number, especially helpful for customers who are struggling financially. • Do more to retain good staff and hire more staff where workloads are currently too high and customer service suffers. • Measure contact centre teams on the quality of their customer service, rather than other stats, such as time on each call. • Commit to giving staff dedicated time away from their day job to train • Extend service level agreement timescales where they are currently not feasible. • Proactively check for leaks if a customer's bill is much higher than usual. • Use social media more and challenge untrue perceptions that we are 'safe' and 'boring'. • Renew our assets more proactively.
What did we already know that the research validated?	Customers are most dissatisfied with the following aspects of our service: • Being inefficient and slow.

	• Being delayed by our roadworks – especially when there is no work going on. • Poor quality re-instatement following works. • Lack of information (customers are not aware that much of the information they want is on our website)
Did the research contradict any other findings?	n/a
Any other information	n/a

3.3 Basic needs research

PR19 Willingness to pay research (WTP)

Supplier	Systra and Frontier Economics
Fieldwork completed	April – June 2017
Aim of the research	Derive customer valuations for improvements in 15 service attributes using a rich variety of different and innovative approaches
Demographics	Core survey: representative sample of 1047 household respondents in England (including 168 waste only customers in the South Staffordshire Water region) and 750 non households Contextualised WTP: 300 respondents who had suffered service failures due to a mains burst and sewer flooding Hard to research: 73 respondents in hall tests with translators and a translated version of the survey in the three main foreign languages in our region (Punjabi, Urdu and Polish) "Non responders" WTP: 432 respondents who were unable (absent or refused) to take part in the core face to face fieldwork responded to a postal version of the WTP survey Deliberative WTP: 120 respondents during the deliberative research. These respondents had time being immersed in the key strategic challenges to the business Budget game: 505 respondents TOTAL 3,226 customers consulted
Research approach	Quantitative stated preference research with a statistically representative sample of customers across the Severn Trent region. Considerable care was taken to ensure the validity of the research taking into account the following: • Cognitive validity – testing and piloting the survey extensively prior to main fieldwork to ensure all service descriptions were understood and trade-offs could be undertaken • Ensuring the overall survey load was not too onerous • Minimising the need for scaling the final valuations by deriving WTP for groups of improvements rather than trading off money with individual service improvements (which can lead to over-estimation of WTP). • Appropriate context and question framing • External validity by validating the findings using alternative methods and/or contexts such as the budget game and service failure survey The survey design and results were peer reviewed by an expert in the field (Prof Ken Willis). The main fieldwork with household customers for the core survey and contextualised WTP consisted in an interviewer administered in home CAPI (Computer Assisted Personal Interview) survey. The budget game fieldwork was also conducted through face to face interviewing using a large "board game" to present customers with their service and bill options. The non-household fieldwork was administered over the telephone, with show materials emailed to each respondent.

	The hard to research fieldwork took place in local venues within communities where each of the foreign languages are spoken and the interviews were administered by translators with a translated version of the survey. The “non responders” fieldwork used a postal self-complete version of the WTP survey, which was sent to over 3,000 addresses where customers had either refused to take part in the original fieldwork, or were not able to because they were absent from home. The deliberative WTP took place during the research workshops using a self-complete version of the survey.
What did the research tell us that was new?	• The most valued service improvements are reducing leakage, reducing internal and external sewer flooding, and improving the taste and smell of drinking water. River water quality, low pressure and reducing pollution are also valued. • There was no statistically different results for customers in vulnerable circumstances (those reporting a disability in the household and / or with income less than 10,000 per annum). • Younger customers (16-24 age bracket) were willing to pay more in general across all service attributes. • In the budget game respondents on average selected 3 improvements in service at an average cost of £7.46. • Respondents in the budget game reported a maximum WTP of around £14 for the maximum improvement across all service attributes. • Experience of service failure has a considerable impact on customer’s valuation for reducing the risk of the service failure happening again. • 13% of respondents reported experiencing low pressure – this is a high figure compared to the number of customers on the low pressure register and tells us there is a discrepancy between experience and how we measure pressure. • Those who completed the WTP postal survey (the “non responders”) value improvements in service considerably more than the core survey respondents. The top priorities are broadly consistent across the groups though. • Customers trust Severn Trent to “balance the need to monitor and look after its network of water and waste-water pipes, invest in the short and longer term, keep bills manageable, and limit any consequences on the local environment”.
What did we already know that the research validated?	• On average customers positively value improvements in service, although to be meaningful the benefits of potential improvements need to be monetised using the WTP results, and then compared with investment costs. • Customers demonstrate altruism with those suffering service failure, and in particular when asked whether they would be willing to pay £4-5 to reduce repeat incidents of sewer flooding, more than half of respondents agreed.
Did the research contradict any other findings?	The WTP results are (in some cases) notably difference from those in the historic valuation research. However, comparing the valuations from the PR19 research to those from previous price reviews is not straightforward as a number of elements have been modified and improved in the current survey design. These include changes to: • the survey methodology (PR19 approach was based on choices on packages of 3 or 4 improvements followed by a within package MaxDiff ranking approach. The PR14 approach was based on choice sets with options for individual different service levels followed by contingent valuation package questions); • the service attributes (different service attributes, updated levels of service and amount of improvement and improved descriptions of the attributes). In some cases we have moved from the presentation of risk (e.g. 1 in 100 risk of an interruption to supply to an absolute number of properties affected); • the inclusion of comparative information on service levels really to other water companies; and • the number of improvement levels presented – we included one level of improvement only rather than 2 levels and a deterioration in service – this provides less valuations but reduces the cognitive burden of the research.

Any other information	The data triangulation stage will take into account the results from the different strands of WTP research and propose final values which can be used for cost benefit analysis to inform performance levels and for incentive calibration. We will be speaking about this project, specifically our engagement with harder-to-reach customers and non-responders, at the Market Research Society's Utilities conference in October 2018.

Revealed preference research – interruptions to supply

Supplier	NERA and Dialogue by Design
Fieldwork completed	April 2018
Aim of the research	Derive a valuation based on the consequences of short term interruptions to supply for domestic customers, using "avertive" behaviour models
Demographics	The list of contacts provided was not intended to be representative of Severn Trent customers on average, but NERA applied demographic weighting in order to estimate a representative valuation for the Severn Trent service region
Research approach	Questionnaire for customers living in areas recently affected by supply interruptions, with 470 households. The respondents had experienced an unplanned supply interruption of either 4.75 or 8.5 hours in their local area in June 2017. 394 respondents took part in telephone interviews, and 77 took part in an online survey in which they answered a set of questions about the actions they had to take as a result of the supply interruption, and the costs associated with these actions
What did the research tell us that was new?	• 58% of respondents did not remember the 3-6 hour supply interruption, and 17% said they used bottled water. Many participants said they had been warned about the interruption so had been able to prepare in advance. • A handful of respondents noted hygiene issues as a result of the interruption, such as postponing washing or not being able to flush the toilet • Customers rarely offered information about costs involved, and none described an impact on their work • 53% did not remember the 6-12 hour interruption, and 23% said they had used bottled water. The qualitative insight was similar to the shorter interruption. • 180 respondents said they would like no increase in bill to reduce interruptions – some argued that current service is acceptable (these events are rare), whilst others said service should be improved but they shouldn't have to pay more • 18 respondents said they would pay more if necessary, but would need clarity about the nature and extent of the improvements, and 14 suggested an amount less than £10 • The expected cost for avertive action per household was £19.56, with the majority being for bottled water, followed by travel time and then takeaway meals (unweighted)
What did we already know that the research validated?	• As a result of the interruption, customers incurred a variety of costs relating to bottled water, food and drink, and other activities such as washing and cleaning. • Reducing leakage was mentioned as a key priority for the plan in general, smaller numbers mentioned improving pressure and taste. Others spoke of the need to mitigate the effect of disruption or said Severn Trent should prioritise lowering bills. • When selecting three priorities for the business plan 73% of respondents selected reducing leakage, while nearly half prioritised reducing supply interruptions.
Did the research contradict any other findings?	The results from this study are likely to constitute a lower bound on the societal value of avoiding supply interruptions, since this method is unable to account for some elements such as the inconvenience for the customer, Severn Trent's private costs of managing the incident, or externalities.

	Reducing supply interruptions emerges as a higher priority for the plan, compared to other research projects.
Any other information	

Strategic challenges – supply and demand

Supplier	Britain Thinks
Fieldwork completed	October 2017
Aim of the research	• Understand customer views on the impact of drought, including levels of tolerance regarding the risk and impact • Explore informed reactions to proposed solutions regarding supply options (e.g. water transfer, effluent reuse, alternative use of sources) and demand management solutions (e.g. metering, behavioural change), and attitudes towards leakage and leakage reduction • Explore attitudes towards short-term versus long-term investment options • Deep dive on metering and switching water sources
Demographics	• Deliberative workshops: 48 customers • Ten in home depth interviews with customers in vulnerable circumstances • Mix of age, gender, SEG, life-stage, ethnicity and tenure type • Mix of payment types, billing methods and water meter status • Mix of attitudes towards the environment TOTAL CUSTOMERS CONSULTED: 58
Research approach	• One full day deliberative workshop in Birmingham with 24 customers, and two half day deliberative workshops in Mansfield (focus on switching water sources) and Stoke-on-Trent (focus on metering), each with 12 customers • Ten in home depth interviews with customers in vulnerable circumstances • The research took a deliberative approach - participants were taken on a 'journey' so that we could explore the things that matter most to them and their priorities (both spontaneous and when informed about Severn Trent Water activities). • This approach allowed us to provide information, building participants' knowledge so that they were able to make an informed decision about different options and priorities to address the supply and demand challenge.
What did the research tell us that was new?	• Awareness of the supply / demand challenge is very low amongst customers – and so few spontaneously list 'planning for the future' among Severn Trent's responsibilities. • However, when prompted, customers agree that ensuring there is enough water for the future should be a priority for the company. • Concerns about drought are low. Hosepipe bans are generally seen as quite common and linked to hot summers rather than droughts – which they think are unlikely to occur. • When prompted, participants describe drought as an issue affecting other countries, rather than the UK. • Most say they would feel little impact from level 1 restrictions (encouraging customers to use less water – expected every two years). Educating customers to use less water is seen as something that Severn Trent is doing, or should be doing, already. • Similarly, due to minimal impact, level 2 restrictions (temporary use ban [hosepipe ban] – expected once every 33 years) are also generally considered acceptable.

	• Customers do not see level 3 restrictions (non-essential usage ban – expected once every 33 years) as having a direct impact on them, but they worry about the impact on businesses. • Level 4 restrictions (emergency drought order – expected once every 200 years) are seen as extreme, although probably proportionate to the seriousness of the situation, and very unlikely to occur. • There is no appetite to invest to improve the level of drought resistance (and no desire to let it deteriorate for a small cost saving), including when presented with comparative levels for other companies. • Customers have a strong moral frame when thinking about water usage, resulting in an emphasis on personal and corporate responsibility to use less water. However many admit to not doing anything at all *themselves* to reduce the amount of water they use, especially if they don't have a water meter. • Amongst those who seek to reduce their water consumption, the most common steps are turning off tap while brushing teeth, water butts in the garden and taking showers instead of baths. • Only a very small number who are careful with water report being motivated by environmental concerns. • Customers used four key questions when evaluating the solutions that they were shown: o Does it encourage responsible use of water? o Is this a long term / sustainable solution? o Is it value for money? (i.e. will it provide value in the long run, not the cheapest option) o Does it avoid harming the environment? • Of the options presented to customers, metering is the one that best satisfied their key questions, and which therefore receives the most support. • The possibility of saving money through a water meter is highly motivating. In addition, customers welcome the enhanced level of personal responsibility meters bring about. • As a result, customers say Severn Trent should ultimately be aiming to move all customers to a meter. Despite this some customers express concern (e.g. those with large families or who use a lot of water for medical reasons) • Customers are often surprised to learn that most people save money on a water meter, that installation is free and that customers can return to rateable value billing within two years. • Other popular solutions are fixing leaks and water efficiency. Least popular solutions are importing water and abstracting more water from rivers and of all the options tested, effluent reuse is the most divisive. • Switching water sources to meet supply demand issues is an issue that prompts considerable concern amongst customers. To feel reassured, customers say they need detailed information about the duration of the switch, the replacement source and the implications of any chemicals used for customers. • Customers favour investment in new infrastructure as a solution to switching. Because it is a long term solution and, ultimately, perceived to be more cost effective than the status quo.
What did we already know that the research validated?	• Water is not a topic that customers think about in their everyday lives. They rarely consider issues such as drought and climate change. • Customers tend to favour demand management approaches over supply options, however they recognise that any solution will need to include a blend of both options. • Tackling leakage is non-negotiable and remains a top priority. Fixing leaks demonstrates Severn Trent's commitment to use its resource responsibly

Did the research contradict any other findings?	• When considering options to resolve the supply demand deficit respondents demonstrated strong support for metering. We know from other research that customers have also have mixed views and understanding of the benefits of having a water meter.
Any other information	n/a

Water trading – joint research with United Utilities and Thames Water

Supplier	Verve
Fieldwork completed	May and June 2018
Aim of the research	Research was needed to evaluate customer views on water transfer solutions in comparison with water supply and demand management alternatives. Aims were: • To understand the spontaneous views of customers towards possible water resource management options • To ascertain customer views towards water trading specifically, focusing on perceived barriers and assurances needed to overcome these barriers • To understand how the above differs across key customer groups
Demographics	• Mix of household and non-household customers in four regions: Severn Trent, Thames Water, United Utilities and Wales. TOTAL CUSTOMERS CONSULTED: 440 Severn Trent customers. (Project total is 1,727 including customers of other water companies)
Research approach	Across the whole project: 49 non-household depth interviews, deep dive online community (173 household customers), online survey amongst household customers (1505 respondents)
What did the research tell us that was new?	• 7 in 10 customers are concerned about water scarcity, particularly those in Thames Water areas. Lack of concern is largely due to disbelief • Customers question why they don't know more given the severity of the issue • Those in 'donor' regions are significantly more likely to feel disbelief due to the wet climate. Thames customers tended to feel more confident that a solution will be found • Customers recognise that water scarcity is a long term issue requiring immediate nationally co-ordinated action • Customers recommend that sustainability is the top selection criterion • 74% 'agree' they would support water trading as part of the solution - it's logical to share • Concerns exist about security of supply, environmental and financial impacts • Donor customers are concerned as to the impact on their supply. Thames Water customers ask whether water will be available when needed • Non-households in donor regions are concerned about the impact of an 'unreliable' supply on their business • Customers assume they will cover the cost of water trading through increased bills. • In donor regions, 40p is seen as better reinvested than returned via lower bills • Eight assurance statements have been developed to help mitigate core areas of concern with water trading, including transparency and fairness • Customers also need to know that there is continued improvement in demand management • Research revealed there are few areas on which customers differ in opinion on the issue of and solution to water scarcity. Where differences exist these are driven by the following factors: o Living in a donor region vs. a recipient region

	○ Customers with a water dependent medical condition ○ Working for a water critical business ○ Social, cultural and political views held • Household and non-household customers demonstrate very similar views throughout. There are 3 areas on which non-household customers are differentiated: ○ Have additional concerns about the impact of water scarcity on business operations and running costs ○ Additional assurance required that water companies are committed to maintaining a water transfer network ○ High levels of trust in water company working practices to ensure effective planning and delivery of supply solutions
What did we already know that the research validated?	• Customers believe widespread education is needed and assume that fixing leaks is the major priority • Customers are less certain about preferences for supply solutions
Did the research contradict any other findings?	n/a
Any other information	n/a

Strategic challenges – resilience

Supplier	Britain Thinks
Fieldwork completed	October 2017
Aim of the research	Understand customers' views on resilience
Demographics	One full day deliberative workshop with 24 customers Ten in home depth interviews with customers in vulnerable circumstances TOTAL: 34
Research approach	The research took a deliberative approach - participants were taken on a 'journey' so that we could explore the things that matter most to them and their priorities (both spontaneous and when informed about Severn Trent Water activities). This approach allowed us to provide information, building participants' knowledge so that they were able to make an informed decision about different options and priorities.
What did the research tell us that was new?	• In terms of resilience, respondents felt Severn Trent should have a combined approach and both anticipate the challenge, and also be prepared to respond when things go wrong. • From experience, discoloration is perceived as being very short in duration and therefore of low impact to customers. Anything over a few hours would be unacceptable. Respondents said they would not feel comfortable drinking discoloured water, and therefore perceived it to be the same as an outage. • Respondents were most concerned about the impact of wastewater asset failures due to the health and environmental impacts. Any events that have serious long term implications for the environment or for customers' health raise concerns and are seen as unacceptable regardless of circumstances • Respondents expected Severn Trent to have contingency plans in place in the event of flooding and to have taken mitigation steps in areas affected in the past • Increasing supply resilience should be a priority as interruptions due to single points of failure were deemed unacceptable
What did we already know that the research validated?	• There is a clear expectation that Severn Trent should have plans in place to ensure a continuous water supply

	• Customers' views of the acceptability of disruptive events are strongly linked to perceptions of responsibility. Severn Trent is held to be responsible for failure of its assets; events of these kind are therefore deemed unacceptable. In contrast, there is more tolerance for failure arising from natural disasters, which are seen as outside Severn Trent's control. • Duration is also key in determining acceptability, when short term, interruption to supply and discolouration are seen as inconvenient but acceptable, whereas longer term interruptions (over a day) are seen as unacceptable, because of the potential implications for customers. • Interruptions to supply can have serious implications for customers in vulnerable circumstances (from both a financial and health and wellbeing perspective)
Did the research contradict any other findings?	
Any other information	As support for protecting assets from flooding was inconclusive we should revisit this in the trade-offs research.

Strategic challenges – flooding

Supplier	Britain Thinks
Fieldwork completed	December 2017 – January 2018
Aim of the research	Understand customers' views on sewer flooding and how Severn Trent should prioritise action
Demographics	One full day deliberative workshop with 24 customers Ten in home depth interviews with customers who have suffered or who are at risk of flooding TOTAL: 33
Research approach	The research took a deliberative approach - participants were taken on a 'journey' so that we could explore the things that matter most to them and their priorities (both spontaneous and when informed about Severn Trent Water activities). This approach allowed us to provide information, building participants' knowledge so that they were able to make an informed decision about different options and priorities.
What did the research tell us that was new?	• Whether or not customers have personal experience of flooding is a key factor driving how urgently customers want to see action taken. Customers with direct, personal experience are far more likely to see it as an issue requiring urgent attention • Severn Trent is not seen as responsible for flooding. Instead the Environment Agency and local councils are more likely to be identified as bearing responsibility • There is limited awareness of what actions can be taken to tackle flooding and who might take them • The range of organisations involved raises immediate concerns about "passing the buck" • Customers without experience of flooding tend to support Severn Trent's current risk based approach to flooding • Those with experience are keen to see Severn Trent go the extra mile to help those at risk • Overall customers do not oppose Severn Trent taking additional responsibility for flooding, but only in the context of other parties doing their fair share • Customers do favour partnership working but have questions as to how well this would work in practice • There is considerable support for the use of SuDs as long as key practical considerations can be addressed

	• Urban creep (although not with those words) is an issue that is raised spontaneously by customers and which is a source of concern. However questions about Severn Trent's ability to have a direct impact on this issue limit support for action.
What did we already know that the research validated?	• Flooding in an extremely emotive issue • Customers were shocked to learn about the extent of sewer blockages and of their own role in causing them • Customers who have experienced flooding want empathy, understanding and accessibility in their interactions with Severn Trent
Did the research contradict any other findings?	
Any other information	

Choices research

Supplier	Truth
Fieldwork completed	February and March 2018
Aim of the research	• Gain deep qualitative and quantitative insight into customer views on different PR19 plan elements, including Outcome Delivery Incentives (ODIs) and Performance Commitments (PCs), against set criteria • Provide clear and robust guidelines on refinement to the plan, based on insight
Demographics	• Household and non-household customers • Mix of demographics • Qualitative fieldwork was conducted in Birmingham, Derby, Coventry, Shrewsbury and Nottingham TOTAL: 2309
Research approach	• 6 focus groups with household customers • 3 focus groups with non-household customers • 4 depth interviews with customers in vulnerable circumstances • 4 depth interviews with medium-sized non-household customers • 20 minute online survey with 2004 household customers • 20 minute online survey with 225 non-household customers (mix of small, medium and large) • The approach was broadly consistent across qualitative and qualitative stages, but like-for-like comparisons cannot be made for every measure. • Customers can struggle to articulate which service levels are most important to them for investment; they are all important in their way. Therefore, we focused on understanding relatively higher priorities via a trade-off approach in both the quant and qual research. • We designed an interactive exercise to present customers with our proposed incentive rates, based on a scaled-score derived from the triangulated WTP results for each service area. We asked customers to feedback on these, including reducing the rate to zero if they felt an incentive was not appropriate for that service area.
What did the research tell us that was new?	• The research took place before and after the big thaw (~ 4 March 2018). Post-incident, a higher percentage of household customers reported issues with low water pressure, leakage and interruption to supply. However, there is no significant impact from this incident on customers' priorities. • Broadly, customers support Severn Trent's proposed PCs, targets and ODIs.

	• Respondents prioritise investment in infrastructure, especially where it contributes to reducing leakage, and where it most impacts people's lives, for example, sewer flooding.
	• Customers support the incentive / penalty mechanism for PCs, and are prepared to pay more for better service. Similarly, they would prefer to avoid weaker performance, even if their bills were lower. Most customers are also prepared to pay more for frontier performance.
	• It's important to take into account the biases customers show when they're making decisions on priorities. Most are unfamiliar with the full scope of Severn Trent's activities, and tend to default to what is familiar or most obvious. Customers do not have a proper understanding of the cost / benefit of some measures, and use other factors to influence decision making.
	• There is variability in the needs of non-household customers. Many have needs which are interchangeable with household customers, however some types of business have specific needs:
	    o Businesses where customers use the premises are much more sensitive to any issues which might paint their business in a negative light, e.g. lack of water, issues with sewerage
	    o Businesses which use water as an integral part of their operations may depend on a certain level of service. Issues with water flow and availability are critical, other measures take more of a back seat.
	• Response to the measures is initially often emotional and based on gut-feel, and then post-rationalised.
	• External sewer flooding: Concerns about health risks and the environment mean that this is an important priority.
	• Lead pipes: Fears over health risks and wasted water mean that this is a consumer priority.
	• Discolouration, taste and smell: Not considered a troublesome issue, so not a priority.
	• Improved river water quality is a 'nice to have' measure. Customers perceive this has little impact on them.
	• Water supply interruptions are not a top priority for customers, but are a priority for water-intensive businesses.
	• Pollution incidents: current performance means that customers feel not much improvement is required.
	• Reducing low water pressure is not a consumer priority, but a more critical issue for businesses.
	• Biodiversity is seen as a lower priority, and outside Severn Trent's remit.
	• Household and non-household respondents feel sewer flooding should have equal priority when it occurs on roads and in gardens.
	• More than half of respondents are prepared to pay more for a larger reduction in mains bursts and collapses.
	• Household respondents don't have a strong view on priority of improving low water pressure. Businesses place greater priority on long-standing pressure issues and are less willing to accept current service levels.
	• ODIs are seen as a fair way to encourage good service and good value for money and given the choice, most are happy to pay more for better performance. This is in the context of the base bill coming down (in real terms).
	• 61% of customers agree that it's acceptable that +/- £15 (based on the average bill) of their bill can be linked to how Severn Trent performs. Aiming for frontier performance is also accepted (with a greater bill impact).

What did we already know that the research validated?	• Customers tend not to think about their water supply or supplier in their day to day lives. • Customers have a rudimentary understanding of the full range of Severn Trent's activities, and of the challenges they face as a business. This means customers tend to default to their own experiences (i.e. how does this affect me?), or perceptions as

	to what Severn Trent ought to be doing as a water company. If they have no experience they consider any potential future impact on themselves. Thereafter, they consider the wider long-term or societal benefits. • Bills are felt to be reasonable, and there is rarely 'bill shock'. • Severn Trent is trusted, and seen to be performing well already. • The water supply is consistent and issues with water / wastewater management are rarely experienced. • Leakage and improving speed of response are considered to be important priorities. • Education is welcomed with adults, as well as children. • Sewer blockages: Consumers feel Severn Trent has an important role to play in encouraging people not to block sewers. • Internal sewer flooding: Consumers are keen to invest in preventing this 'soul destroying' event. • Customers support the principle of Severn Trent's social tariff, the Big Difference Scheme, and are willing to increase their contribution. It's seen as a positive way to help those who are struggling. There are some reservations over whether all of the money is going to the right place and whether the scheme is administered fairly, but these only cause rejection of the scheme among a minority.
Did the research contradict any other findings?	In this project, customers' willingness to contribute to the Big Difference Scheme was lower than seen in the 'social tariff cross-subsidy research'. This is because in that project, the methodology was different; the social tariff was explored in isolation (as advised by CCWater), not amongst other bill impacts. However, both studies concur that most customers are happy to increase their contribution to the Big Difference Scheme.
Any other information	n/a

Choices research – depths with large non-household customers

Supplier	Truth
Fieldwork completed	June 2018
Aim of the research	• To understand what matters most to large businesses in terms of service • To explore their views of the business plan
Demographics	• Three representatives of large, water-critical businesses located in the Severn Trent region. • A large automotive company, a food manufacturer and a large hospital were consulted. • All were accountable for the water supply at their company, but job roles varied; they worked in estate management, health and safety and energy manager roles. • Two of the companies had experienced a water supply interruption in March 2018. This incident seriously impacted one business. This context has driven perceptions of Severn Trent's priorities at each business. TOTAL CUSTOMERS CONSULTED: 3
Research approach	Face-to-face qualitative interviews, each lasting one hour
What did the research tell us that was new?	• Water is a critical resource for all of the large businesses, and therefore their focus is primarily on a guaranteed and reliable supply. To this end they would like to see investment from Severn Trent in the areas which affect supply. • All large businesses see themselves as part of their community and take their social obligations seriously. They want to see this reflected by their suppliers and partners. This affects their view on measures which affect the community and natural world. • They want us to prioritise long term investment and tend to de-prioritise areas that do not directly or frequently affect them as a business.

	• The retailer / wholesaler split has created a barrier between business and the supplier, which is not in businesses' interests. Businesses depend on water supply and seek to maintain a relationship with Severn Trent in case service issues occur, and want to see Severn Trent committed to their interests as well as the wider consumer base. • They are happy to pay more for a better wholesale service. Compared to other utilities, and other business expenses, water is cheap. Conversely, water supply is a significant business risk; without water the business can't function. Therefore these large businesses are not particularly price sensitive – their priority is minimising risk and maintaining supply • This dynamic feeds through to the incentive mechanism; large businesses are prepared to pay more for higher and frontier performance as the perception is that it will meet their needs better. • The key benefit of splitting retailer from wholesaler is to introduce competition and reduce costs, however, water is a relatively low expense compared with other utilities and business costs, and there are only marginal savings connected with switching retailer. On the other side, the retailer / wholesaler relationship introduces complexity and additional bureaucracy. • Response times from retailers for even minor service queries are slow. This is a backward step from having a dedicated relationship manager with Severn Trent. Ultimately businesses see Severn Trent as holding responsibility for wholesale service issues, and so seek a direct relationship with them. • There are a number of frustrations with retailers: These include: a long lead time between a request for information and the answer, billing complications, late bills, lack of communication and lack of integration with the wholesaler • We asked businesses to feed back on the performance commitment areas at a general level, before going into the detail of what is proposed. Of primary priority are issues relating to reliability of supply. Of secondary priority are issues relating to making a positive difference in the community. Of tertiary priority are issues which may be of importance, but which do not directly affect the business. • On seeing the detail of what is proposed opinions shift a little. Primary priorities relate to water supply interruptions, leakage, response to leaks, low pressure and mains bursts. Secondary priorities are biodiversity, river water quality and pollution incidents. Tertiary priorities are internal sewer flooding, external sewer flooding, sewer blockages, sewer collapses, lead pipes and discolouration, taste and smell.
What did we already know that the research validated?	• Large businesses want (and expect) quick solutions if there are service issues
Did the research contradict any other findings?	n/a
Any other information	n/a

Tap Chat – water efficiency campaign

Supplier	Join the Dots
Fieldwork completed	6 June 2018
Aim of the research	• To understand customers' likely response to Severn Trent's water efficiency Facebook campaign • To explore reactions and appeal of five creatives (three videos and two stills were shown) which may be used in the campaign, as well as two website landing pages • To understand whether or not the campaign would encourage customers to 'click-through' to a landing page to find out more about ways to save water

	• To understand any impact the campaign may have on customers' water usage behaviour • To explore how, if at all, the campaign changes customer perceptions of Severn Trent
Demographics	• Selected panel members were invited to participate. Nine panel members participated. • Mix of age, gender, SEG and metered status TOTAL CUSTOMERS CONSULTED: 9
Research approach	Live chat – online discussion lasting one hour
What did the research tell us that was new?	• Customers are not surprised to see Severn Trent trying to encourage customers to save water. They would not be surprised to see the same sort of messages coming from the government, their local council, environmental organisations and charities. • Panel members don't necessarily expect to see a Severn Trent campaign on Facebook. They say they would expect to see such messaging on an email instead. Facebook is perceived as a social platform; customers say they don't expect to see companies promoting messages there, and that they don't tend to 'follow' companies. • All five creatives are considered informative and interesting; they show how simple some of the methods of saving water are. However, respondents say they are unlikely to click through to find out more without prompting. • The 'watering can' video and 'shower' still were liked best; the images of water droplets and seasonal water use have particular appeal. • The 'dishwasher' creative highlights the importance of teaching children at a young age to conserve water. • The 'Hippo device' creative was not well received, not only because panel members did not know what a Hippo device is, but also because they find it inappropriate to see a video of a child on the toilet. • In the 'toothbrush' creative, respondents were shocked to learn that as much as ten litres of water can be wasted when brushing teeth and leaving the tap on. • Respondents would prefer a more diverse representation of customers. The customers who don't have children engaged less well with the creatives which feature children. • Metered customers said the campaign would remind them to save water. • The campaign does not necessarily change respondents' opinions of Severn Trent, but all acknowledge that such a campaign is worthwhile.
What did we already know that the research validated?	• Most customers are unaware that Severn Trent provides water-saving devices to customers free of charge.

Tap Chat – asset health and maintenance

Supplier	Join the Dots
Fieldwork completed	31 May 2018
Aim of the research	• Explore to what extent asset health measures, such as mains bursts, are customer priorities. • To explore the extent to which customers think about asset health, how they feel about potential issues, and what their expectations are of Severn Trent
Demographics	• Eight panel members participated in a live chat (online focus group) • Mix of age, gender, SEG and metered status TOTAL CUSTOMERS CONSULTED: 8

Research approach	Live chat – online discussion lasting one hour
What did the research tell us that was new?	• There's very little knowledge about the frequency of pipe maintenance or the age of the infrastructure in their area – and it's not a spontaneous concern for respondents. • Mains bursts, sewer collapses, sewer blockages are felt to be 'just one of those things' – they happen occasionally but rarely in customers' experience. Severn Trent isn't singled out for blame. • When informed of the number of bursts in the region and age of the water pipes, customers are surprised, but have no context for the information so cannot realistically know whether this is particularly good or bad compared with other water companies. • Respondents assume assets are regularly maintained, as they are not aware of issues arising from ageing assets. • The expected impact of a mains burst are supply loss or contamination, roadworks and damage to roads and properties. • The importance of drinking water makes maintenance on pipes more of a priority vs other utilities. • Some customers feel that less there's less visible work occurring vs other types of utilities – however, some are thinking of it in terms of less being needed. • On balance, customers' priority is ensuring they don't experience increased disruption to their water supply – more so than reducing bursts but there is a strong realisation of these being connected. • We told customers: 'Over the next five year period Severn Trent will be working to improve the service customers get – for example they will deliver a reduction in interruptions to supply, fewer properties suffering from low pressure and a 15% leakage reduction. They will also be maintaining the network of water pipes to ensure the number of bursts is kept stable.' Although respondents want Severn Trent to do more than outlined here, the level of disruption they experience is minimal enough that the current level of maintenance is acceptable.
What did we already know that the research validated?	• Customers only tend to think about water when there's a trigger such as a bill, supply issue, leak, visible maintenance, potential issues (e.g. frost) or when they see something in the news. • Loss of supply is not something they worry about even though some have experienced interruptions. However, there might be specific individual circumstances - we saw one person with a disability was more concerned.

Tap Chat – lead free schools and ODI design

Supplier	Join the Dots
Fieldwork completed	Live chat: 5 May 2018 Survey: 8 May – 10 May 2018
Aim of the research	This project provides insight on two topics: • Severn Trent wants to check proactively for lead pipes in schools and nurseries, to reach a position where there are no lead pipes supplying water in the region's schools. We wanted to check whether customers agree with this strategy. • Do customers support ODI penalty collars
Demographics	• Panel members were invited to participate in the live chat. Six panel members participated, followed by an online survey which was taken by 545 panel members. • Mix of age, gender, SEG and metered status. TOTAL CUSTOMERS CONSULTED: 551
Research approach	Live chat – online discussion lasting one hour, followed by a 20 question survey with 545 Severn Trent customers.

What did the research tell us that was new?	<u>Lead-free schools</u> • Lead in drinking water isn't a major spontaneous concern for customers. More common concerns about water quality are around unpleasant smell and taste, limescale, fluoride, chlorine, pollutants, air bubbles etc. • Most are aware that lead pipes were widely used until the 1970s; half of those aware say it's a concern for them. • 8/10 customers claim to be aware that pipe ownership changes from the water company to the property owner at the property boundary. • Most believe the approach of tackling lead pipes in schools and nurseries first is a good idea and that the proposed target is acceptable. However, some don't want to pay more via their bills if Severn Trent exceeds the target. • Resistance is largely because customers feel *every household's* pipes should be checked, not just those belonging to schools and nurseries, as children are more likely to drink water in the home. • Some feel that schools/nurseries should check their own water pipes and homes should be given priority. • Some think Severn Trent should use profits or other sources to fund the initiative. <u>ODI penalty collars</u> • 84% of customers think the principle of ODI penalties for missing targets is fair and 60% feel the same way about incentives for exceeding targets. • Customers feel there should be a cap on how much Severn Trent can be penalised and on how much their bills can increase by. • Some don't think it's fair for water companies to be incentive for what they see as the "day job", while other think any "penalties" should feed back into infrastructure and services. • Customers are split about whether customers should benefit from reduced bills if an *extreme event* means Severn Trent misses its targets, although two thirds think water companies should be prepared for all events – even 'acts of God' – largely because they provide an essential service. Others say it's not reasonable to be prepared for events outside of Severn Trent's control. • Some raised concerns that a penalty collar could mean Severn Trent becomes complacent about being prepared for increasingly frequent 'acts of God' such as flooding.

Real options approach- deliberative research

Supplier	Britain Thinks
Fieldwork completed	6 July 2018
Aim of the research	• To understand which of the approaches Severn Trent is considering in relation to the Water Framework Directive (WFD) and the supply/demand imbalance customers would prefer. • To identify principles that should underpin decisions that ST takes when there is uncertainty.
Demographics	• Mix of age, gender, life-stage, SEG, ethnicity and tenure type • Four customers who are struggling to pay bills, two with a disability or health problem • Mix of payment types, billing methods and water meter status • Mix of attitudes to the environment TOTAL CUSTOMERS CONSULTED: 24
Research approach	A day-long deliberative workshop, held in Birmingham

What did the research tell us that was new?	• Customers are used to bills increasing over time, therefore a small annual increase in water bills is not a huge concern for the starting point for many customers is an increased need for water, leaks and use of water meters, with some awareness of inflation • When presented with the reasons behind bill increases customers were (even) more accepting of potential rises • Customers were positive that ST is planning to reduce bills prior to inflation • Customers say that they would be concerned about increases from between £3 and £10 extra per month. £5 is seen as a 'notable' payment, and therefore an acceptable (maximum) increase • There is no existing 'gold standard' for how companies communicate bill changes to customers. Email, text and post are all mentioned as good ways for ST to keep customers informed. A couple of customers mentioned ST's recent texts about the heatwave as great examples of short, snappy and useful communications • Customers' front of mind issues facing water providers are the maintenance, supply, shortage and price of water. Climate change was not spontaneously mentioned by many as a challenge • Customers are surprised by the challenges to the water supply, but expect and trust Severn Trent to deal with it effectively • We gradually revealed information about three different options to address uncertainty relating to the supply/demand imbalance, and the impact on bills, to understand how perceptions changed. The options were: Option A (invest now in schemes that might turn out not to be needed), Option B (some investment for design/feasibility) and Option C (do nothing yet). Most chose Option B initially, and did not change their opinion after the impact on bills was shown. However, once shown the impact of all three options on their bill, a minority of customers changed their mind and selected Option A. These customers consider a bill increase of £4 per year to be insignificant. • We presented customers with information about the Water Framework Directive, explaining that Severn Trent must take action to improve river water quality, and that Severn Trent has 'green' and 'amber' schemes for improving river water quality. Customers then decided individually whether Severn Trent should include funding for the 'amber' schemes as well as the 'green' ones. Initially, most chose to fund just the 'green' schemes. But once bill impacts were shown, most wanted the 'amber' schemes to be funded too, since an additional £3 on their annual bill was not considered to be high. Those who are keen on 'amber' investments tend to care more about the environment, and trust the company to do the right thing. • In the context of customers' household bills, Severn Trent bills are seen to be low. As a result, there is a relatively high tolerance of bill volatility.
What did we already know that the research validated?	• Trust in Severn Trent is high, based on personal experience of a reliable water supply. Communicating about Severn Trent's plans to address the supply/demand imbalance could help to build trust further. • Customers have a relatively relaxed attitude to their water bill because it is generally much lower than their other bills. As a result, they are positive about the value for money ST provides • Those without a water meter are more likely to be disengaged with their water bill, as the fixed price means they know what to expect • The environment is a key concern for customers. Most customers are concerned about the environmental impact of unnecessary works, but think that ST needs to forward plan to ensure it is protecting the environment • There is an acceptance that the long-term security of the water supply is the responsibility of both Severn Trent and the customer. As such, many spontaneously talk about Severn Trent educating customers on how to use water more efficiently • Customers outline four overarching principles that define the motivation behind their choices in terms of supply demand solutions: o Does it encourage responsible use of water?

	○ Is this a long term / sustainable solution? ○ Is it value for money? (i.e. will it provide value in the long run, not the cheapest option) ○ Does it avoid harming the environment? • Customers feel that ST and customers must work in partnership, therefore an equal split of demand management and supply side approaches is preferred. However, the size of potential contribution from supply side options leads many to view them as the most effective choice.
Did the research contradict any other findings?	n/a
Any other information	n/a

Real options approach – quantitative research

Supplier	Join the dots
Fieldwork completed	13 – 15 June 2018
Aim of the research	To understand customer preference for the approach Severn Trent could take with respect to the two areas of uncertainty in investments: • Improving the biological health of rivers over 2020 – 2025 to comply with the Water Framework Directive • The supply-demand balance, ensuring water for future generations
Demographics	• Mix of age, gender and SEG. TOTAL CUSTOMERS CONSULTED: 824 Quick poll 1 – 824 completes Quick poll 2 – 781 completes Online discussion – 216 comments
Research approach	Tap Chat community panel. Two polls and an online discussion.
What did the research tell us that was new?	• On improving river water quality, 76% of customers want us to wait until the “amber” schemes have been confirmed before we recover the costs for investment through customer bills. Only 24% want us to collect the money up front and refunding it back to them later if the schemes do not go ahead. • Some customers have concerns that they may have moved or died by the time Severn Trent refunds the costs of schemes that do not go ahead. Some are skeptical that they will ever receive a refund. • A few feel that it isn’t fair to ask customers who are struggling to pay their bills for money they don’t have to make investments that may not be needed. • There is an underlying sentiment that customers should not have to pick up the bill for future investments in environmental improvements or in building new infrastructure. These investments should either be funded by government, company profits or shareholders. • A similar sentiment emerges on the supply-demand investment to ensure future water supply in the event of impacts from climate change. 69% of customers prefer Severn Trent to be in state of readiness by investing a moderate amount now to lay down the ground work. 18% would like us to invest now in infrastructure that may not be needed in the future. Only 13% feel we should do nothing until it becomes completely clear that the investment is needed (13%).
What did we already know that the research validated?	Severn Trent should be doing a lot more to educate customers on how to use water wisely. We should also be: • Fixing water leaks (which is seen as a major priority). • Maintaining infrastructure.

	• Promoting metering so customers can see how much water they actually use. • Investing in new technologies relating to water efficiency. • Increasing water storage and distribution.
Did the research contradict any other findings?	n/a
Any other information	n/a

Acceptability research – pre survey testing - Reporting performance and presenting inflation

Supplier	Join the Dots
Fieldwork completed	May 2018

Aim of the research	<u>Reporting performance</u>
	• To understand the performance commitments (PCs) which of most interest to customers.
	• To understand the best way to communicate Severn Trent's annual performance to customers.
	• To understand customer reaction to comparative information (performance of Severn Trent vs other water companies).
	<u>Inflation</u>
	• To inform the language that we use in our PR19 Acceptability research, specifically:
	  ○ How to explain inflation clearly
	  ○ How best to show bill profiles 2020 – 2025
	• To understand whether customers know why bills fluctuate from year to year.

Demographics	• Selected panel members were invited to participate. We aimed to achieve 500 completed surveys, from a representative mix of respondents, for each topic. TOTAL CUSTOMERS CONSULTED: 1020
Research approach	Online survey, including activities from Join the Dots' toolkit, e.g. 'sticky notes'.

What did the research tell us that was new?	• Customers find the performance commitments for water services of greater interest than those for wastewater.
	• The PCs most commonly selected as 'important for me to <u>know</u> about' are:
	  ○ Ensure future water supply (74%)
	  ○ Risk of severe restrictions in a drought (67%)
	  ○ Water supply interruptions (64%)
	  ○ CRI (60%)
	  ○ Mains bursts (59%)
	  ○ Speed of response to customer-reported leaks 53%)
	  ○ Leakage (50%)
	• The wastewater PCs most commonly selected as 'important for me to <u>know</u> about' are:
	  ○ Pollution incidents (50%)
	  ○ Sewer flooding in roads and public places (49%)
	  ○ Improvements in river water quality (45%)
	  ○ Sewer blockages (44%)
	  ○ Sewer collapses (43%)
	• Since customers are unable to switch suppliers, knowing how their water company is performing compared to others is important. Comparative information showing Severn Trent performance against an all water companies UK average is important for most. It helps reassure them that they are not being exploited.

	• Only 5% have visited the Discover Water website. This shows that customers do care about the information being available but may prefer to read and use information if it is sent to them rather than them having to seek it out.
	• When shown 'What your bills paid for in 2016/17', which included a doughnut chart showing the proportions of different types of company spending, customers liked the following text:
	  ○ 'We're proud to say that this is the lowest combined bill across the whole of Great Britain'
	  ○ 'Just 90 pence per day' – this is a relatable sum
	  ○ Bright colours on the chart – make it easy to read
	• Some customers felt some categories of spending require more information
	• There is some negativity towards one third of the spending going on "running the company". More information is needed to allay customer concerns and to ensure complete transparency.
	• The biggest proportion of respondents want the information on their bill (35%). 10% of respondents say they want to see this information in Severn Trent's annual report. 19% want to see it on the Severn Trent website.
	• The majority want the information in the form of an infographic (70%) or a short report (37%). Less popular was video (17%). 6% said they would not want the information in any format.
	• We tested three different versions of presenting information for a PC. All were considered clear, but the one most preferred was the most detailed one, which included both (example) target number of incidents and the target percentage reduction: 'We will reduce pollution incidents from 300 per year currently to 270 per year in 2025. This represents a 10% reduction'.
	• Some customers want to know more, e.g. how we define a pollution incident, and how the reduction will be achieved.
	Inflation
	• Only 1% of respondents don't know what inflation is, and most say they would be able to explain it (70%).
	• Customers understand that inflation can cause bills to fluctuate.
	• When looking at the cost of their future bills, the largest proportion of respondents would like an estimate of inflation to be included - even though this would be an estimate, and the price of other goods and services, as well as their income, could change over the next five years (45%).
	• Almost one fifth (18%) say they would prefer to see the cost of future bills without inflation because the price of other goods and services, and their income, could change over the next five years.
	• All of the bill profile examples we showed are considered clear and easy to understand. The bill profile ranked most clear and easy to understand was in the form of a table showing average bills in each of the five years. There was a column showing the bill with and without inflation.
	• Some question how inflation can be predicted accurately.
	• Customers like to compare their bills with those of other water companies; they hope to see that they are not being overcharged for a similar service.

What did we already know that the research validated?	Customers are most concerned with the PCs that are more likely to impact them directly. This is true for both water and wastewater services.
Did the research contradict any other findings?	n/a
Any other information	n/a

Acceptability research

Supplier	DJS Research / Join the dots
Fieldwork completed	25 May – 2 July 2018 and 13th – 20th August
Aim of the research	• To determine the acceptability of the PR19 business plan in terms of bill impact, bill profile (2020 – 2025) and service improvements. • To understand why the plan is acceptable or not, and the implications for affordability
Demographics	The sample included: • Household customers – spread of geography across the region • Non-household customers (mix of micro, small, medium and large) • Younger bill payers • Those in financially vulnerable circumstances • Hard to reach customers, e.g. first generation Punjabi, Urdu and Polish speakers, • South Staffs Water household customers TOTAL CUSTOMERS CONSULTED: 2,654 in wave 1 and 1,400 in wave 2
Research approach	**Wave 1** • Online surveys and CAPI (face-to-face, in-home) interviews • 492 (26%) of the online surveys with Severn Trent household customers were conducted with members of Tap Chat, Severn Trent's online community panel • First generation Punjabi and Urdu speakers - survey was translated and conducted in each language • Stimulus materials used in the survey were subjected to the '10 year old test', a mini focus group with six ten year olds to assess clarity. Wording of materials was tweaked as a result. • Pre-fieldwork, there was a pilot phase, including filming ten interviews with household customers • Half of the sample saw bill prices in real terms; half of the sample saw prices in nominal terms • Quotas were set on age, gender, SEG, income and meter status. • Data were weighted to ensure they were representative of the region **Wave 2** • Online survey on Tap Chat, with a fresh sample of household customers who were not invited to take part in the previous research • Half of the sample saw the bill prices in real terms; half of the sample saw it in nominal terms • Quotas were set on age, gender, SEG, income and meter status. • The sample which saw the bill in real terms met the quotas, the nominal sample was very slightly off quota
What did the research tell us that was new?	**Wave 1** 80% of household customers, and 61% of non-household customers find our proposed plan acceptable, when presented with the service plan and bill in real terms. • We asked customers whether the proposed performance commitments for water, wastewater and retail are acceptable, and the majority of customers agreed they are: 81% of household customers, and 80% of non-household customers, supported the proposed package of water performance commitments. • 80% of household customers, and 78% of non-household customers, supported the proposed package of wastewater performance commitments;

	• Those who disagreed often perceived they would be paying more for the improvement or had no issues with the current service. • 75% of household customers supported the retail performance commitments; those who disagreed with the retail commitments felt other aspects of water supply are a higher priority compared to helping others. • Presenting the bill in real or nominal terms does have an impact on net acceptability, although results from the questions in nominal terms are still very positive, with 66% of household customers finding the proposal acceptable. Interestingly, acceptability increases to 72% for non-household customers when presented in nominal terms. • Some customer groups are less likely to find our proposals acceptable – low income customers and those who are "just about managing". Despite the fact the difference is significant we still find that 72% of low income customers, and 74% of those "just about managing" find the plan acceptable. Experience of service failure, and a disability in the household, do not make a significant different to acceptability. • Attitudes towards water companies impact on acceptability, those who say they trust their water company report the highest level of acceptability (91%), followed by those who are satisfied with the service they receive (89%), whilst those who believe profits are too high, or are pro-renationalisation report lower levels of acceptability (73% and 74%). • Those (relatively few) customers who find the plan unacceptable tell us this is down to the bill being already expensive, or company profits being perceived to be too high. • The future bill is also seen to be affordable by customers, with 61% of households finding the future bill affordable (and less than 10% net disagree). This is an increase compared to those who find the current bill affordable. Those on a low income and who always struggle to pay their bills report lower levels of agreement. • 81% of South Staffs Water customers agree with our wastewater performance commitments, and 81% of customers find their future combined bill acceptable. • 52% of Severn Trent household customers surveyed (and 55% of non-household customers surveyed) believe water companies make too much profit, but 51% (53% of non-household) say they would not trust the government to take over the running of their water company. • 30% of Severn Trent household customers surveyed (and 35% of non-household) say they would like water companies to be re-nationalised. **Wave 2** • The majority of customers find our proposed plan acceptable and affordable (85% in real terms, 77% in nominal terms) . • When asked about uninformed acceptability 80% of customers find the bill profile acceptable in real terms, and 67% in nominal terms. • Seeing how the Severn Trent bill compares to other WASCs makes little difference to acceptability. • The individual components of the plan (i.e. the summary of the performance improvements) gained acceptance from the vast majority of the customer base (over 90% for water, wastewater and retail performance improvements). • 75% of customers agree with the community dividend, and around 18% neither agree nor disagree. • Presenting bill profiles in real or nominal terms does make a difference to net acceptability – this is most marked in the uninformed question. • Reduced service and a reduced bill (through an ODI penalty) is only supported by 27% and 33% of HH customers (real and nominal terms) • However, 60% of customers support improved service and a higher bill (through an ODI reward) in real terms, and 64% when presented in nominal terms.
What did we already know that the research validated?	• As we have found in other research, customers are altruistic. In this project, the main reason for finding the plan to be acceptable was that all customers would benefit

	from the improvements, followed by the improvements being needed and the environment benefiting. • In the sample which saw the bill presented in real terms, we find that customers understand and expect inflation to further impact their bill.
Did the research contradict any other findings?	n/a
Any other information	n/a

ODI uncapping research

Supplier	Omnisis
Fieldwork completed	9 – 19 February 2018
Aim of the research	To obtain evidence to inform whether (and if so in what form) Severn Trent should make an application to Ofwat to amend the PR14 aggregate ODI cap
Demographics	• Severn Trent bill-payers, all household customers • Mix of age, gender, SEG, household size and household income, to reflect the profile of the Severn Trent region TOTAL CUSTOMERS CONSULTED: 4,206 Severn Trent customers
Research approach	• Online survey • Recognising that this is a potentially complex issue for customers to engage in, we worked with Dr Donna Harris, a behavioural economist at the University of Oxford, to help inform the overall design of the research • We also engaged directly with our CCG, the Water Forum, on the overall approach to the research design, prior to the fieldwork
What did the research tell us that was new?	• 82% of customers support bills being linked to outcomes performance • 72% of the customers surveyed support amending the ODI cap. • A significant proportion of our customers 'very strongly' support the amendment of the cap. • Customers understood, and were concerned by, the detrimental impacts the cap could lead. • 71% of customers do care that, if the cap affects the industry benchmark, the customers of other companies will also be adversely affected. • Of our shortlisted balanced package options, there is most support for Option 1 (remove the cap, but make a commitment to invest to assist vulnerable customers) (69.9%) and Option 2 (raise the cap to a level equivalent to 3% RORE with lowered incremental incentive rate) (69.6%). Option 3 (allow netting off between the water and wastewater caps) has less support (54.8%). • Customers express a willingness to pay for the incentive benefits associated with removing the cap. There is a willingness to pay (under any option) of between £6.32 and £9.78. • In relation to Option 1, customers are supportive of us making a commitment to invest money targeted at helping the vulnerable. There is most support for this being through reducing surface flooding in deprived communities (although overall, customers show similar support for all options that assist the vulnerable). • 89% of respondents said that they understood the questions they were asked, which provides further confidence in the reliability of the work.
What did we already know that the research validated?	Customers support bills being linked to performance.

Did the research contradict any other findings?	n/a
Any other information	n/a

A fair balance of charges – deliberative research

Supplier	Britain Thinks
Fieldwork completed	12 July 2018
Aim of the research	Engage with customers to understand their views on their proposed approach to achieve a fair balance of charges over time in terms of: • How to measure inflation when calculating the RCV payments • How to maintain a good credit rating for future investments
Demographics	Spread of customer age, gender, SEG, life stage, ethnicity, urban/rural. Mix of payment types, billing methods and water meter status. In order to ensure engagement with topics under discussion, the customers recruited had stated they had an interest in personal finance, and that they like to shop around for personal financial products. TOTAL CUSTOMERS CONSULTED: 12
Research approach	Half day deliberative workshop in Coventry
What did the research tell us that was new?	• When thinking about the balance of charges over time, there is a considerable degree of alignment between customers' spontaneously developed principles and ST's principles • Customers identify bill stability, maintaining the current level of service delivery and each generation paying their fair share as their spontaneous principles • When shown ST's principles customers identify bill stability as the most important one, although they agree that all three are important. The principles are felt to be sensible, fair, and to have customers' long term interests at their heart • All identify themselves as the next generation of bill payers (i.e. the people that would be paying any costs pushed forward to the 2025-2030 period). Some also discuss the principles in the context of having children and grandchildren that they do not want to push the costs onto. • Customers agree with ST's proposed approach for changing the measure of inflation and maintaining access to low cost borrowing. It is thought to reflect ST's principles and ensure bill stability over time. • When presented with the expected impact on bills, customers continue to support ST's proposed approach. • However the actual volatility in bills for the alternative approach is not as great as expected. • We presented customers with information about how Severn Trent funds their investments, the concept of the RCV and how customer charges contribute to it over time - customers broadly understand the concept of the RCV and think it is sensible in the context of the water industry • All understand why Severn Trent borrows money to fund investment. All agree that the cost of this should be shared by bill payers over a long period of time to reflect the lifetime of the infrastructure it funds. • Some are concerned about how shocks (like natural disasters) might affect the size of the RCV and do not spontaneously understand that these eventualities are planned for as part of the long term investment process. • The size of the RCV is not seen as relevant to customers in principle and is believed to be for Severn Trent to manage. It only feels relevant in so far as it doesn't result in big bill increases or a degradation in service delivery.

	• The idea of a credit rating is also familiar to most.
What did we already know that the research validated?	• Spontaneously, customers are broadly satisfied with Severn Trent • When customers see information about Severn Trent, including their core service areas, how they set their bills, and where they spend their money, customers continue to view Severn Trent positively, and are surprised to see how much is invested • Customers are surprised that Severn Trent has a regulator, about the cost of the average bill and about the support offered to struggling customers
Did the research contradict any other findings?	n/a
Any other information	n/a

A fair balance of charges – quantitative research

Supplier	Join the Dots
Fieldwork completed	July 2018
Aim of the research	• To quantify customer views on the balance of charges over time
Demographics	• Quotas set on age, gender, SEG and meter status to reflect Severn Trent region TOTAL CUSTOMERS CONSULTED: 502
Research approach	Quantitative survey of Tap Chat members
What did the research tell us that was new?	• We asked respondents to choose which of two approaches they'd be most likely to take when personally buying something that will last for some time, such as a car, a piece of furniture or new kitchen. The majority (81%) said, 'I would rather pay a little bit more now (i.e. save less money now) if that means I will pay less over the long term'. 19% said, 'I would rather spend less now (i.e. save money now) even if it means I have to pay more over the long term'. • Customers were asked whether they agreed with each of Severn Trent's principles to ensure a fair balance of charges. A large majority of respondents agree with each. Bills being stable over time receives the highest level of support. • Respondents were asked to choose between two bill profile scenarios. 88% of respondents chose the scenario with a smaller bill reduction in the short term, but a more stable profile over time. • Women are more likely to want a lower reduction now if this means financial stability in the future. • Financial stability is also more important to lower social grades (DEs) as fluctuations in bills can cause significant financial problems for them. • Those who chose the scenario with a greater reduction now, but less stable bills over time did so because they don't have the funds to afford to pay more in the short term. Others said they might not be around due to their age so wouldn't be affected by future increases.
What did we already know that the research validated?	69% agree that that the water and waste water charges they pay for are affordable to them. Although the question wording is slightly different, this finding is consistent with our quarterly customer tracker survey (66% agree in Q1, 2018).
Did the research contradict any other findings?	n/a
Any other information	n/a

Customer contact and complaint data

Supplier	Internal analysis
Fieldwork complete	We have reviewed complaints from 15/16 and 16/17
Aim of the research	To understand what drives customers to contact or complain to us
Demographics	n/a
Research approach	For each category (written complaints and contacts) we have identified the top issues for complaint / contact. For written complaints the top ten complaint issues cover over 75% of complaints. For non-operational (customer services and credit management) customer contacts the top 5 reasons for contact across channels cover 95% of the total contacts received in these contact centres.
What did the research tell us that was new?	Almost half of complaints relate to retail, and the top ten reasons are: • Issues with our payment facilities (e.g. incorrect direct debits) • Disputing responsibilities and / or charges • Large bill issued without investigation • Problems understanding the bill • Customer unhappy about being sent a reminder notice • Customer unhappy about receiving a court summons • Customer doesn't understand surface water drainage charge and are unhappy about the cost / policy • The customer didn't receive information we said we would send or haven't received their bill • Usability of web self-serve facility • Customer has missed a payment 38% of complaints relate to water, with the top issues being issues with water meters, leakage and workmanship. 17% of complaints relate to waste, with the top reasons being external flooding and blockages, lack of first time resolution and workmanship
What did we already know that the research validated?	n/a
Did the research contradict any other findings?	The number of customer complaints about low pressure is not very high, but we know from other research that a significant number of customers perceive that they experience low pressure.
Any other information	Although insight can be drawn from customer contact data we need to take into the account the following key considerations: • The data is best suited for issues that are in customers conscious and relevant today (in contrast to future issues such as resilience & unconscious issues such as risk) • The data does not reveal severity or intensity of feeling on specific issues (so whilst we might get 1000 contacts on water colour we cannot solely use that information to make trade-offs about a service in which we only get 10 complaints (e.g. sewer flooding)) • Frontline staff knowledge is a better indicator of severity/intensity of customer sentiment • Engagement with front line staff who liaise with customers daily can help bring out what customers are passionate about and reveal severity of the issue and intensity of customer feelings towards the issue

Castle Donington incident review

Supplier	DJS Research
Fieldwork completed	April 2016
Aim of the research	• In March 2016, too much chlorine was added at the water treatment works which supplies water to part of the Castle Donington area, Leicestershire. • This research aimed to understand, from the customer's point of view, how well Severn Trent communicated during the incident, whether communications had any impact on customer behaviour, and what other lessons could be learned for the future.
Demographics	• 20 customers living in the Castle Donington area • Six received a 'do not use' letter from Severn Trent. The others live in homes not affected by the contamination, but believed they may be affected • Mix of age and life-stage • Four with a disability • 12 with children under ten years TOTAL CUSTOMERS CONSULTED:
Research approach	20 in-depth qualitative interviews
What did the research tell us that was new?	• Awareness of the incident came from many different channels - from Severn Trent, word of mouth, text message, TV and Facebook. Facebook was seen as the main source of information about the incident • Some did not *believe* what they saw on Facebook, or what they heard from family and friends. • Most sought alternative sources of water straight away. • Other actions included seeking out further information (TV news, visiting the Severn Trent website, speaking to family and friends), finding alternative food (e.g. buying takeaways and buying ready-made baby formula). • When visiting supermarkets to buy water, some customers reported finding shelves empty by the time they arrived, or finding them overcrowded. • Some customers felt the Severn Trent bottled water stations at supermarkets were set up too late; many respondents had already bought bottled water. • Respondents would have preferred official and direct communications from Severn Trent (e.g. text message, email and automated landline messages), and more specific, timely information – such as exactly which postcodes were affected. • Respondents report feeling panic and confusion during the incident; they were not sure what to believe. A few seemed to react with nonchalance and felt they had only experienced minor disruption to their lives as a result of the incident. • Larger households and those containing customers with vulnerabilities reported suffering more panic and inconvenience. In particular, accessing water to make baby formula, sterilise baby bottles, swallowing medication, for hygiene and accessing transport in order to buy or collect water. • Some felt frustrated that they did not receive the information from Severn Trent that they needed, or did not receive it quickly enough. • One issue was that schools notified all parents of the problem and told them not to use any water, regardless of whether their postcode was within the 'do not use' area. • One family did not hear about the incident until they had been using contaminated water all day. This inevitably led to panic. • Those who received the 'do not use' notice felt the notice was easy to understand, and they complied with it immediately.

	• Many felt that the notice was not delivered quickly enough, as most had already heard about the incident by the time it arrived. Some felt that the notice should have stated at what time the contamination started. • Many customers reported not being told when the incident was over. They would have liked further communication to confirm that the water supply was safe to use. Some would also have liked follow-up information about what had caused the incident to occur. • Some customers continued not to use the water for a time once the all clear was given. • A few weeks after the incident, despite a little wariness towards their water supply, most said it had had only a minor impact on their trust in Severn Trent, and on their overall satisfaction with the company.
What did we already know that the research validated?	• Customers often don't think much about their water supply unless something goes wrong.
Did the research contradict any other findings?	n/a
Any other information	n/a